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# THE ARCHITECTS' JOURNAL & Architectural Engineer

*With which is incorporated "The Builders' Journal."*

## New Year Special Issue

(EDITION DE LUXE)

### *LIST OF FEATURES:*

### A Survey of Government Housing Schemes

With Articles by PROFESSOR S. D. ADSHEAD, M.A., F.R.I.B.A., MANNING ROBERTSON, A.R.I.B.A., and others

### The Rebuilding of Regent Street

With a Special Article

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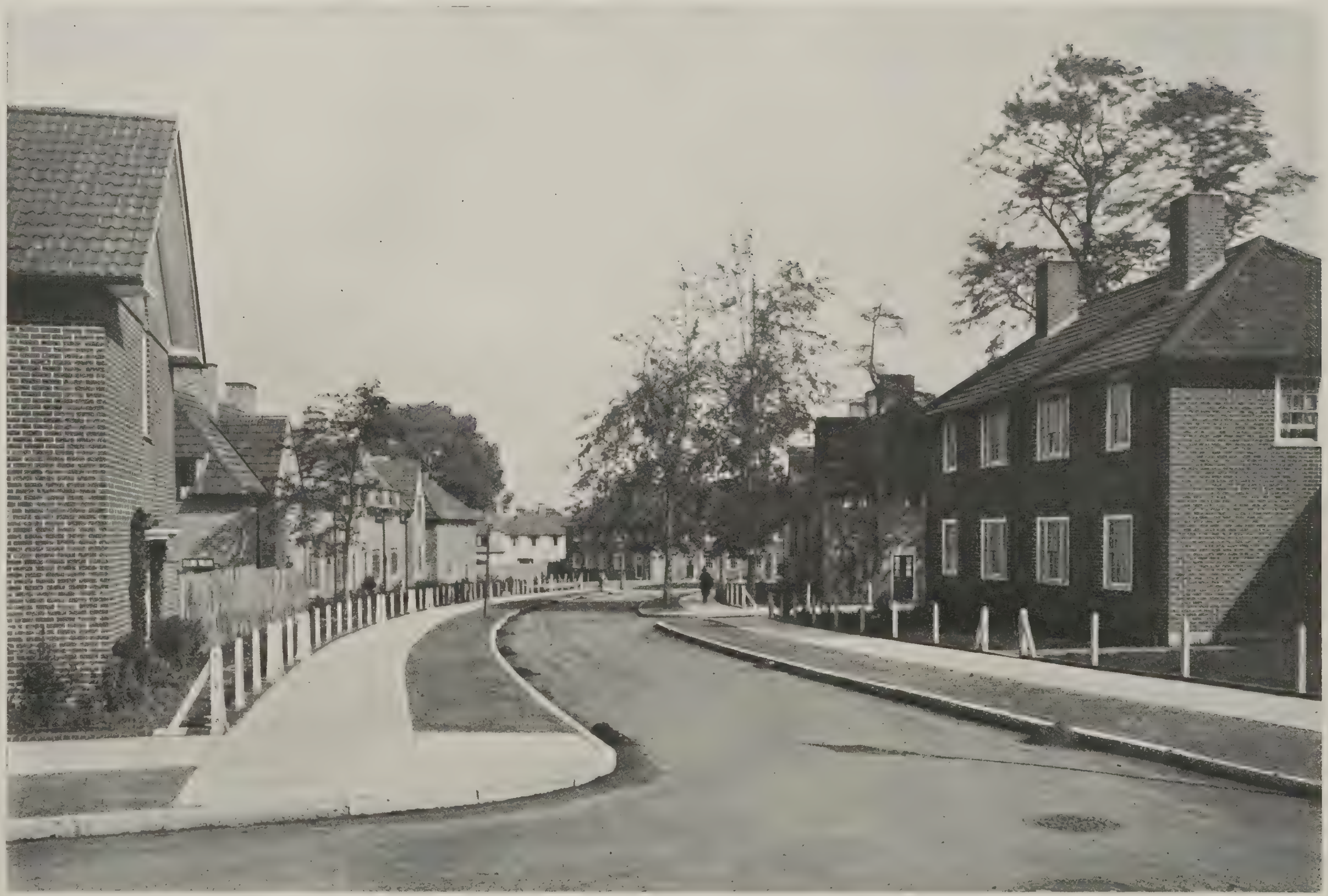
### An Illustrated Record of Some Important Buildings of the Year

The Chief Architectural Events of 1922

27-29 Tothill Street, Westminster, S.W.1.

# The Roehampton Housing Scheme of the London County Council: North End of Swinburne Road

G. Topham Forrest, F.R.I.B.A., Architect to the Council



Roehampton is one of the most delightful housing schemes in the country. Much skill has been employed in the creation of the estate, not only in the design of the individual houses, which are charming examples of domestic architecture, but in their grouping on the lay-out, which provides a succession of picturesque *coups d'œil*.

THE
ARCHITECTS' JOURNAL
27-29 Tothill Street, Westminster, S.W.1.

**Wednesday, January 3, 1923** **Volume LVII. No. 1461**

# Housing: A Retrospect and a Forecast

THE subject of housing still quite properly figures prominently in Parliamentary question time; indeed, during the debate on the address subsequent to the opening of the session many pertinent questions were asked by members of every political party. This is a good omen. The physical health and the mental disposition of the nation are more dependent upon good housing than upon any other single condition, and until housing is made to transcend party politics, and to take its place in national affairs in the same unfettered way as, for example, matters affecting the post office, the whole subject will be at the mercy of intrigue and opportunism.

The late Government's housing programme terminated, according to the terms of the 1919 Act, at the end of June of this year. Actually, owing to circumstances that are now well known, the closing down began exactly a year previously, when the majority of the Housing Commissioners' staffs were served with notices to terminate their appointments at the end of September. What is the result of the three years' work under the Act? In the opinion of some extraordinary people it is negligible. Yet it has been such as to have excited the admiration of other countries, who, it would seem, are more generously disposed than the average Englishman, whose prerogative it still remains to abuse every enterprise which his Government undertakes without first pausing to consider the obstacles that may have been encountered or to view the result from more than a single aspect.

Considered numerically, it may with some justification be said that the results are disappointing. The amount of energy, enthusiasm, and hard work which went to forward the cause of housing might appear to be incommensurably recompensed by the comparatively small number of houses produced. The estimated need in 1919 was half a million houses. The actual number of houses completed by the end of October this year, under both the 1919 Acts, was 184,916. In addition, 3,056 dwellings have been provided by conversions of huts and large houses, and 30,229 more houses are passed for erection, of which the majority are in actual course of construction, making a total of 218,201 dwellings. Even the result thus baldly contained in a bare statistical statement represents no mean achievement when the enormous difficulties to be encountered are considered. It is doubtful if any other Government has ever carried out such a programme, or has made so rich a contribution to the immediate needs of the community. To make good a shortage of eight years (1914–1922) in three, even in times of industrial prosperity, in a country long undisturbed by war and rumours of war, would be a feat of surprising magnitude; but when such an attempt is made by a nation, weary, worn, stressed, and utterly shaken by four years' conflict of unprecedented violence, complete success is scarcely within the bounds of possibility. However, to view the matter on a mere statistical basis is to ignore the deeper significance of the three years' work.

The really important things are that standards in housing have been immensely raised; that the whole nation has had its interest in housing quickened as never before, so that there is scarcely a parish in the whole of Great Britain that has not a committee of men and women considering the question of housing with keenness and intelligence. The results of thus turning the nation's thought to matters pertaining to housing have spread out in countless ramifications. To them may be attributed much of the experimental work which has been carried out in new systems of construction. Various methods for the use of concrete as a house-building material have been devised, which have been important factors in reducing costs. To them may be attributed the enormous improvement in labour-saving devices and household equipment which are lessening the drudgery in thousands of homes. To them also may be attributed the efforts and determination to combat the smoke evil which desecrates the countryside, wastes millions of pounds annually in uneconomical fuel consumption, in unnecessary laundry work, and in disintegrating buildings, and which condemns the majority of the nation to live in a permanently sunless and unhealthy atmosphere. Yet more than all these things is the quickening and reviving of civic consciousness, without which our towns must always remain dirty, chaotic, and ugly, and the eyes, ears, and nose be subjected to continual offence until the very senses themselves atrophy and cease to serve us.

In this issue will be found illustrations and descriptions of a number of schemes which have been undertaken in different parts of the country. They are typical of others. A most superficial inspection is sufficient to show how immensely superior these houses are to a similar class of house of an earlier pre-war date; superior in the comforts and amenities of life which they provide, and superior in their general grouping and in their relation to each other. Their efficiency, their "home-worthiness," insure their being art in the fullest and richest connotation of that much-abused word, even though they are not consciously "artistic," which quality has often in the past consisted in marring simplicity with meretricious applied ornament. These plans show conclusively the wisdom of having insisted upon proper ventilation and sunshine, convenient planning, and low density. These are lessons that have been so thoroughly inculcated that whoever provides houses in the future will be compelled, if he wishes to market his goods, to abide by them. Local authorities, too, will be compelled to maintain these new standards, and many of them are determined to continue with the provision of houses, even though they will receive no financial assistance from the State. Thirty-five authorities have actually undertaken to provide houses on these lines, and another sixty have schemes under consideration.

The material result of the late Government's work of nearly a quarter of a million dwellings is, under the circumstances, no mean achievement, and its absolute result of a changed mental attitude towards housing conditions and standards, and a changed spiritual attitude towards civics, marks an advancement in national life which none but the purblind can ignore.

Housing must go on immediately, and architects are rightly determined to be associated with it. Mr. Stanley Hamp and other distinguished architects have taken up the matter with commendable enthusiasm, and we look forward to the early establishment of some new basis of co-operation between architects and house-builders.

# Architectural Character and the Government Housing Scheme

## By Professor S. D. ADSHEAD, M.A, F.R.I.B.A.

IN architecture the expression of character has ever been regarded as a first essential of design. Variance in view and of opinion has been, not as to the need for character, but as to the way in which character should be expressed.

The "Garden City" movement, which has had so important an influence in shaping the Ministry schemes, was essentially a revolt against villadom, against the endless repetition of those mean streets and monotonous houses which the industrial conditions of a century of town building had produced.

Those responsible for the lay-out and design of our first garden cities and garden suburbs may be said to have adopted the "Casemented" or "Jacobean" style of cottage, in preference to the "Georgian sash," and this to avoid all suspicion of a relationship with the ugly plate-glass windows of the nineteenth-century villa, or anything that had a hung sash.

But a more mature view made it clear that the real difference between the character of a cottage and that of a villa lay in an appreciation of niceties, less obvious and more subtle than mere distinctions between types of windows. It was seen that the so-called nineteenth-century villa, notwithstanding its sash windows, was a very different proposition from the simple and carefully-proportioned sashed cottages of the Georgian era.

It came to be realized that, whilst both casements and sashes were suitable for cottages and capable of producing cottage character, both could also very easily adapt themselves to villadom, it being all a question of detail of proportions and of the treatment of every feature that contributes to architectural design.

But the type of window, important as it is in deciding the character of the architecture, is not alone responsible for setting the style. Perhaps even more important than the window is the pitch of the roof and the treatment of the eaves. In the early days roofs were pitched high in accordance with early models, but latterly there has been a tendency to flatten the roofs, and this to so gentle a pitch as 30 deg. Cottages of this type assimilate to what is known as the style of the Greek revival of the early part of last century, and many good cottages modelled on these early-nineteenth-century houses form a part of those carried out in the Ministry schemes. But, perhaps, the thing that is most striking in these Ministry houses, as compared with previous houses erected for the working classes, is the material which composes their roofs. Probably two-thirds of the houses have been roofed in with tiles, and whilst there is nothing to be said against good slates used with discrimination and a nice sense of colour, there is no doubt that for homeliness and a comfortable appearance nothing is so attractive as the cottage that is tiled.

In the early days of Ministry housing, it was generally felt that repetition and standardization were to be avoided at all costs, and whilst the designers of housing schemes were for reasons of economy and in order to be able to carry out rapidly large numbers of houses, limited as regards the number of different types, it was felt that as far as possible the picturesque village of the English countryside, in which every cottage was a piece of individual history, was the model upon which the Ministry housing scheme was to be based. However, the hopelessness of producing even a lifeless imitation of an English village very soon became apparent, and it was seen that a group of from 50 to 500 houses, erected from a limited number of types, must depend upon other interests than those which belong to the historic town and village, which have grown up in quite a different way.

It was seen that quite new opportunities were offered the designer of Ministry houses—opportunities of producing compositions on a scale in this kind of building hitherto unknown.

In many of the best schemes, street compositions and the planning of squares and forecourts have introduced quite a new interest, and one which is eminently characteristic of the full communal existence which the tenants of these new housing schemes may enjoy.

It is regrettable that in the numerous lay-outs that are dotted all over the country, dull repetition has taken the place of composition, and very few have made their compositions the expression of real communal needs.

There are very few, moreover, who in the design of their houses have preserved that simplicity and breadth which is so essential to the cottage character, and who have escaped getting entangled in a conflict of faddist requirements that are so irritating to the general effect.

Amongst the more successful, and those which have not been marred by over many constructional and hygienic stunts, may be mentioned the charming cottages at Swanpool by Messrs. Hennell and James. These architects have shown that the casemented cottage, which is used there, can be as artistic and practical as the sash-windowed type, which they have also used with such good results elsewhere in their other schemes. An example from Welwyn is particularly worthy of attention.

Mr. Houfton, who at a very early date in the new movement gave us those delightful cottages at Woodlands, is still a believer in the casement, which he knows how to proportion so well.

Amongst those who have contributed to the distinctly Georgian type of cottage we would pick out at random the work of Messrs. Clayton and Black, who have carried out some of the houses in the Moulescombe Estate at Brighton, and whose fanlight doorways are so distinctive.

Another scheme which has been carried out with extremely picturesque character and on a distinctly picturesque site, is one by Messrs. Culpin and Bowers at Folkestone. There is something about this scheme which strikes one as being very free. The living-room windows remind one of those transomed windows which we associate with the rather more ambitious dwellings of the Elizabethan and Jacobean period, but they are used so well and are obviously so practical, that there is every excuse for this rather ambitious feature in cottage design.

Amongst designs that are worthy of mention on account of their good Georgian character may be mentioned the cottages of Mr. Waring, of Norwich; Messrs. Harvey and Wicks at West Bromwich, and Mr. Soutar at Kensington. Of rural cottages few are more charming than those which have been erected from the designs of Mr. Skipper of Norwich.

# Economy of Cost in House Building

TO an architect the problem of economy in building costs has elements of complexity which can seldom be taken account of in the utilitarian calculations of the engineers and sanitary experts who may be called upon to devote their attention to housing. The question to which he must address himself is not only how a house of given accommodation can be erected with the least expenditure of money, but how far such economy can be achieved without the sacrifice of that quality which marks the distinction between architecture and mere building. Of course, there are several only too obvious ways of cheapening the cost of houses. Cut the porch off the doorway, reduce your factors of safety by employing the smallest scantlings possible, eschew all cornices and other mouldings, leave out the felt under the slates, use two coats of paint instead of three, and so on. I do not propose to examine expedients such as these, but shall confine myself to a consideration of the means whereby a legitimate economy can be attained without forgoing either good construction or architectural effect.

Everybody must be familiar with countless designs which would actually have been improved if less money had been spent upon decorative features, and there is no need to insist upon the platitude that an embellishment badly handled may be worse than no embellishment at all. By the elimination of false ornament and of other meretricious features the cost of building can be reduced, and there are also arrangements of plan and of the grouping of houses which will tend to cheapness of construction. But although it is true that Mr. Bernard Shaw's dictum "The love of economy is the root of all virtue" expresses a truth which is as valid for architecture as for life in general, the term "economy" must here be construed as economy of means to a desired artistic end, and the need for economy should not be made an excuse for poverty of conception.

Even from the narrowest financial point of view the chief desideratum is not cheapness of construction, but rather an adequate return for money invested. In many instances a very small extra expenditure will so enhance the appearance and social status of a house that an addition in rent quite out of proportion to the additional capital sum invested in the improvement will readily be paid by the prospective tenant. Sometimes an appeal is made to an uneducated taste, such as that which demands a bay window or a gable to each subdivision in a row of cottages, and it is to be hoped that a better architectural ideal in cottage building will presently prevail. But whether the public taste be good or bad, it does not alter the fact that the degree of financial economy in building is not dependent merely upon cost of construction, but upon the relation of cost of construction to rent. And the client has a right to demand from the architect a house which, although it may not be the cheapest possible house of stated accommodation (for this might not be architecture at all), will yet have the greatest architectural value which can be supplied at a moderate cost.

With regard to the plan there are several obvious considerations which must be borne in mind. The perfect plan, however, does not exist, for in planning every virtue is liable to have its own characteristic defect. For instance, architectural students are often warned by their instructors to be sparing of passages wasteful of space, and to aim at the utmost compactness in the arrangement of rooms. Yet there can be too severe an economy in passages. Nobody wants to live in a house where several people happening simultaneously to emerge from the rooms on an exiguous landing must necessarily head for a collision. Nor is it to be forgotten that a passage is often a convenient place for cupboards, shelves, bookcases, which otherwise might cumber the rooms, and, in fact, a passage so employed cannot justly be described as waste space, for a house must be designed to accommodate not only persons but their effects. Economical planning is partly a matter of providing space for a certain quantity of furniture without this furniture appearing to be in the way. In this connection it may be noted that a doorway at the extreme edge of a wall is always unfortunate, as at least 4 ft. of the adjoining wall-space ought to be kept free from furniture in order that the door may open. An interval of 2 ft. or 18 in. between corner of wall and door is all that is needed to obviate this difficulty.

Of rectangular rooms, the most economical is the square, for this has the greatest area of floor-space per lineal yard of wall. It is sometimes hastily concluded, however, that a square or nearly square over-all plan must necessarily be the cheapest. But this is not the case, for the arrangement of the internal walls must be taken into account as well, and an elongated rectangle or even a T- or L-shaped house, of which the constituent chambers all approximated to the square form (even including the staircase hall) might easily be more economical of wallage than a square house of equal area subdivided into the same number of long and narrow apartments. Yet in comparing the respective cheapness of the two types, allowance must be made for the fact that external walls are more costly than internal ones, and the greater this difference in cost the more important will it be to adopt a simple form for the over-all plan. It is not to be assumed, however, that a house 30 ft. by 50 ft. will be cheaper than one of 25 ft. by 60 ft., although these houses are of the same area, and the former more nearly approximates to the square shape. Although the perimeter of the first house is 160 ft. as against 170 ft. in the second, it is probable that the extra cost of the larger roof timbers required for the 30 ft. span will neutralize the advantage of the shorter length of wallage, while the additional height of chimney-flues and party-walls, if any, will still further increase the comparative cost of the narrower-fronted house.

The nature of the roof construction has an important bearing upon costs. Obviously it is more economical to use slates at quarter pitch than either slates or tiles at a pitch of 50 or 60 degrees. For a low-pitched roof a hip is generally cheaper than a gable, but for a steep roof the gabled treatment has the advantage, assuming that the simplest form of construction be adopted in each case. The natural place of the gable, however, is either at the ends of the house or at the end of any projecting portion of it, and it is always an extravagance to place it as a decorative adjunct in the middle of the façade. In this latter case a gable is a quite gratuitous expense, for it entails additional roof truss, valleys, and brickwork, and it is highly questionable whether the resultant artistic effect is a praiseworthy one. Of course, if the gable has a window giving light to a room inside the roof, its use may be justifiable. The custom of placing rooms in a roof, however, although it reduces the cubical contents of a house, and may thus appear to be a cheap treatment, has many disadvantages. Dormers are always costly, and they generally fail to give adequate ventilation to the rooms. The practice of having steep roofs and dormers is really far more often due to a sentimental admiration of the mediæval cottage than to a desire for economy. For, granted that the mediæval cottage was cheap, the standard of bedroom accommodation has since undergone an important change, and people are no longer content to sleep in lofts. The type of client who wants airy rectangular bedrooms cannot be provided for more cheaply than by building up the walls to the ceiling of the topmost story of a house, and by surmounting them by a low-pitched roof.

One of the most lamentable results of the fluctuations in prices since the war is that lead has now become so costly that its use as a building material must be severely restricted.

This has had a most unfortunate effect upon design inasmuch as architects can now seldom venture to solve a difficulty of roofing by putting lead flats over small projections or irregularities of plan. Also, and this is more important still, the parapet wall, which was treated with such success in the eighteenth and early nineteenth centuries, has now become somewhat of a luxury. Where in domestic architecture an urban character is desired, a parapet will do more than any other feature to impart dignity to a façade and to effect that subtle distinction between a "house" and a "cottage." If an inventor could supply a cheap and serviceable substitute for lead to be used for gutters behind parapet walls, he would earn the gratitude of architects. The flat roof has practical advantages over any other kind, and it is a matter of urgent importance that the constructional problem it presents should have an economical solution. At present the architect is constantly being hampered in his planning by difficulties in connection with the roof, but with flat-roofed buildings he would more easily be able to indulge in those terminal projections and formal modulations which are necessary if houses are not to be characterized by a tiresome simplicity. "They look just like barns," is a popular criticism of many of the cottages recently erected. This comment is a just one, and the fault is partly due to the limitations of design imposed by the present necessity to adopt a form of roof which is apt to be uneconomical unless it is applied to a building shaped like a barn. On the other hand, gables, dormers, and half-timbered work are costly and unsatisfactory devices for mitigating the crudeness of these designs. If a simplicity of unit is to be insisted upon, by far the cheapest method of obtaining a good architectural effect is by large group formations of houses, which can be arranged in terraces, quadrangles, or other dispositions. By this means the repetition of the unit of the house, which is an important factor in economy, will no longer lead to monotony, because the eye will find satisfaction in the variety of the larger formations themselves and in the occasional emphasis at special points of the long façades. And it is scarcely necessary to point out that a house in a large block is cheaper than one detached or semi-detached. There is an obvious saving in external walls and in the drains, gas, water, and other services. The advocacy of continuous building, with as much repetition of the unit as may be necessary to the attainment of rhythm and orderly composition, does not imply an acceptance of the ideal expressed in the words "standard house." The "standard house" is an architectural abortion; it is conceived in ignorance of the fact that each individual building should have a relation to its environment. Moreover, common humanity is insulted at the suggestion that the homes of men should be cast in a single pattern, as if we had now reached the stage at which industrialism had obliterated distinctions of personality. Standard joinery may occasionally be tolerated, and, of course, standard sizes for bricks and timber scantlings, for slates and tiles, are extremely useful and tend to economy of building costs. But there are strict limits to the possibility of standardizing the design of a house or of any feature of a house.

A word may here be added with regard to the many systems of "special construction" which have been tried during the last few years. Exhaustive experiments have been made with concrete slabs and other artificial materials for walls, with excellent results. Bricks and mortar, however, can still hold their own.

There can be no doubt that, as far as methods of building construction are concerned, a state of great efficiency has been reached, and a large number of highly economical plans are being produced by architects. If houses are still too expensive for many people who would like to build or rent them, this state of things is not the fault of the architect or constructor, but it is due to the general financial situation.

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# House Planning

## By MANNING ROBERTSON, A.R.I.B.A., late Deputy Chief Architect, Ministry of Health (Housing Department)

THE average layman is under the belief that there is nothing so easy in this world as to design a small house, and this illusion too often leads him to attempt the performance, with results on a par with doing eighteen holes in 126 strokes, the unfortunate difference being that, in the case of the house, each stroke over bogey costs some five pounds. Every avoidable bit of passage, each undigested corner adds its quota to the price, and the layman, delighted at having "done it himself" and saved architect's fees, not only pays more than those fees but also lives in less comfortable circumstances than he need, merely on account of his ignorance of planning.

It is not proposed in this article to deal with the desirability of any particular accommodation, nor does space permit of a discussion on the arrangement of rooms. One can only outline the broader aspects of the subject and consider the developments that should be aimed at in the future.

Before dealing with the actual planning of small houses it is necessary to emphasize certain conditions that must be fulfilled if satisfactory planning is to be possible. Practically all our troubles in the past have arisen from attempts to design houses on too narrow a front, and it cannot be too clearly understood that any such attempt can only end in failure. A net frontage of 19 ft. for a non-parlour house and 21 ft. for a parlour house is about the lowest on which a well-planned house can be built and, even so, too many houses of these dimensions would result in monotony. These figures refer to houses with rooms of the standard sizes laid down by the Ministry of Health. There have been two main reasons for the habitual overcrowding of buildings on a site: first, the excessive cost of land, usually due to "corners" created by landlord speculators; secondly, by-laws and other elaborate requirements as to the width and substance of residential roads, the cost of such roads being so great that as many houses as possible were squeezed along the frontage in an attempt to recoup this extravagant outlay. When these two obstacles are finally removed we shall find that the tendency to plan houses on narrow frontages will disappear, and with the passing of the cramped front will go the scullery pushed outside the main building into the back extension. Fig. 1 is a typical plan of the narrow-fronted Victorian house, a monstrosity that, even at the risk of wearisome repetition, must be illustrated in any discussion on house planning.

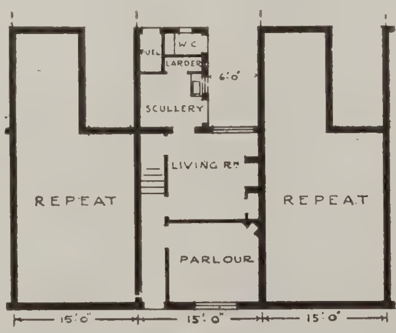


FIG. 1.

Illustrating the bad lighting and ventilation resulting from planning on too narrow a frontage.

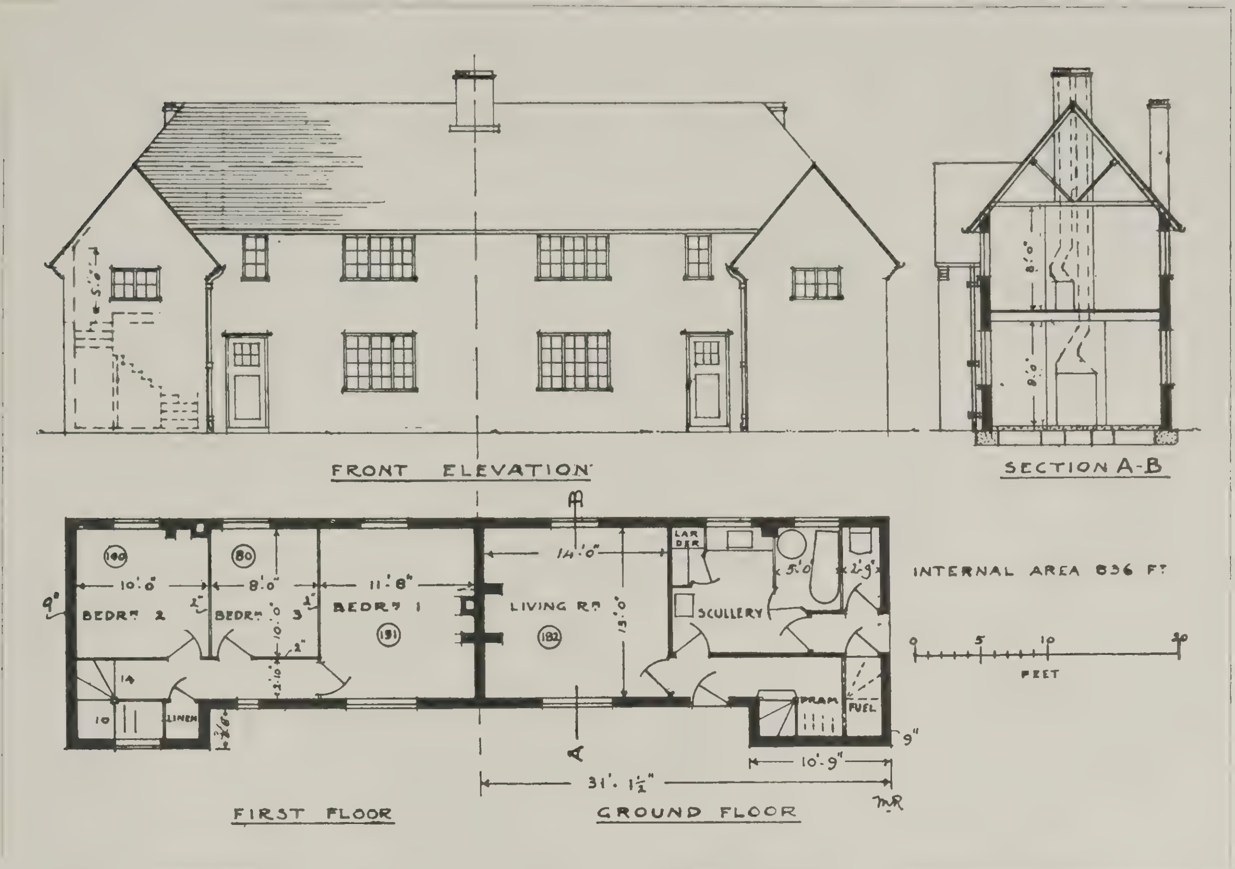


FIG. 2. THE "SUSSEX" TYPE. THE NARROW SPAN ECONOMIZES TILING.

When the frontage is so narrow that it becomes necessary to place the scullery in a back extension, we automatically prevent the sun from entering the main back window of the house, we convert the living-room into a passage looking out into a passage, and, in trying to plan adequately a row or terrace of such houses, we are attempting to solve a problem that would baffle Sir Christopher Wren if he were called up from the dead for that especial purpose.

To leave impossibilities out of account we must assume a sufficient width of frontage. There is probably no subject which has, in recent years, received such widespread and concentrated attention as the planning of small houses, more even than is indicated by the 176,000 houses built under the Government scheme, and one can therefore only summarize the results of recent experience. The two main points to be considered are clearly efficiency and economy, and, at the outset, we are faced with the difficulty that these vary with the locality in which the house is to be built. There is no definite house plan or form of construction that represents an absolute standard of cheapness, and while it is easy to grasp why local materials are cheaper than those requiring transport, it is not at first sight so clear why one type of plan should be cheaper in the Midlands and another in the South-East. We may well be thankful that this "relativity" exists, otherwise there would be a natural tendency to build the one absolutely cheap and efficient house throughout the country. The difference arises mainly on account of the prevailing local roofing material. If it be common tiles, a pitch of at least 45 deg. is necessary, and it is advantageous to utilize the space in the roof to the fullest extent if by this means roof space and outside walling can be economized. Plans of this type necessitate a considerable length of frontage, and often irregularity of outline, and we should therefore expect to find them in rural parts of Sussex and the neighbouring counties where land is reasonably cheap and where tiles are the local roofing material. The experience of the Ministry of Health confirmed this expectation, and houses of the type shown in Fig. 2 were usually found to be the cheapest to build in the circumstances mentioned. People whose experience lies only in other parts of the country are frequently inclined to be sceptical, but they may be reminded that builders will build most cheaply the type of house to which they are accustomed, and there still exists, fortunately, a large body of men who are accustomed to houses of what we may call the "Sussex" type, and who have brought the erection of such houses to a degree of nicety as regards economy that would be impossible to the man whose experience lies in the "square box" house.

Turning now to the Midlands and the North of England, where slates at 30 deg. pitch is the recognized roofing material, we find naturally enough that the "square box" is the cheapest house to build. With a pitch of 45 deg. or more the "square box" means a great roof area and consequent waste of roof space, and while a narrow span is therefore the characteristic of the Sussex house a wide span is more economical with the "square box," because when dealing with slates at 30 deg. the roof area is smaller and the waste of roof space is immaterial in comparison with the saving effected by keeping an unbroken roof. As a consequence of this we see that the "back extension" type of house, with its irregular outline and cut-up roof, is not only ugly and unhealthy, but actually more expensive to build than the same house built within a rectangle and slated in the usual way. The price of land and the cost of roads must have this extra charge debited to their account.

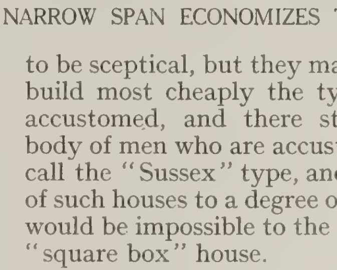


FIG. 3.

The "Square Box" Type. Compare the lighting and ventilation with that obtained on the fifteen foot frontage in Fig. 1, and note the increased economy in this plain roof and rectangular walling.

Fig. 3 illustrates a typical "square box" type of house, and the freedom it enjoys can best be appreciated by comparing it with Fig. 1. While it would be absurd to pretend that Fig. 3 illustrates all that could be desired, the type does probably represent all we can hope to obtain for real "working-class" houses in urban conditions. The double-fronted house, with a through living-room, requires a frontage of from 25 ft. to 30 ft. (Fig. 4), but the increased amenity it affords must mean a slight increase in rent, and our problem at present is to find the cheapest house that can be built consistent with efficiency and regard to the moral and physical welfare of the inmates. If the "working man" is to pay an economic rent out of wages bearing any resemblance to those he now receives, nothing but the lowest possible rent will do.

Locality has another important bearing upon the design of the house; the miner's requirements are entirely different to those of the Londoner, and the agricultural labourer has his own ideas which are by no means identical throughout the country; and we need not therefore be afraid of too great a degree of standardization. We must depend upon these divergencies of requirements and material to produce typical local architecture, an architecture which should arise not from the promiscuous bandying about of one individual plan or blue print (of which we have seen ten times more than enough already), but from an architectural grouping and lay-out of those plans that are found most suitable for the district in question.

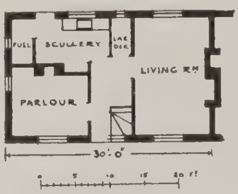


FIG. 4.

The "Double Fronted" type. (Taken from the Ministry of Health's Book of Type Plans.)

"Aspect" has been so thoroughly thrashed out that in embarking upon it one is afraid of "teaching one's grandmother to suck eggs." Seeing, however, that most old ladies would require instruction in this art, the risk must be run. It has been suggested that the Ministry of Health, in issuing the book of type plans, should have provided for a greater selection of aspects than merely north and south, but the truth is that each site should have separate consideration. The aspect is not all; the thoroughfares, the surrounding country, the prevailing winds, and numerous other factors should be taken into account when a plan is selected, and in a general collection of type plans little can be said beyond labelling a house "north" if the larder faces the front and the living-room behind, and "south" if positions are reversed. As a general guide this is all that can usefully be done without providing an enormous number of plans. The main reason for disregard of aspect in the past has, of course, been that the houses (Fig. 1) had no aspect at the back, it was therefore immaterial whether the dingy passage faced north, south, east or west.

Finally it may be said that no cottage plan has ever been produced that is not open to criticism. The planning in a really economical house is so compact that some of the minor amenities must be allowed to look after themselves; the important point is to realize which are minor and which are major, and this will to a great extent depend upon the site and prospective tenants of the cottage in question.

No model type plans, however efficient, can take the place of the individual designer. The lack of personal attention and an acceptance of impossible conditions have in the past led to a complete absence of design, to unhealthy homes, and an amazingly stereotyped monotony. It is to be hoped that the present renaissance in cottage architecture will result in the architect and the builder joining hands, first to insist on a fair field in which to work, and then jointly to produce results creditable to themselves and to the country.

# London County Council Housing Schemes

## G. TOPHAM FORREST, F.R.I.B.A., Architect to the Council

ROEHAMPTON and Bellingham are two of the L.C.C.'s most important housing estates. The first section of the former has been completed, and comprises 624 cottages and maisonnettes. The Bellingham Estate will be completed by the end of January, 1923. It is the second largest of the Council's estates, the total number of cottages and flats on the estate being 2,089.

As in the case of all the other L.C.C. estates, the lay-outs and houses have been designed by the architect to the Council, Mr. G. Topham Forrest, F.R.I.B.A., F.R.S.E., F.G.S., and, as the accompanying illustrations show, he has obtained exceptionally pleasing and satisfactory results, and this notwithstanding all the difficulties at first experienced in obtaining suitable materials.

The Roehampton Estate is one of the most charming of the municipal housing estates in the country. The combination of the different coloured materials in the houses, the grouping of the blocks, the width of the roads, and the sense of openness about the estate, give in the result all that is looked for in the lay-out of a garden city.

Since Mr. Topham Forrest's appointment the L.C.C. has let contracts for 7,420 houses and 323 tenements (block dwellings). Of these over 6,000 houses and about 200 tenements have actually been completed, a remarkable achievement when we remember that Mr. Topham Forrest has been architect to the Council for only three years. He has already earned the thanks of London architects for the helpful way in which he administers the various Building Acts, and now he is to be further congratulated on the excellent results he has achieved as an architect in the design and lay-out of the Council's housing estates and in the design of new educational buildings for the same authority.

### ROEHAMPTON ESTATE

This estate is 147 acres in extent, and was purchased in October, 1919, for £120,000. It lies to the west of Putney Park Lane, between the Upper Richmond Road and Putney Heath, and rises from north to south.

The northern portion of the site, to the extent of about 94 acres, has been reserved for development by the Council for the housing of the working classes.

This reservation is distributed as follows :—

| | Acres. |
|---|---|
| Housing site | 52 |
| Schools, shops, etc. | 8 |
| Roads, allotments, and open spaces | 34 |
| | 94 |

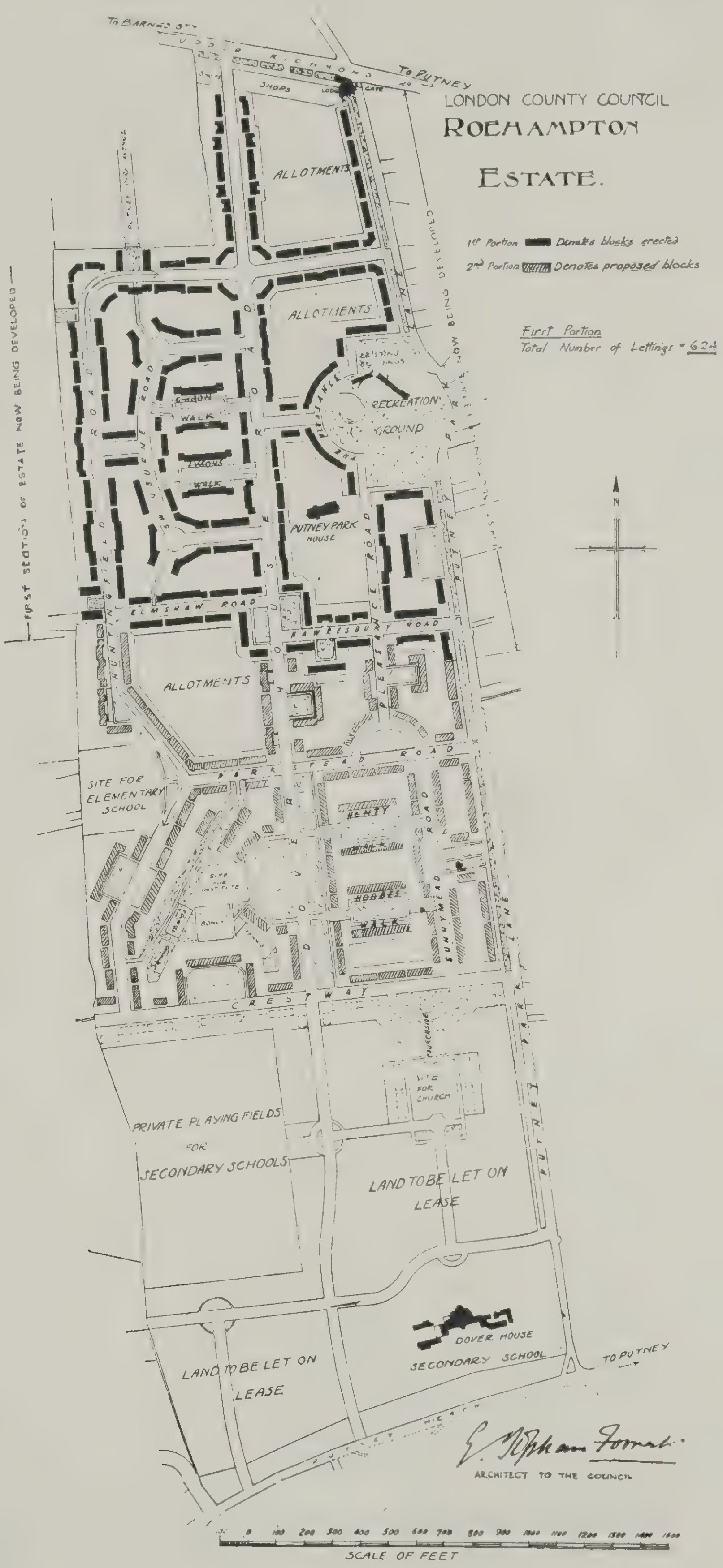
Distribution of remaining land :—

| | Acres. |
|---|---|
| Area reserved for houses other than working class | 34 |
| Secondary school | 5 |
| Church site | 1 |
| Roads and open spaces | 13 |
| | 53 |

*Accommodation.*

The portion of the estate developed comprises 624 cottages and maisonnettes as under :—

| | | |
|---|---|---|
| Three-room cottages | (living-room and two bedrooms) | 37 |
| Four-room ,, | (living-room and three bedrooms) | 222 |
| Five-room ,, | (living-room, parlour, and three bedrooms) | 271 |
| Two-room maisonnettes | (living-room and one bedroom) | 66 |
| Three-room ,, | (living-room and two bedrooms) | 28 |
| | | 624 |



LAY-OUT OF THE ROEHAMPTON (L.C.C.) HOUSING ESTATE.

G. TOPHAM FORREST, F.R.I.B.A., ARCHITECT TO THE COUNCIL.

*Rent, Rates, and Taxes* (*November*, 1922).

| | Rent. | | Rates and Taxes. | | Total. | |
|---|---|---|---|---|---|---|
| | s. | d. | s. | d. | s. | d. |
| Five-room house .. .. | 18 | 6 | 7 | 4 | 25 | 10 |
| Four-room ,, .. .. | 15 | 6 | 6 | 4 | 21 | 10 |
| Three-room ,, .. .. | 14 | 6 | 5 | 10 | 20 | 4 |
| Three-room flat .. .. | 12 | 6 | 5 | 0 | 17 | 6 |
| Two-room ,, .. .. | 11 | 0 | 4 | 2 | 15 | 2 |

*Schools.*

There will be one elementary school for 996 places, divided as follows :—

312 places for boys.
312 ,, ,, girls.
372 ,, ,, infants.

996

The junior portion is already built, and accommodation is temporarily provided there for 384 junior mixed pupils and infants. There will be one secondary school, for which a site of 5 acres has been reserved.

In framing the lay-out and designing the cottages, special regard has been paid to the preservation of the amenities of the neighbourhood, and natural features, including the finer trees, have been retained and absorbed into the scheme as far as possible.

In order to secure the maximum amount of sunlight in the principal rooms, particular attention has been directed to the grouping and aspects of the various blocks.

Among features of interest are turfed open spaces at the more important road crossings, and open greens bounded by subsidiary roads.

A scheme of seclusion is created by the judicious use of feature blocks as closing vistas, and this will be enhanced as the shrubs and trees included in the general scheme mature.

The scheme for the whole estate provides for the erection of approximately 1,200 houses, comprising two- and three-room maisonnettes, and three-, four-, and five-room cottages.

As will be seen from the plans, each house erected on the first portion of the estate has a separate bathroom (with lavatory basin, except in the case of the three-room cottage) and w.c., a hot-water system, supplying bathroom and scullery, and space for a perambulator or cycle.

Messrs. Leslie & Co., Ltd., and Mr. F. G. Minter were the general contractors for Roehampton. The sub-contractors were as follows :—*Tiling and slating :* Messrs. A. W. Allard & Co., Ltd., Clapham Junction. *Fencing :* Messrs. W. Turner, Riley & Co., Ltd., Putney Bridge Road; Messrs. John Stenning and Son, Ltd., East Grinstead. *Tar paving :* Messrs. Josiah Smart and Son, Gray's Inn Road. *Metal casements :* Messrs. The Crittall Manufacturing Co., Ltd.

## BELLINGHAM ESTATE

The estate at Bellingham is one of the largest State-aided schemes approved by the Minister of Health. The site, of about 250 acres, was purchased by the Council, the price being about £200 per acre. It is situated in the Metropolitan Borough of Lewisham, about nine miles from Charing Cross.

Comprising an area of about 175 acres, the estate is, roughly, a triangle enclosed on the west by the Mid-Kent branch of the S.E. & C. Railway, on the east by the Catford loop-line of the S.E. & C. Railway, and on the south by Southend Lane.

The area is served by three stations, of which Bellingham is the most central. Trams and omnibuses pass close by along the Bromley Road. Following are some interesting particulars :—

| | Acres. |
|---|---|
| Housing site .. .. .. .. .. .. | 176·5 |
| Area reserved for houses other than working class .. | 52·0 |
| Market gardens, etc. .. .. .. .. .. | 23·5 |
| | 252·0 |

The housing site includes :—

| | |
|---|---|
| Allotments .. .. .. .. .. | 20·40 |
| Recreation ground .. .. .. .. | 9·50 |
| Site for two schools .. .. .. | 4·79 |
| Site for churches, shops, etc. .. .. | 4·58 |

*Accommodation.*

399 five-room houses.
1,103 four-room ,, without parlours.
111 four-room ,, with parlours.
188 three-room ,,
156 three-room flats.
132 two-room ,,

2,089

An estate office and workshop in Randlesdown Road.

*Rent, Rates, and Taxes* (*November*, 1922).

| | Rent. | | Rates and Taxes. | | Total. | | |
|---|---|---|---|---|---|---|---|
| | s. | d. | s. | d. | £ | s. | d. |
| Five-room house .. .. | 16 | 6 | 6 | 5 | 1 | 2 | 11 |
| Four-room ,, (parlour) | 15 | 6 | 5 | 6 | 1 | 1 | 0 |
| Four-room ,, .. .. | 14 | 6 | 5 | 6 | 1 | 0 | 0 |
| Three-room ,, .. .. | 13 | 6 | 4 | 11 | | 18 | 5 |
| Three-room flat .. .. | 11 | 6 | 3 | 7 | | 15 | 1 |
| Two-room ,, .. .. | 10 | 0 | 3 | 0 | | 13 | 0 |

*Schools.*

There will be two elementary schools.

*The N. School :* 1,024 places.

384 places have been provided for infants.

320 additional places will be ready early this year.

320 further places will be ready in February, 1923.

*The S. School :* 1,024 places.

It is expected the erection of this school will be started early this year.

*Construction.*

The construction of the houses is as follows :—

External walls : 11 in. hollow walls faced with various bricks.

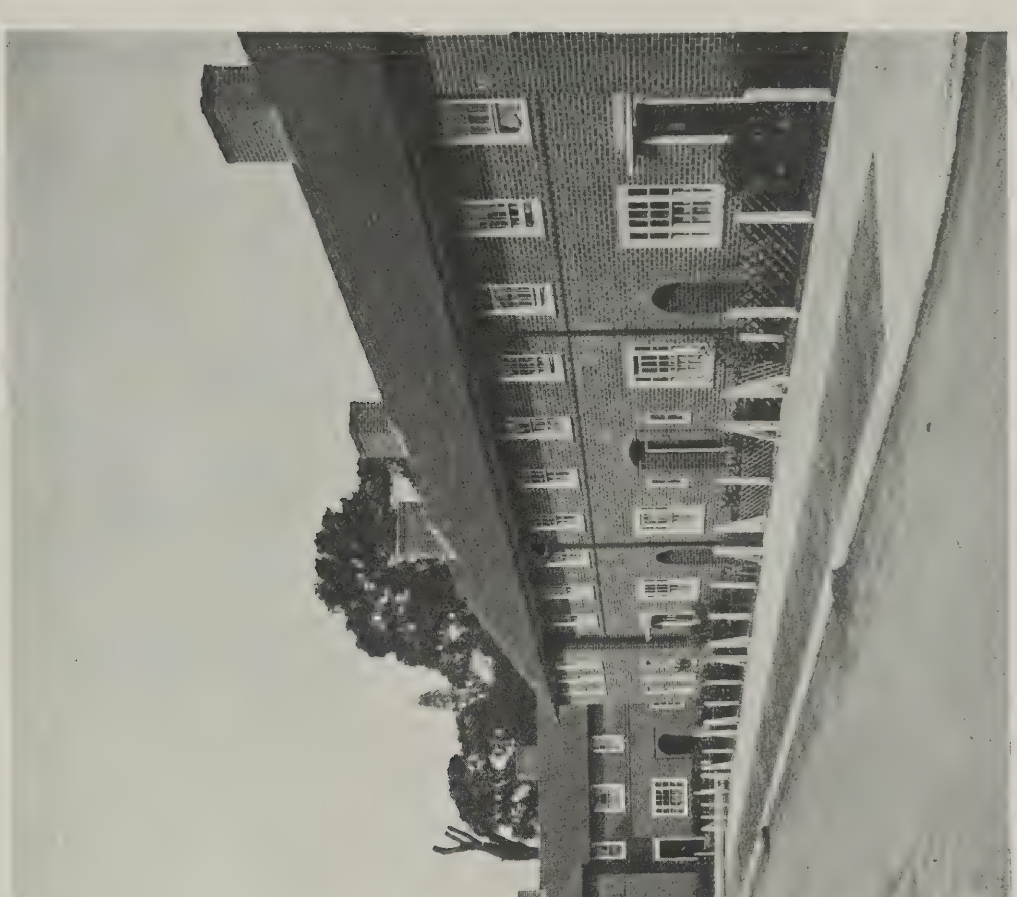
Internal walls : largely coke breeze.

Wood floors.

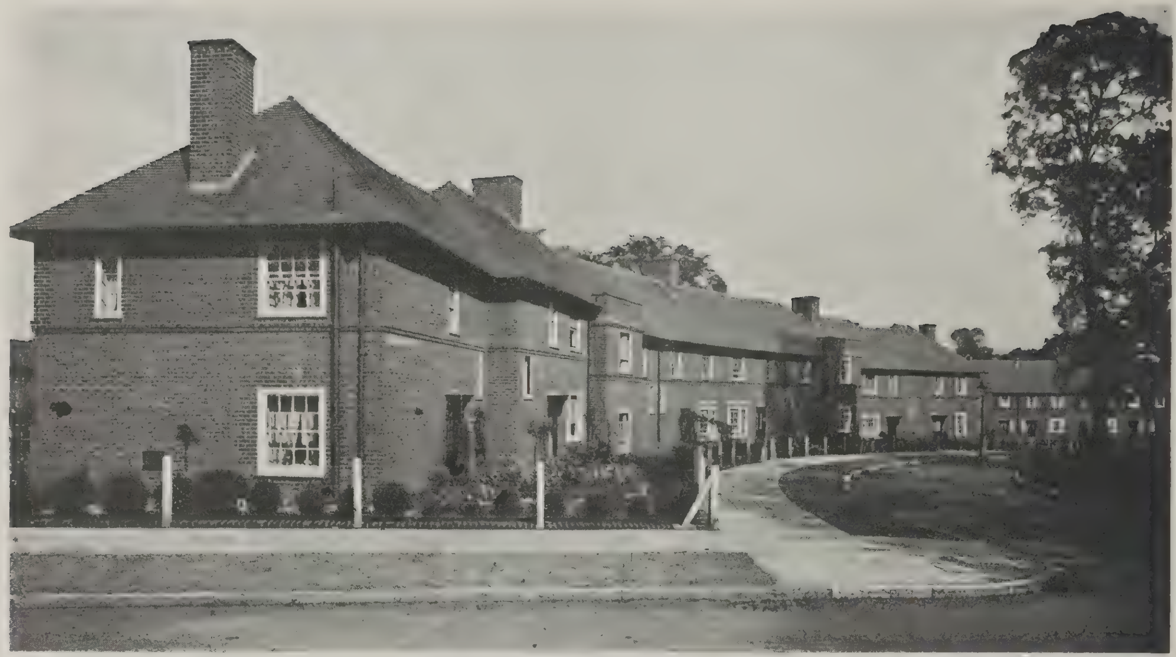
Roofs covered with Courtrai, Marseilles, Van Eght, Home tiles, and Welsh slates.

A point of interest about the blocks which have been erected on rising ground is that they have been designed with the floors stepped, and at the same time unsightly breaks in the horizontal lines of the roofs have been avoided.

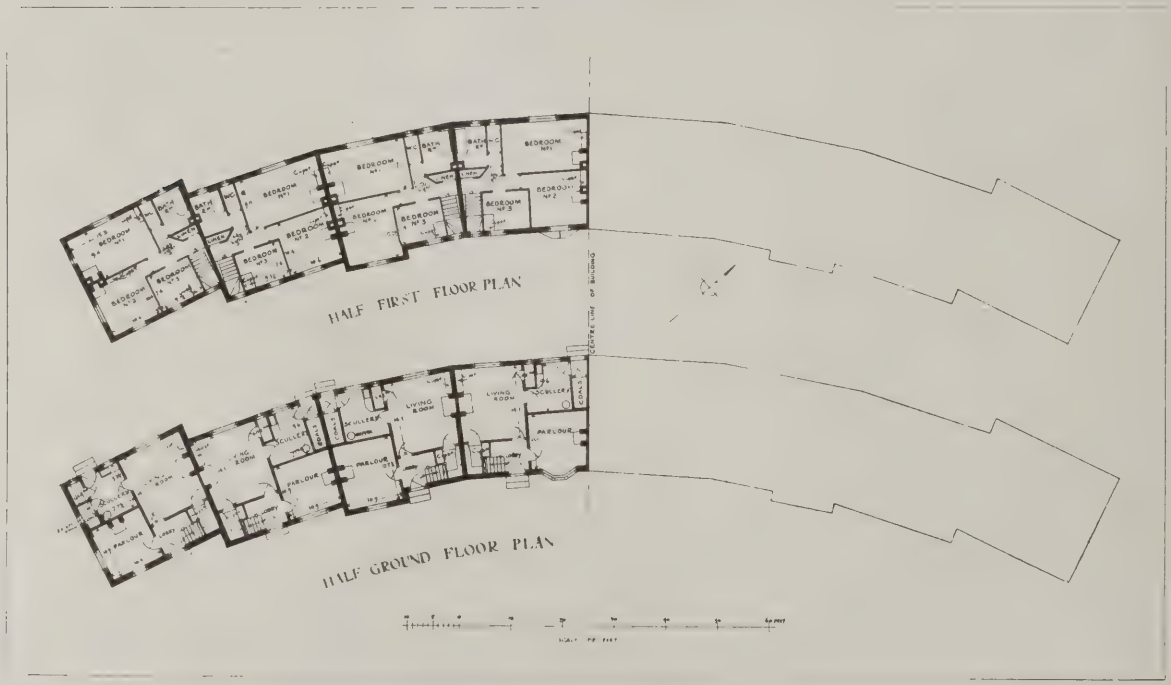
Sir Robert McAlpine and Sons were the general contractors for the Bellingham Estate, and the following were sub-contractors :—*Plasterers :* Messrs. H. and F. Badcock, Peckham; Messrs. Jefferyes & Co., London; Mr. H. Hitchings, Balham. *Glaziers :* Messrs. Brooks, Phillips & Co., Paddington Green; Mr. A. Goldstein, Gillingham, Kent; Messrs. Smith and Owen, Beckenham; Messrs. W. Weller and Sons, Catford. *Tilers :* Messrs. Roberts, Adlard & Co., Bermondsey; Messrs. Nethercot & Co., Stratford Market. *Painting :* Messrs. J. and R. Anderson, Glasgow. *Road surfacing and garden paths :* Messrs. Constable, Hart & Co., London. *Asphalt :* Messrs. The Limmer and Trinidad Lake Asphalte Co., Ltd., London; Messrs. The Ragusa Asphalte Co., Ltd., London. *Fencing :* Messrs. The Vectis Stone and Fencing Co., Ltd., Hay, Herefordshire; Messrs. The Fernden Fencing Co., Guildford; Messrs. Turner, Riley & Co., Putney; Messrs. The Merton Abbey Joinery Works, Merton Abbey.



ROEHAMPTON (L.C.C.) HOUSING ESTATE: HUNTINGFIELD ROAD FROM SWINBURNE ROAD.
G. TOPHAM FORREST, F.R.I.B.A., ARCHITECT TO THE COUNCIL.



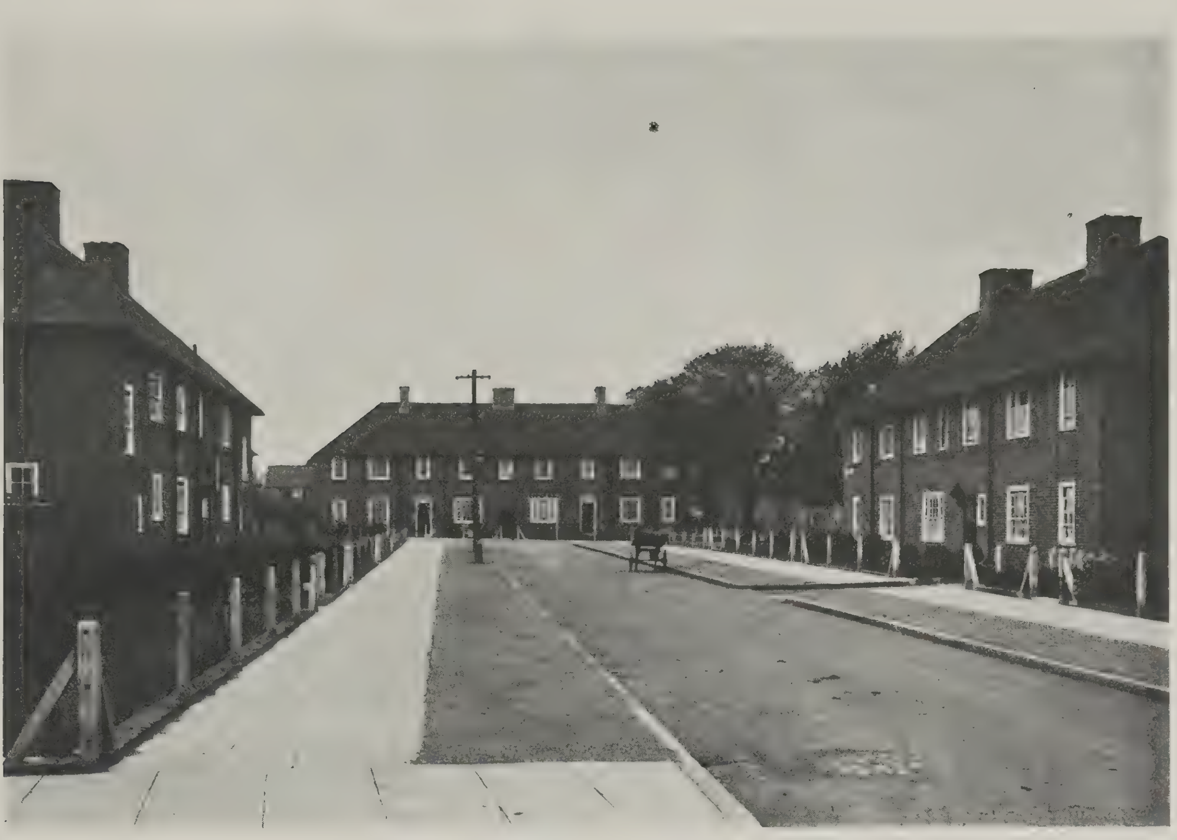
"THE PLEASANCE," LOOKING NORTH.



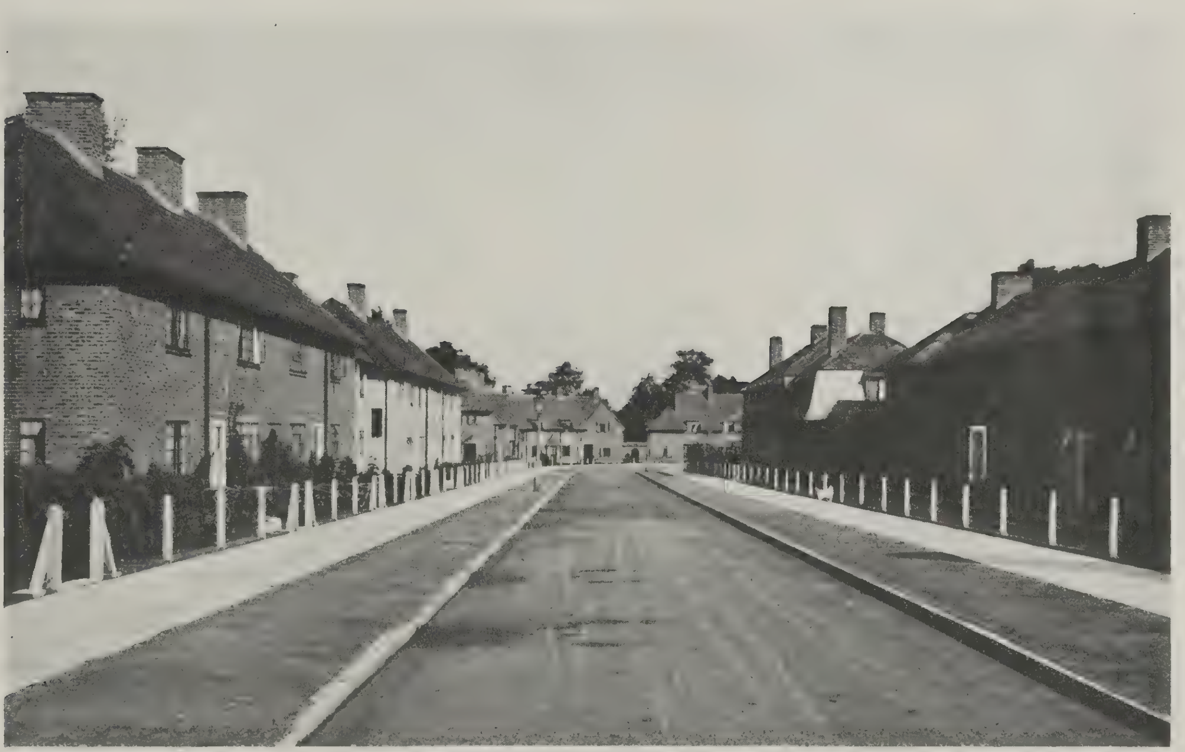
PLANS OF "THE PLEASANCE."

ROEHAMPTON (L.C.C.) HOUSING ESTATE.

G. TOPHAM FORREST, F.R.I.B.A., ARCHITECT TO THE COUNCIL.



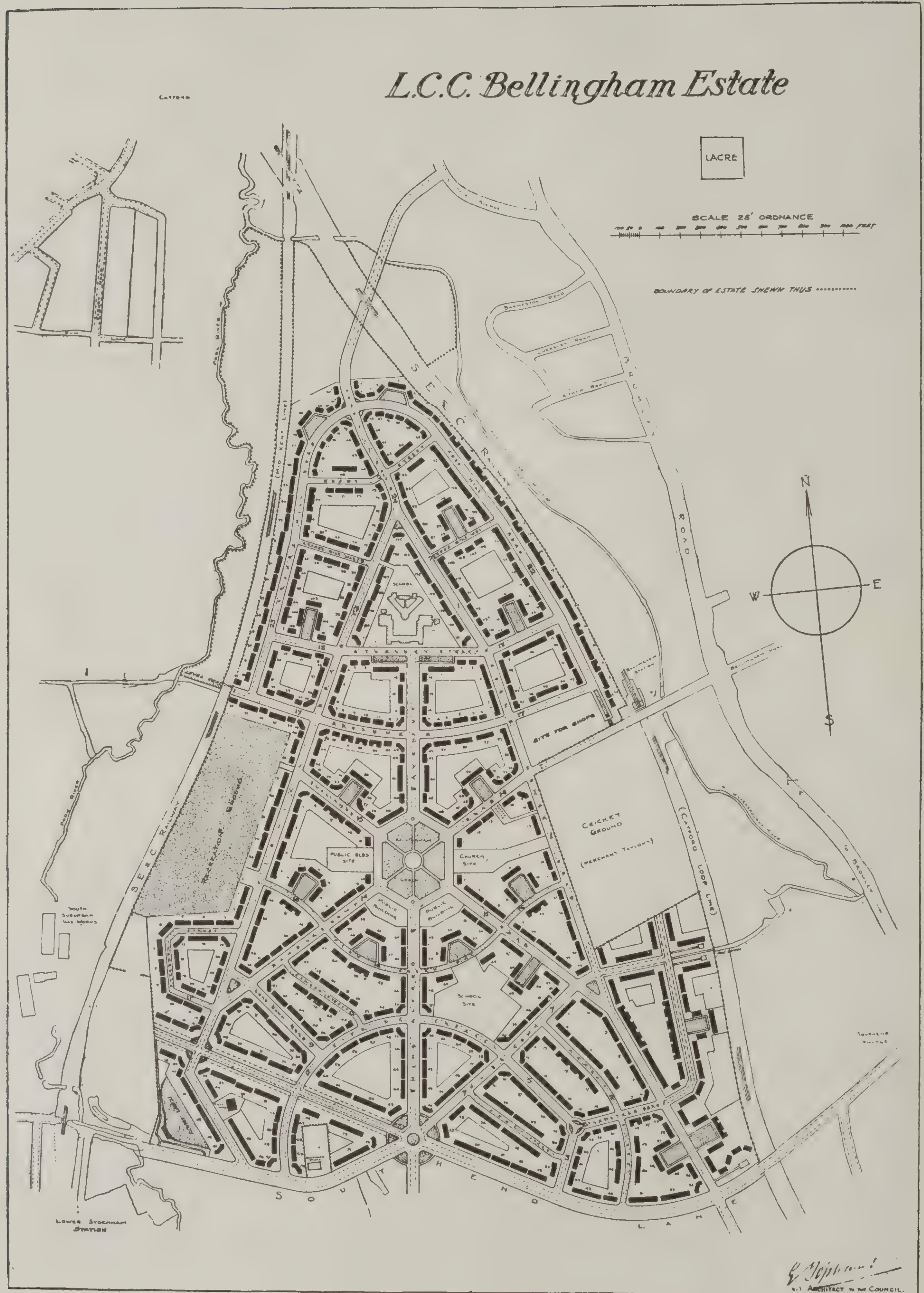
"THE PLEASANCE," LOOKING W. TO DOWER HOUSE ROAD.



HUNTINGFIELD ROAD, LOOKING NORTH.

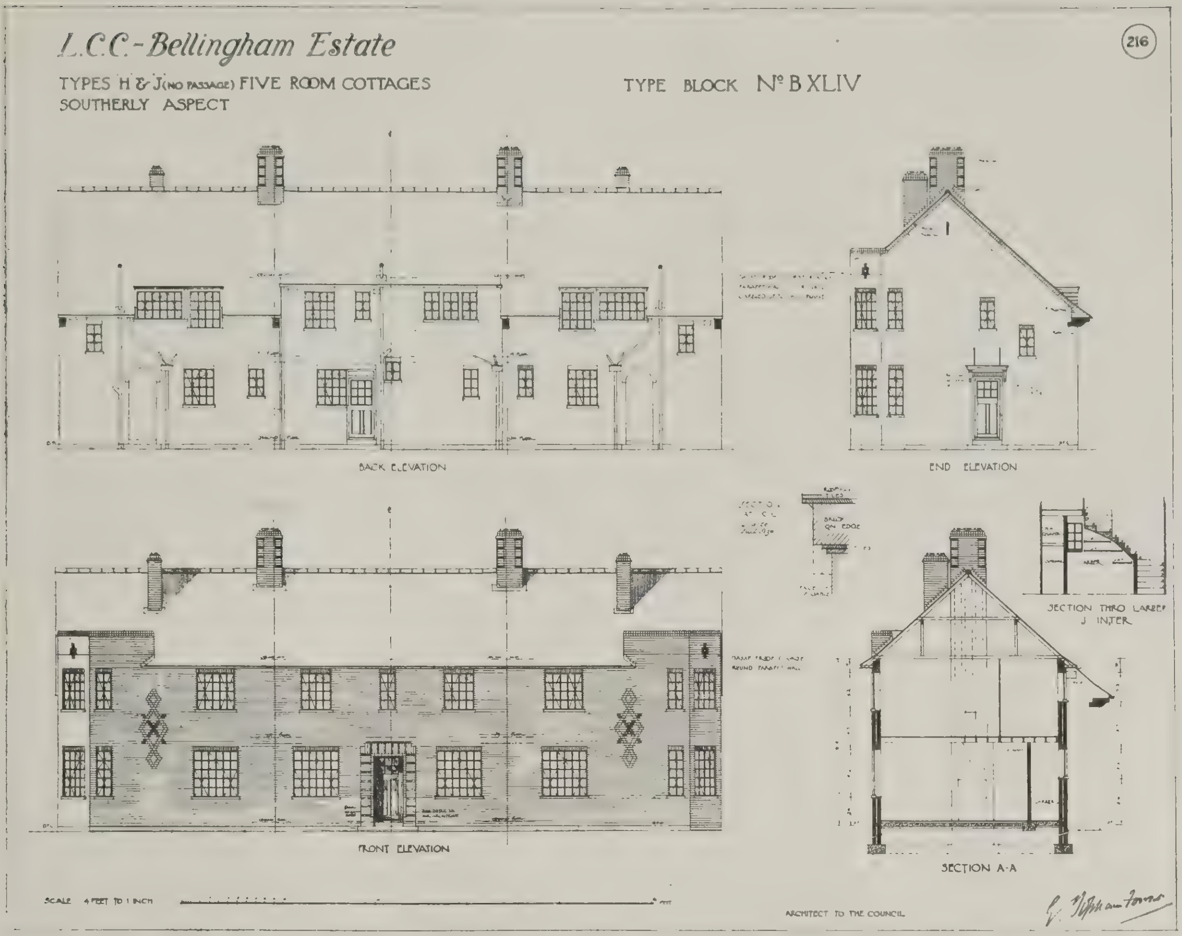
ROEHAMPTON (L.C.C.) HOUSING ESTATE.

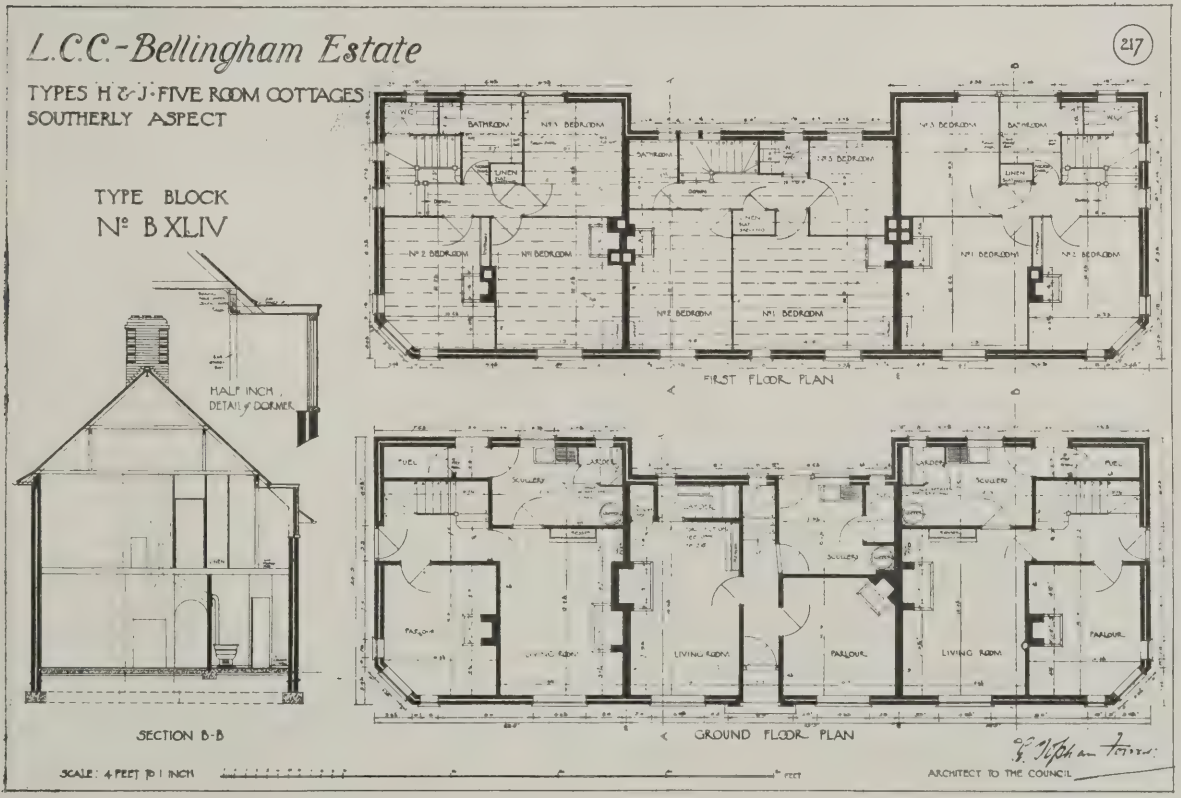
G. TOPHAM FORREST, F.R.I.B.A., ARCHITECT TO THE COUNCIL.



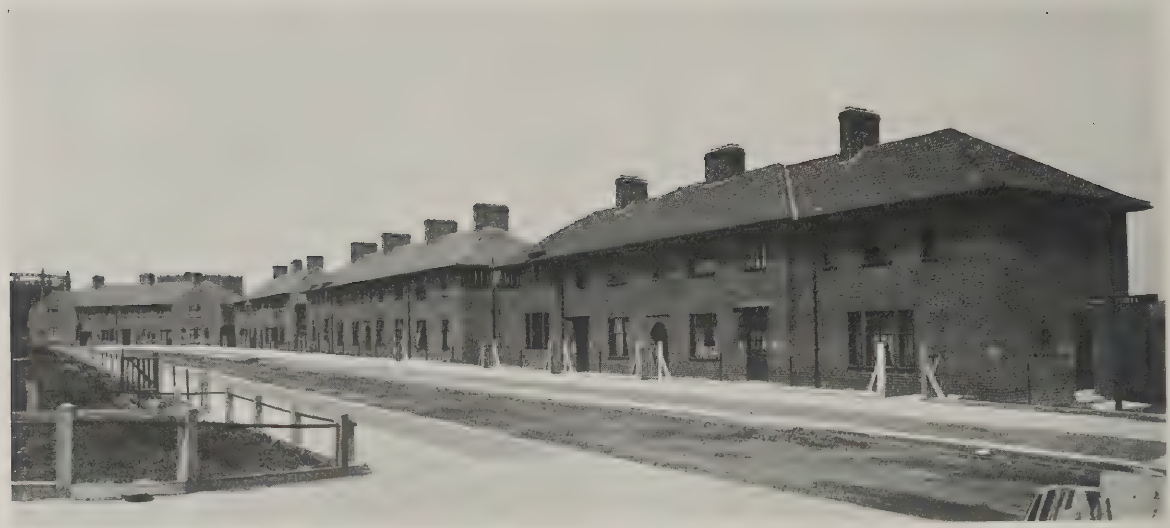
LAY-OUT OF THE BELLINGHAM (L.C.C.) HOUSING ESTATE.

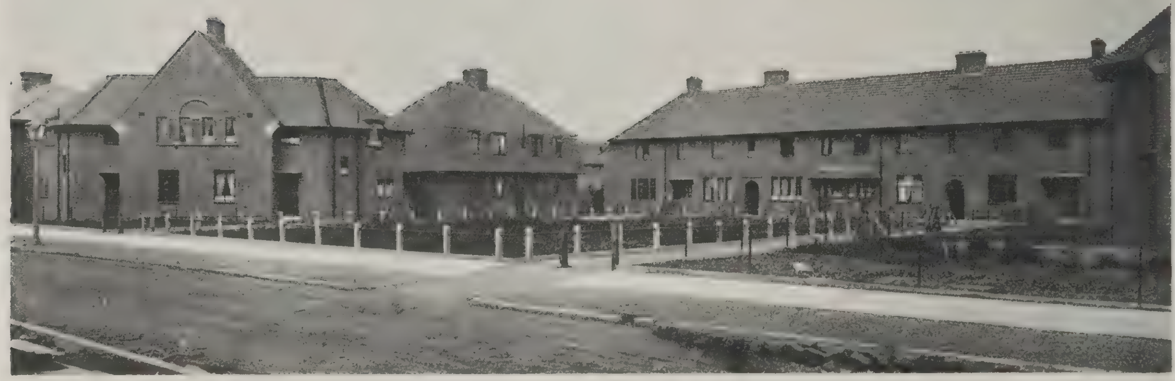
G. TOPHAM FORREST, F.R.I.B.A., ARCHITECT TO THE COUNCIL.

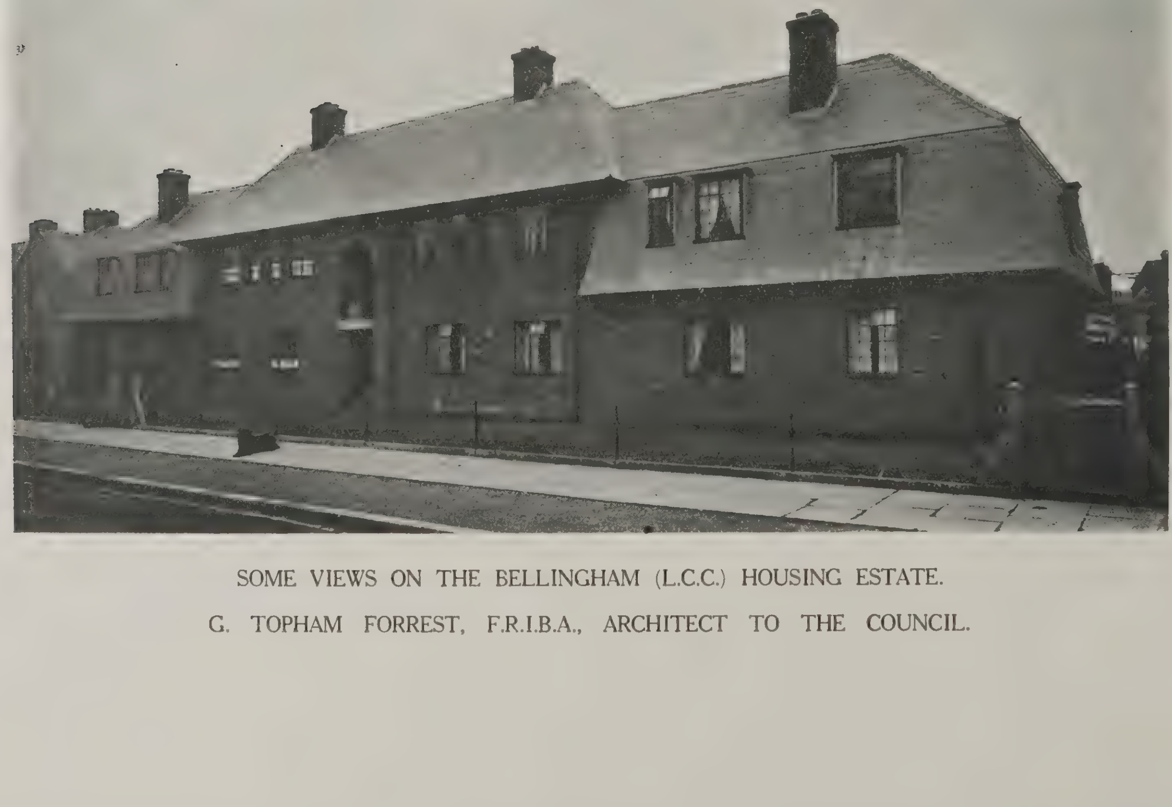




BELLINGHAM (L.C.C.) HOUSING ESTATE: PLANS, SECTIONS, AND ELEVATIONS OF A BLOCK OF FIVE-ROOM COTTAGES. G. TOPHAM FORREST, F.R.I.B.A., ARCHITECT TO THE COUNCIL.

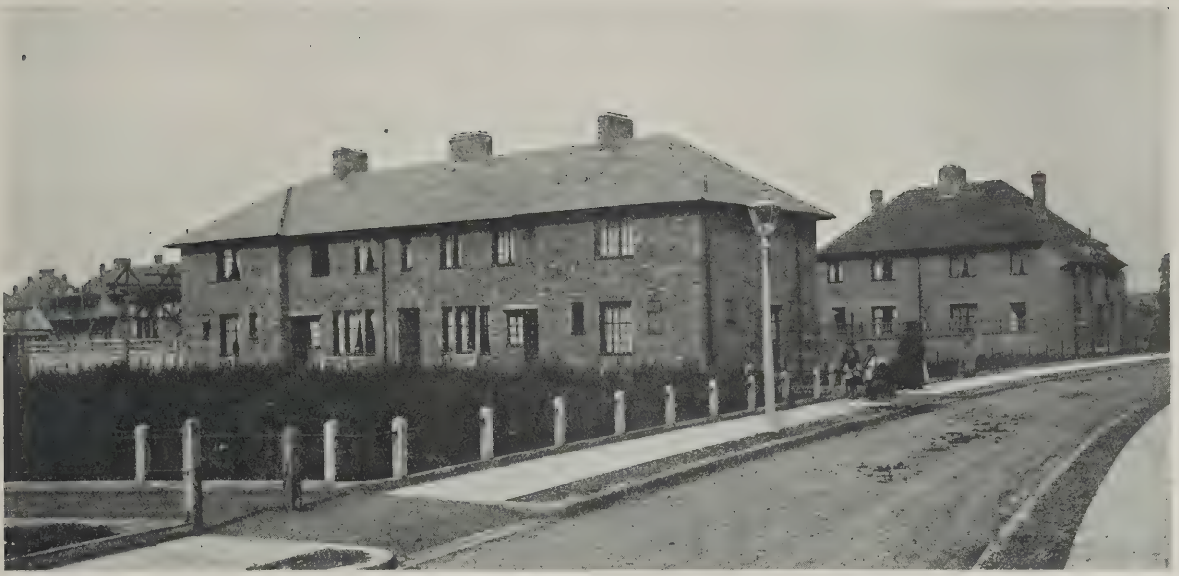


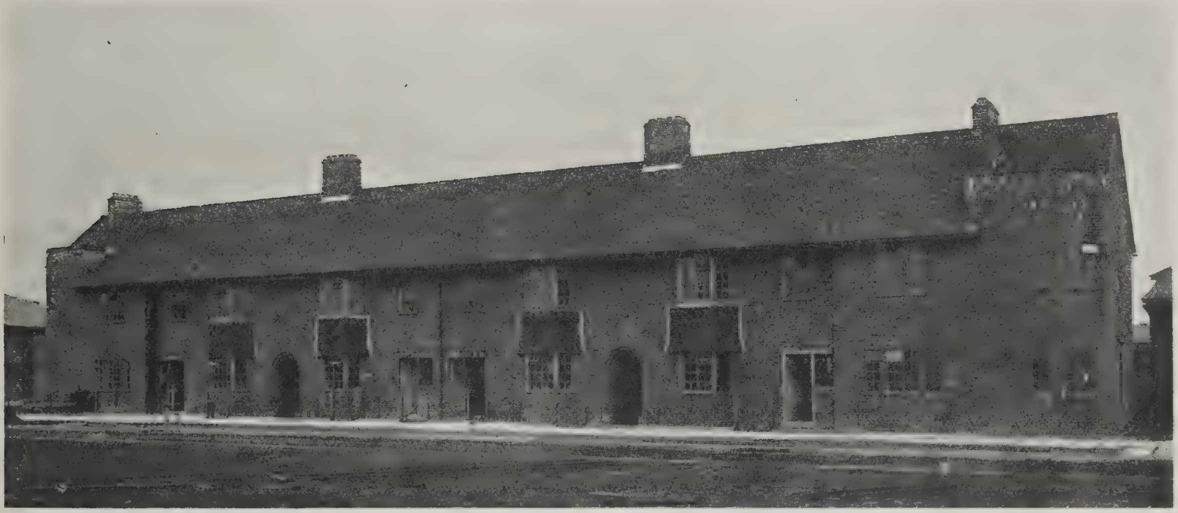


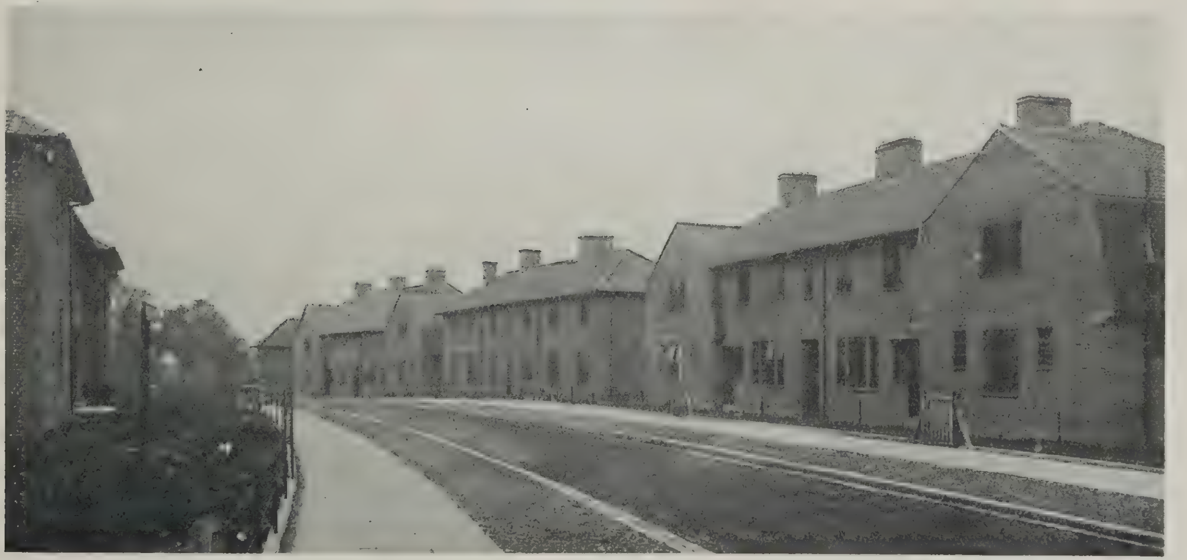


SOME VIEWS ON THE BELLINGHAM (L.C.C.) HOUSING ESTATE.

G. TOPHAM FORREST, F.R.I.B.A., ARCHITECT TO THE COUNCIL.







SOME VIEWS ON THE BELLINGHAM (L.C.C.) HOUSING ESTATE.
G. TOPHAM FORREST, F.R.I.B.A., ARCHITECT TO THE COUNCIL.

D

# Welwyn Garden City, Herts

C. MURRAY HENNELL F.S.I., and C. H. JAMES, A.R.I.B.A., Architects

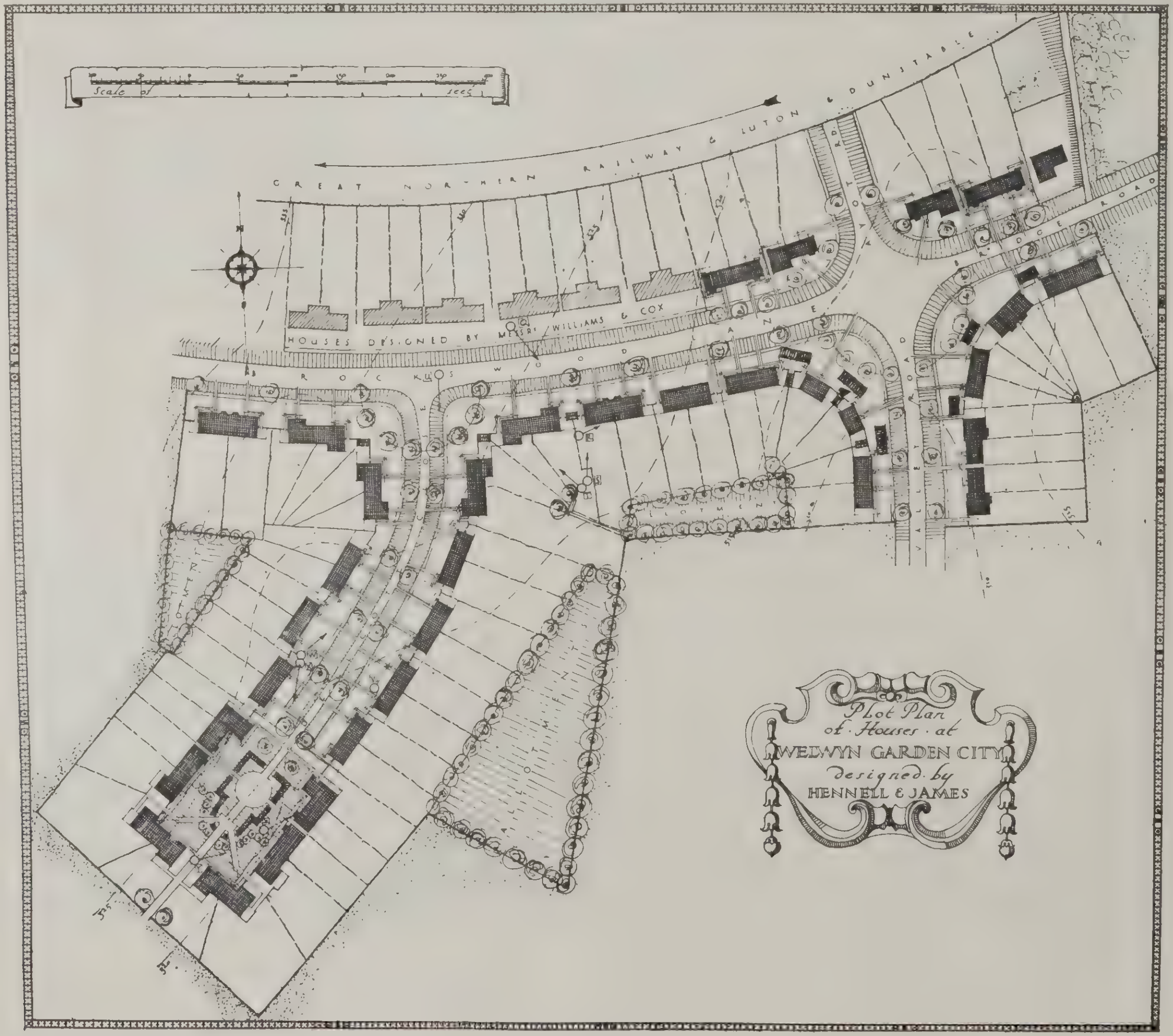
THE houses shown in the accompanying plans and photographs form part of a "middle class" housing scheme embarked on by a "Public Utility Society," known as "Labour Saving Houses, Ltd.," which received Government financial assistance under the 1919 Housing Act. It will be appreciated, therefore, that the architects were strictly limited as to cost.

The building of the first twenty-eight houses, in Brockswood Lane and the northern part of Dellcott Close, illustrated by the photographs taken from points Q, T, and U, was started in 1920, when good facing bricks were practically unobtainable except at prohibitive prices and in uncertain quantities. Rough-cast was, therefore, resorted to, but in the later houses, at the end of Dellcott Close (see photographs taken from points X and Z), also at the corners of Valley Road and Ayot Road, the availability of bricks facilitated a Georgian treatment of the elevations, mixed red and Luton grey facings being used.

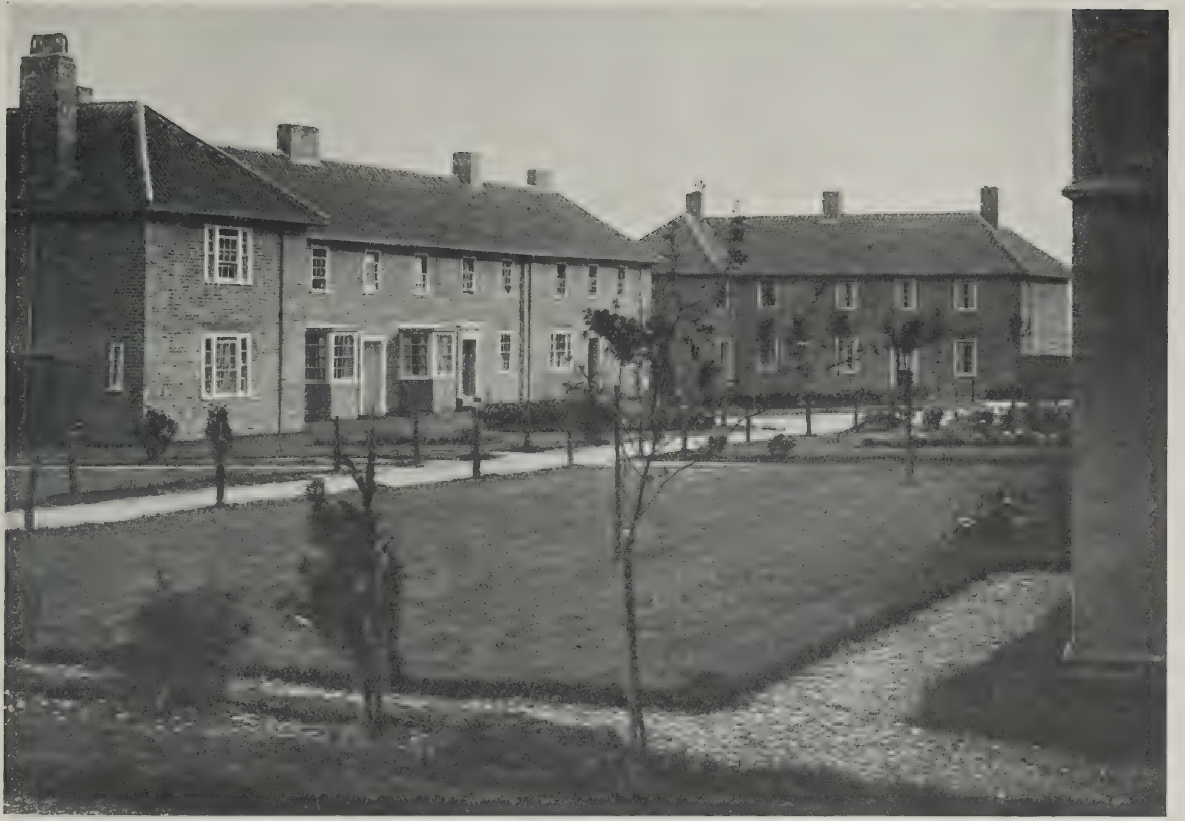
The siting of these houses, as shown on the plot plan, was more or less dictated by the General Town Planning of Welwyn Garden City, the levels of the land (severe and difficult falls being encountered throughout), and the fact that the Society required for the most part semi-detached houses. The accommodation in the houses ranges from living-room, scullery, and two bedrooms (generally known as Type A2), to living-room, dining-room, kitchen, scullery, and four bedrooms (Type B4), and some of the houses have a living-room, dining-room, with a working scullery recess, and two or three bedrooms. In every house there is a bathroom and one separate w.c., and in the larger types a second w.c. is provided.

With an unlevel site and such small units as semi-detached houses, it was extremely difficult to obtain any continuity of line, but the linking-up of the houses by high square trellis fencing and gates, which was the most that could be afforded, has obviated the usual draughty-looking opening between such buildings, and when Nature has had her way in the form of ramblers, shrubs, and trees, many of which had yet to be planted when the photographs were taken, a restful and harmonious result is likely to be achieved.

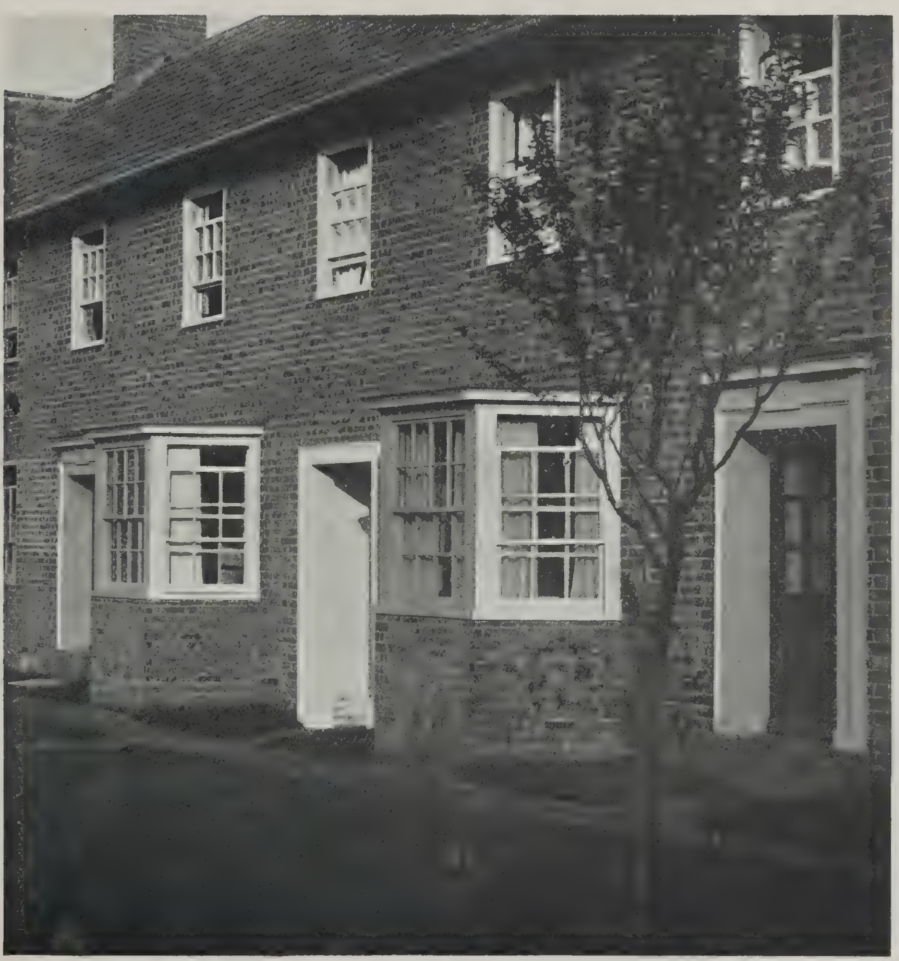
The quadrangle at the southern end of Dellcott Close, flanked by a block of four houses on each side and terminated by two pairs, gave the architects a much better chance, but here again the severe fall across the site did not readily lend itself to such a treatment. However, this has been overcome in such a way that, unless the observer's attention is drawn to the difference of levels, he will come away with the impression that the site is practically a flat one.


Scale of Feet
GREAT NORTHERN RAILWAY & LUTON & DUNSTABLE
N
HOUSES DESIGNED BY MESSRS. WILLIAMS & COX
BROCKSWOOD LANE
AYOT RD.
BRIDGE ROAD
VALLEY ROAD
ALLOTMENTS
Plot Plan of Houses at WELWYN GARDEN CITY designed by HENNELL & JAMES

THE LAY-OUT.

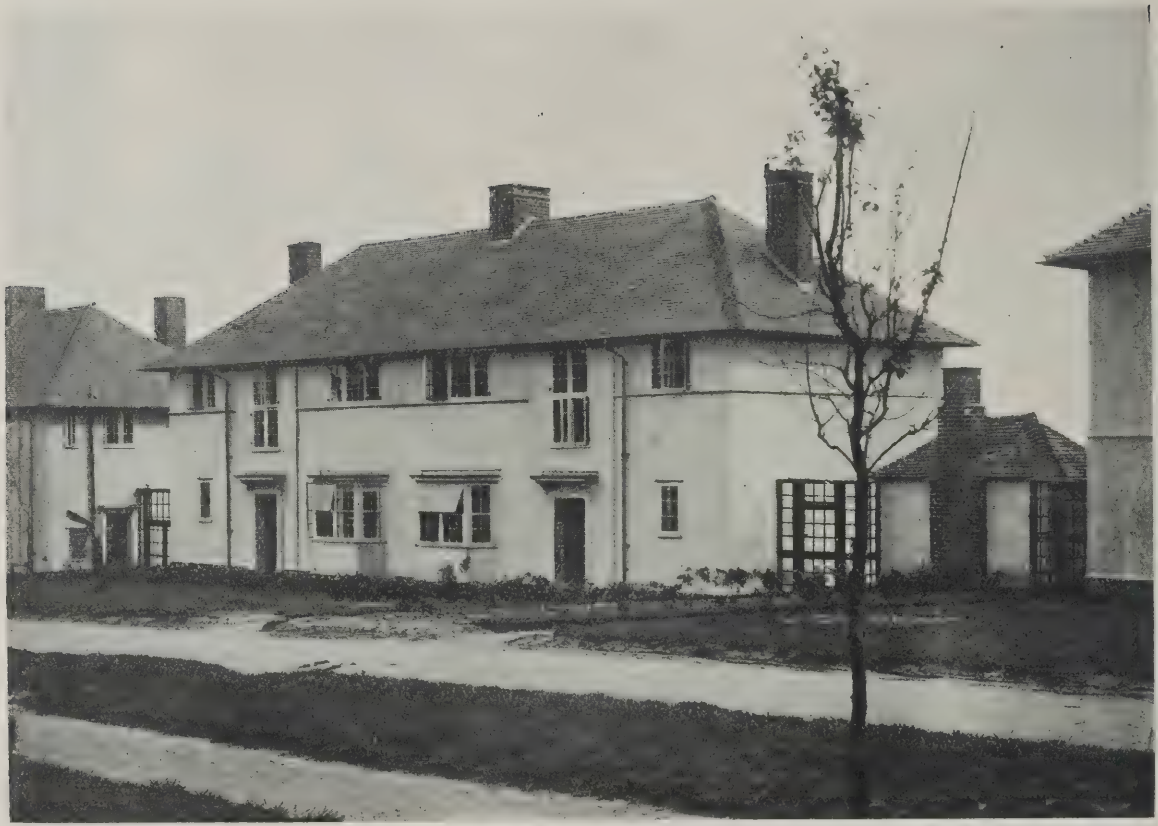


VIEW FROM POINT X ON PLOT PLAN.

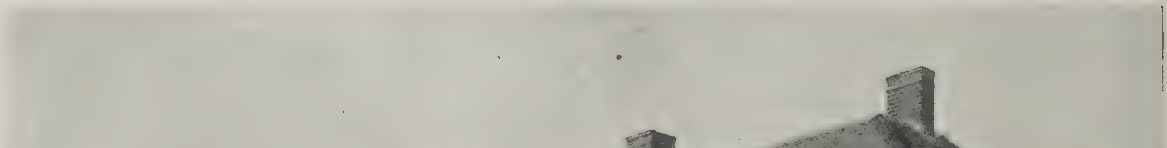


VIEW FROM POINT Z ON PLOT PLAN.

HOUSES AT WELWYN GARDEN CITY. HENNELL AND JAMES, ARCHITECTS

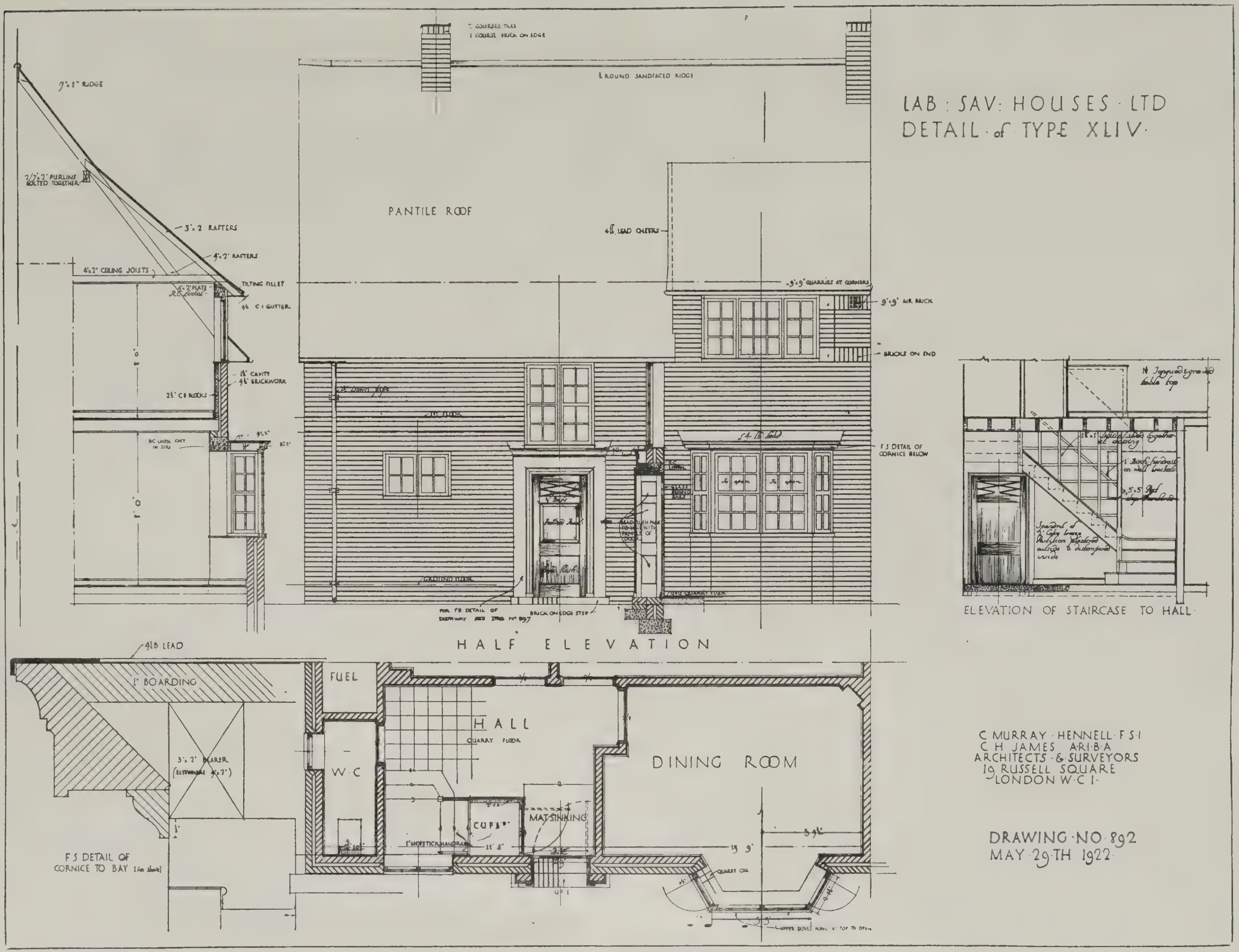


VIEW FROM POINT Q ON PLOT PLAN.

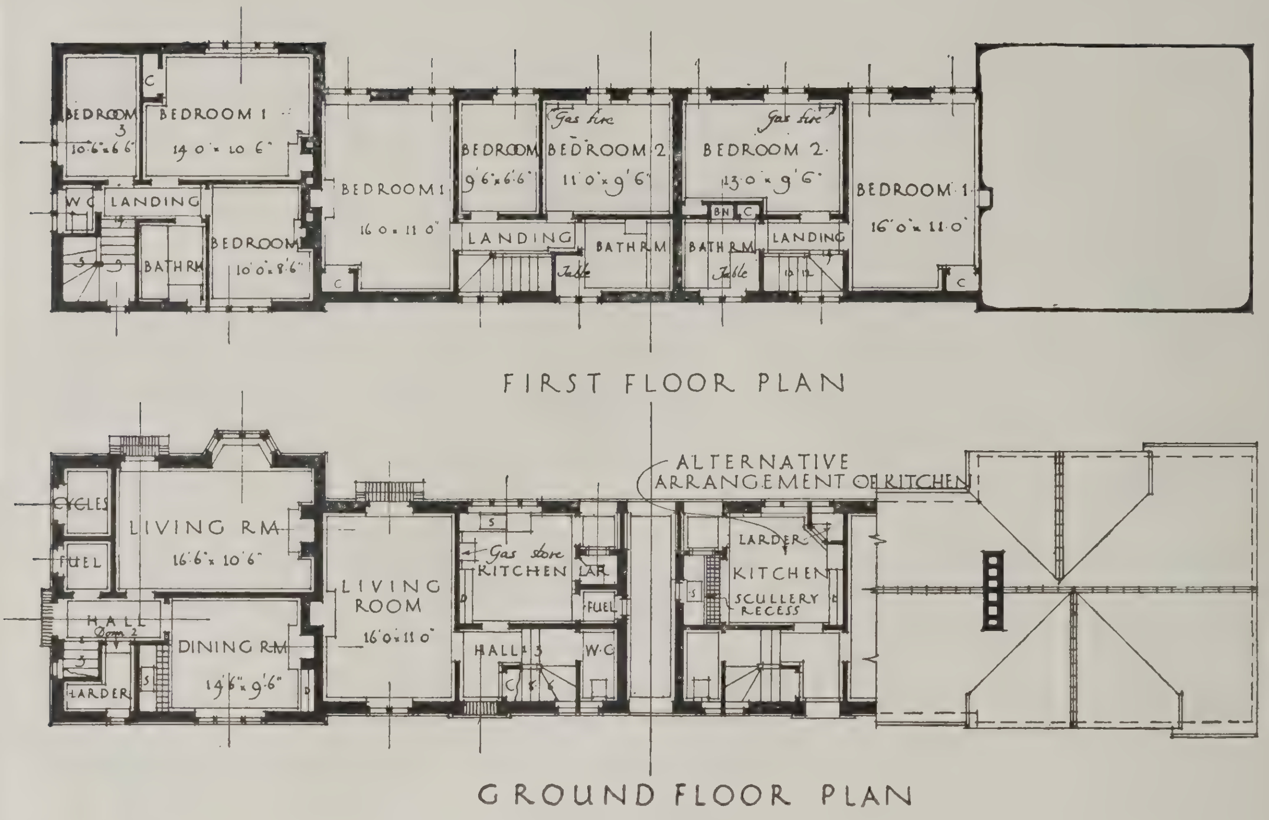


VIEW FROM POINT T ON PLOT PLAN.

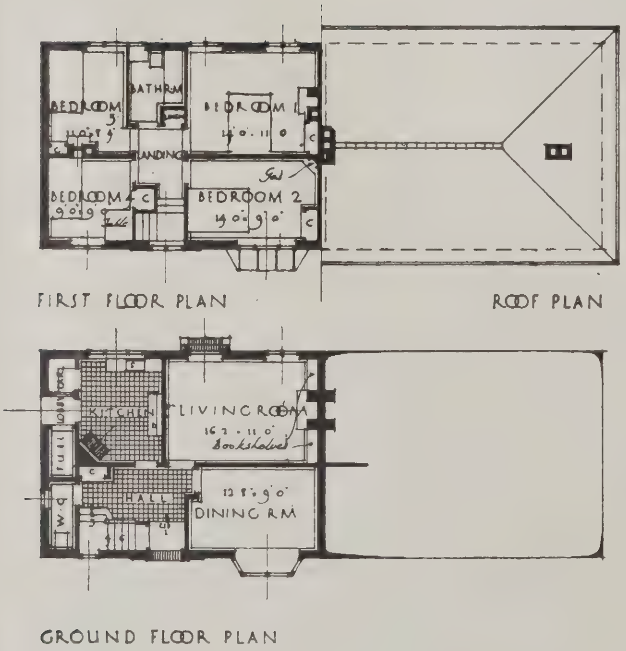
HOUSES AT WELWYN GARDEN CITY. HENNELL AND JAMES, ARCHITECTS.



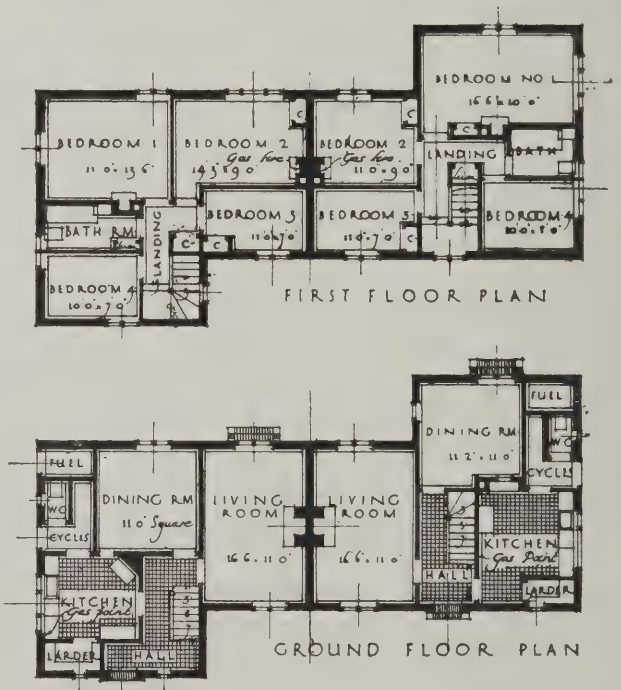
WELWYN GARDEN CITY: DETAIL OF A TYPICAL HOUSE.
HENNELL AND JAMES, ARCHITECTS.



COMPOSITE BLOCK. END HOUSES C 3 TYPE; MIDDLE HOUSES A 2 AND A 3.



NORTH-WEST ASPECT. B 4 TYPE.



B 4 TYPE USED AT CORNERS. SUITABLE FOR NORTH, EAST, OR WEST ASPECTS.

WELWYN GARDEN CITY: SOME TYPICAL HOUSE PLANS.
HENNELL AND JAMES, ARCHITECTS.

VIEW FROM POINT U ON PLOT PLAN.

WELWYN GARDEN CITY. HENNELL AND JAMES, ARCHITECTS.

# Housing Schemes at Totnes (Devonshire), and Ham (Surrey)

### ADSHEAD and RAMSEY, FF.R.I.B.A., Architects

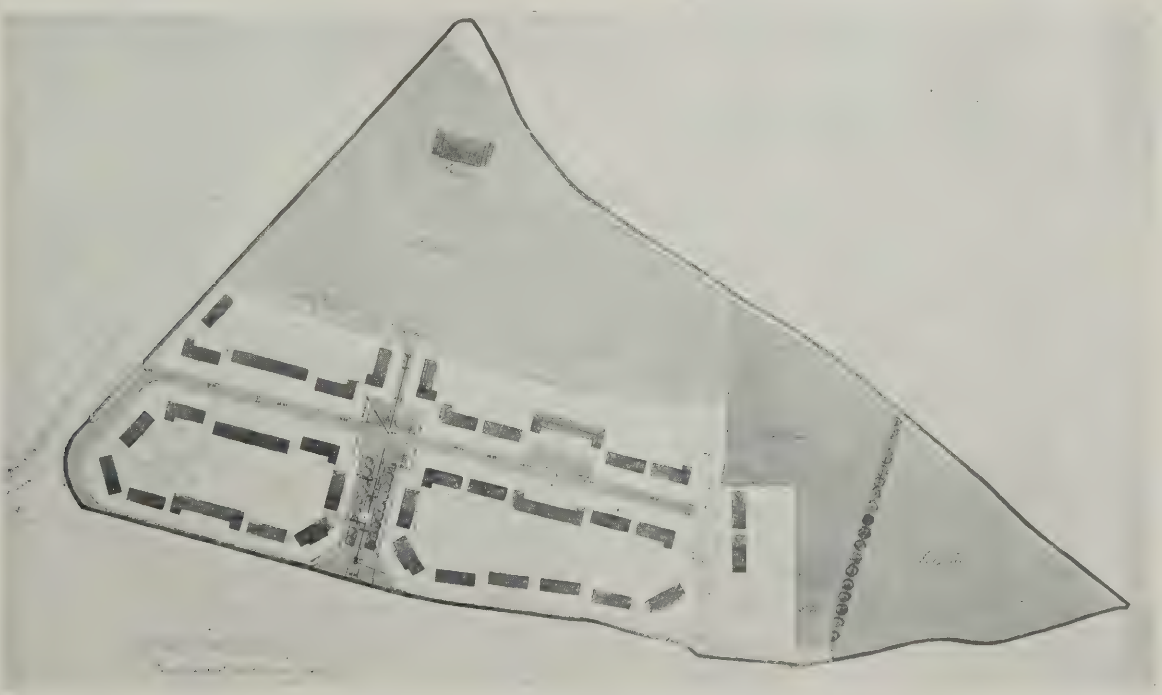
THE original scheme at Totnes provided for forty houses, provision being made for the addition of future houses from time to time, as required. Of this scheme twenty-four houses have been built along the main road.

The site is a comparatively flat one, and the interest of the lay-out centres around the small square.

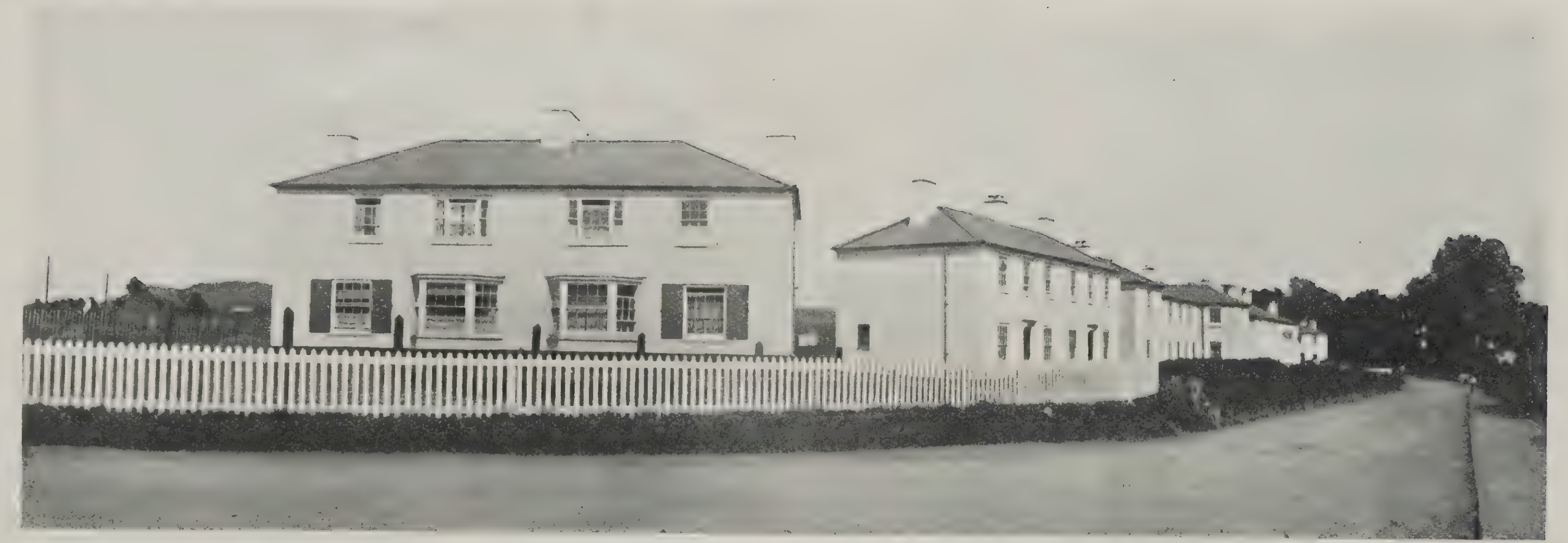
The houses are built of concrete blocks covered with cement plaster, finished off with a wood float and coloured a light cream. The roofs are covered with slates from the Delabole Slate Quarries in Cornwall.

The Ham scheme consists of twenty houses, built with London stock bricks and roofed with double Roman tiles of bright orange-red. The windows are all sash.

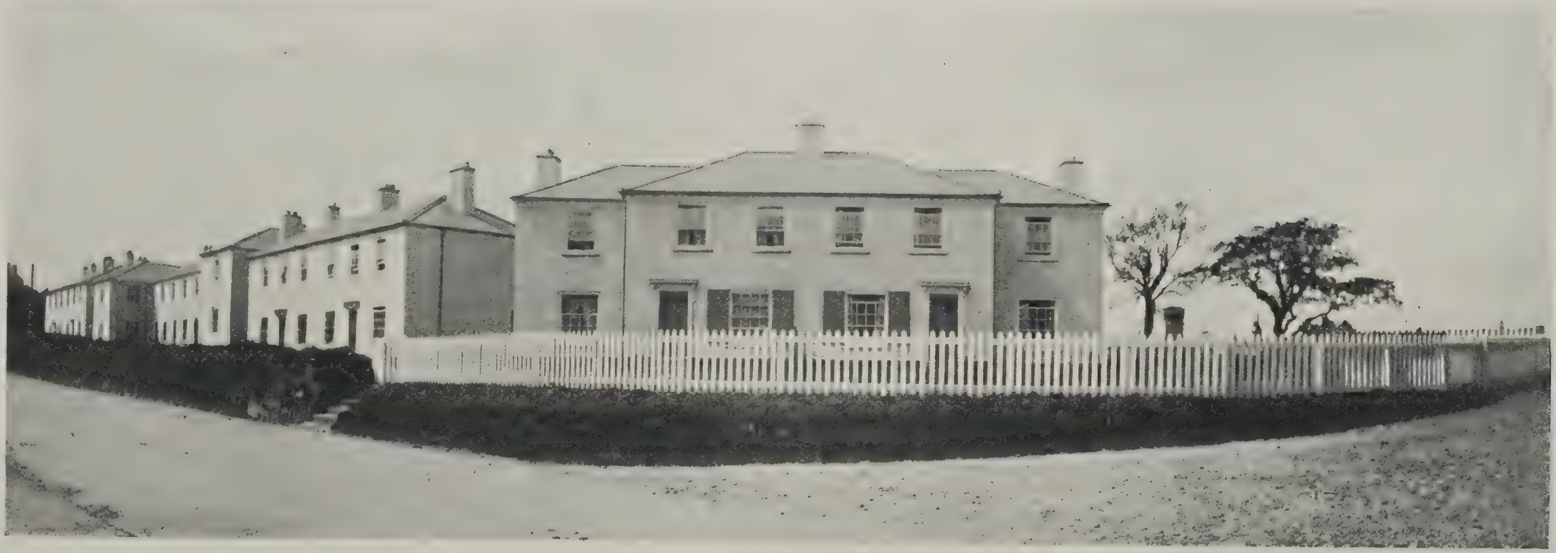
Architectural character has been obtained by a careful disposition of windows and wall spacing. The doorways have evidently been designed with great care. (Mr. E. J. Partridge, Architect to the Dysart Estate, was associated with Messrs. Adshead and Ramsey in this scheme.)



LAY-OUT OF TOTNES HOUSING SCHEME.

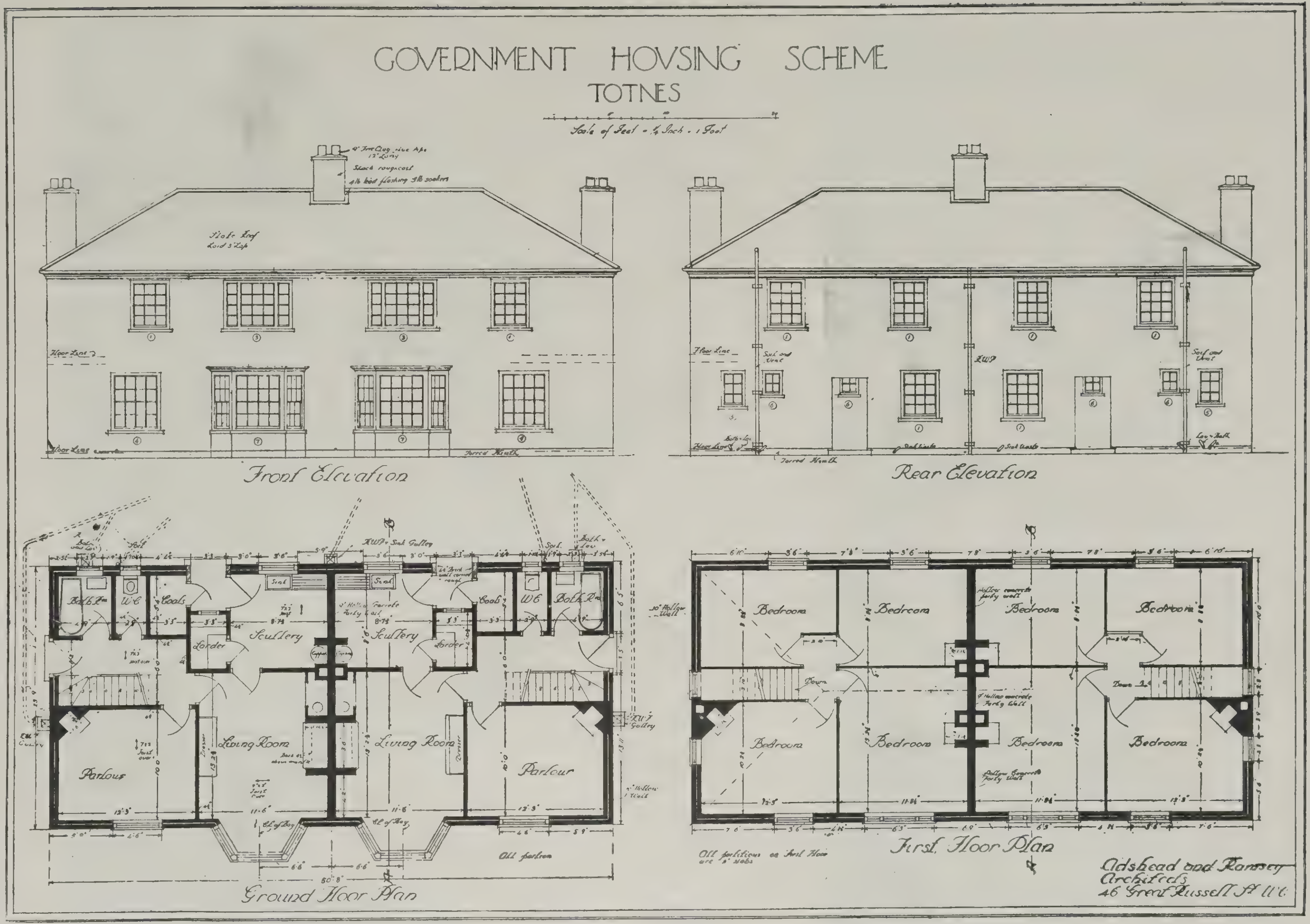


VIEW LOOKING EAST



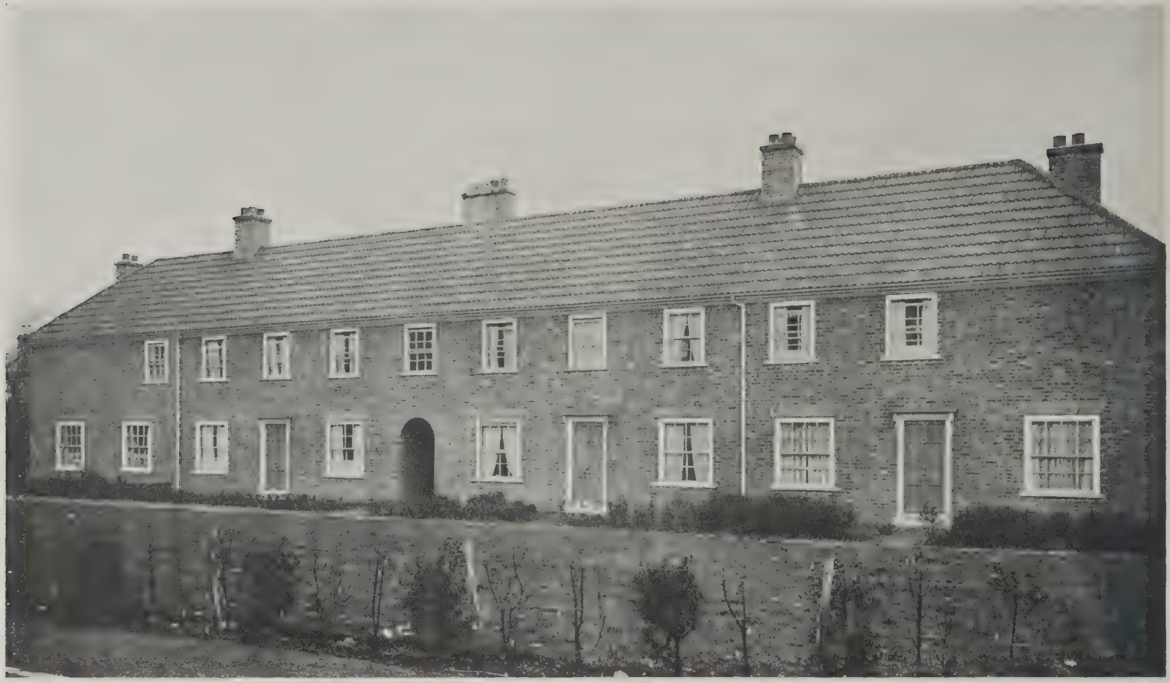
VIEW LOOKING WEST.

TOTNES HOUSING SCHEME ADSHEAD AND RAMSEY, FF.R.I.B.A., ARCHITECTS.

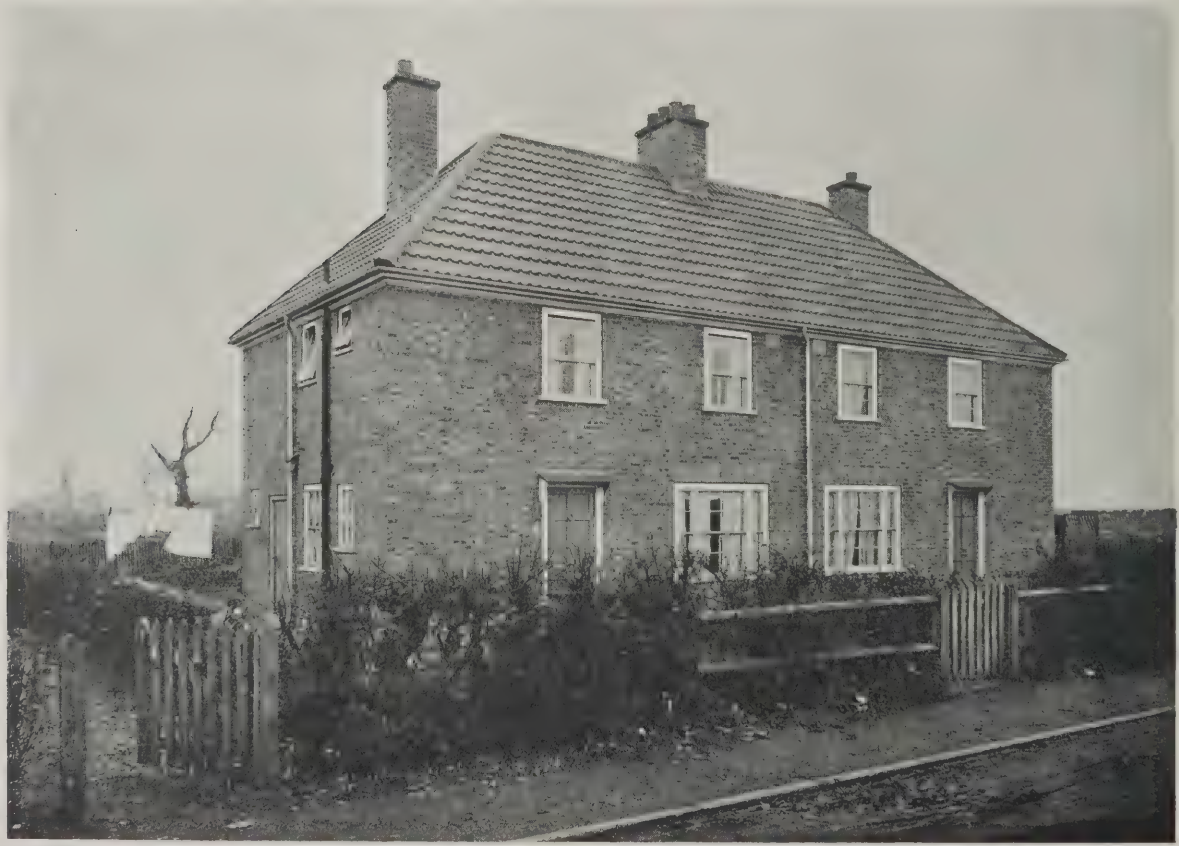


TOTNES HOUSING SCHEME: PLANS AND ELEVATIONS OF A PAIR OF HOUSES.

ADSHEAD AND RAMSEY, FF.R.I.B.A., ARCHITECTS.

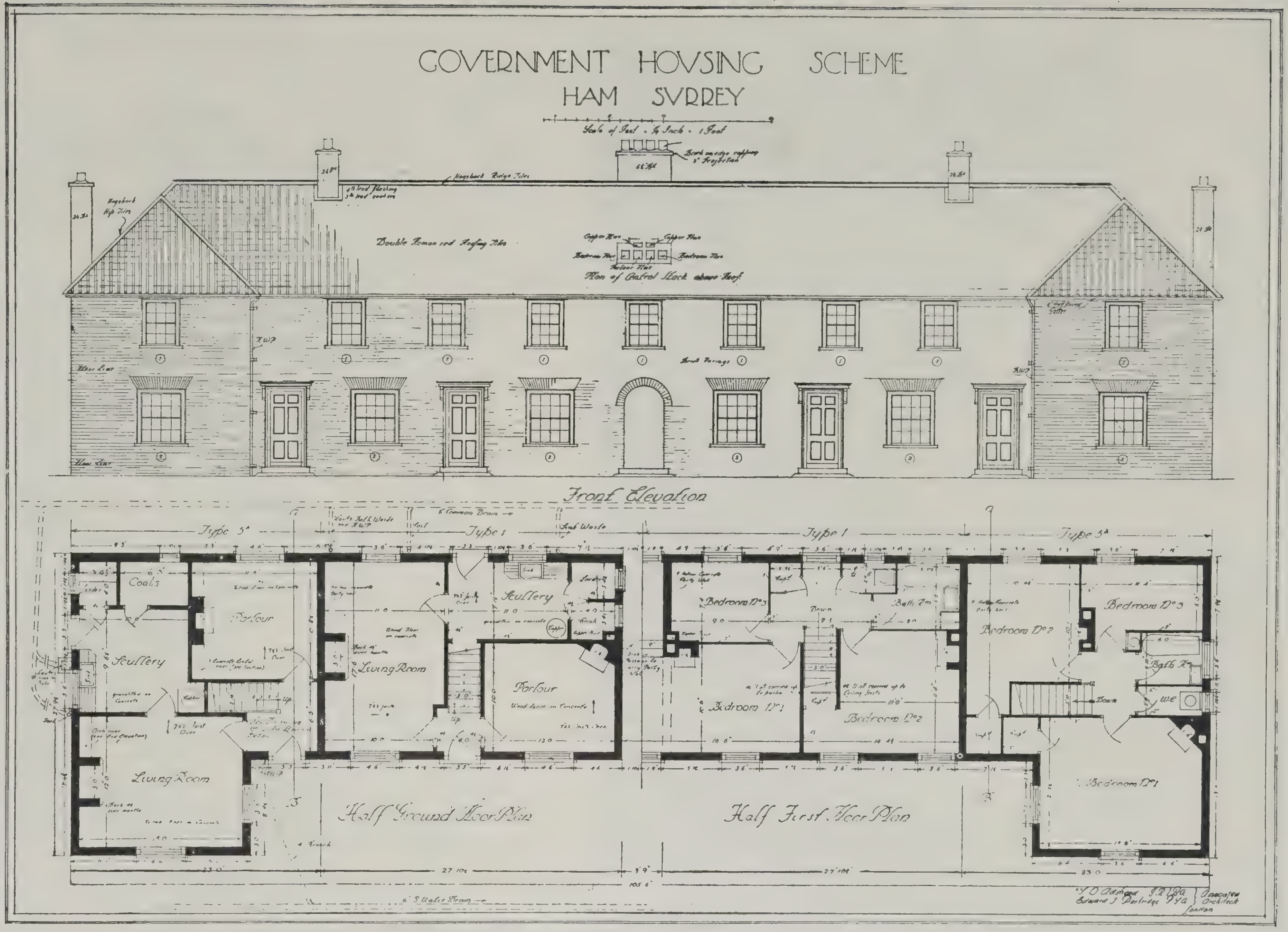


A GROUP OF FOUR HOUSES



A PAIR OF HOUSES.

HAM HOUSING SCHEME, NEAR RICHMOND, SURREY.
ADSHEAD AND RAMSEY, FF.R.I.B.A., ARCHITECTS.

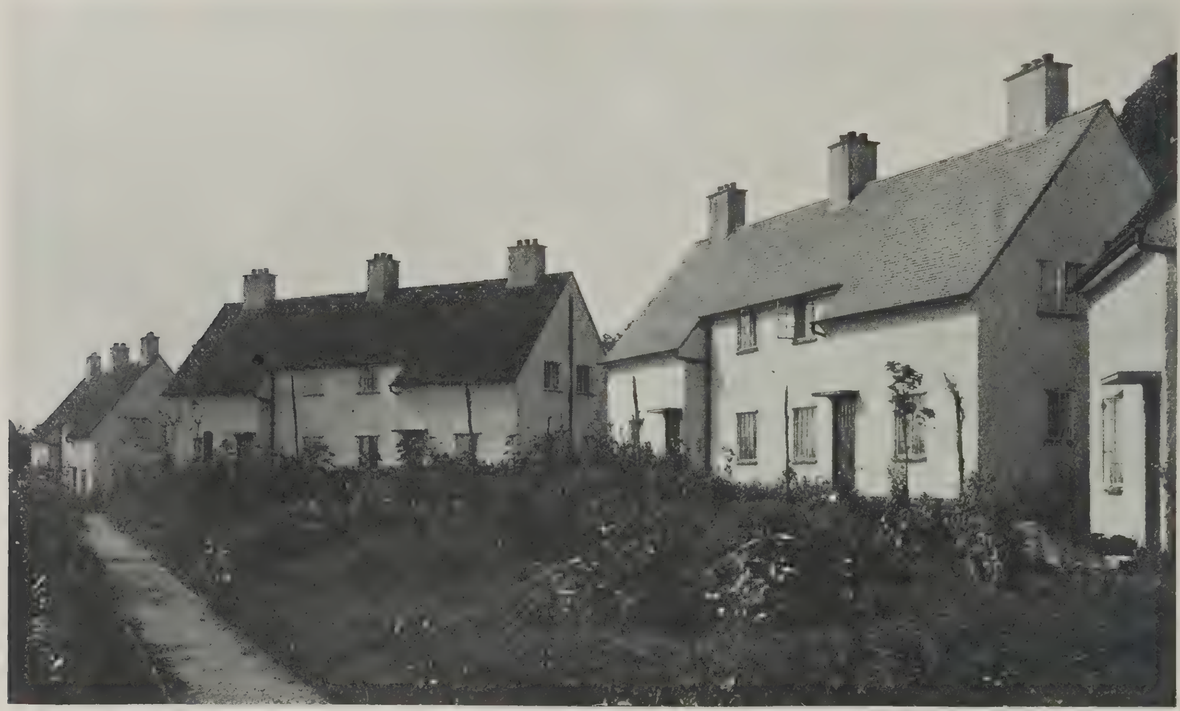


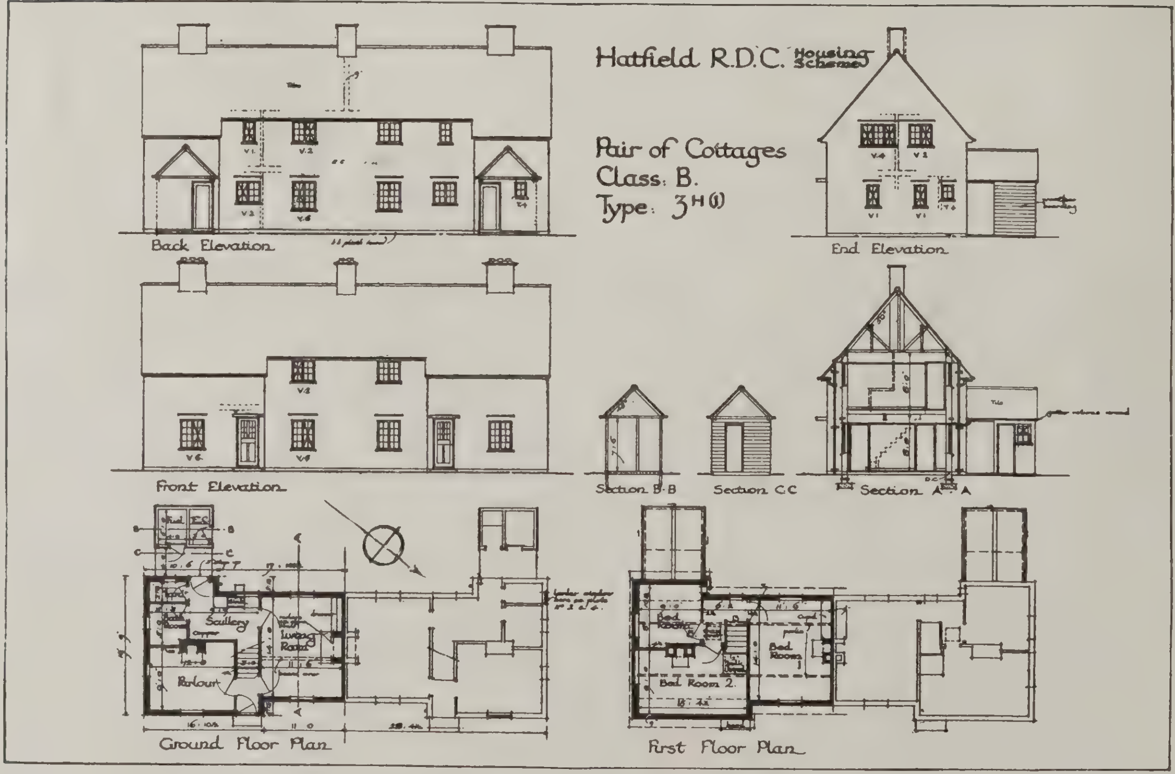
HAM HOUSING SCHEME: PLANS AND ELEVATION OF A GROUP OF FOUR HOUSES.
ADSHEAD AND RAMSEY, FF.R.I.B.A., ARCHITECTS.

# Hatfield Housing Scheme

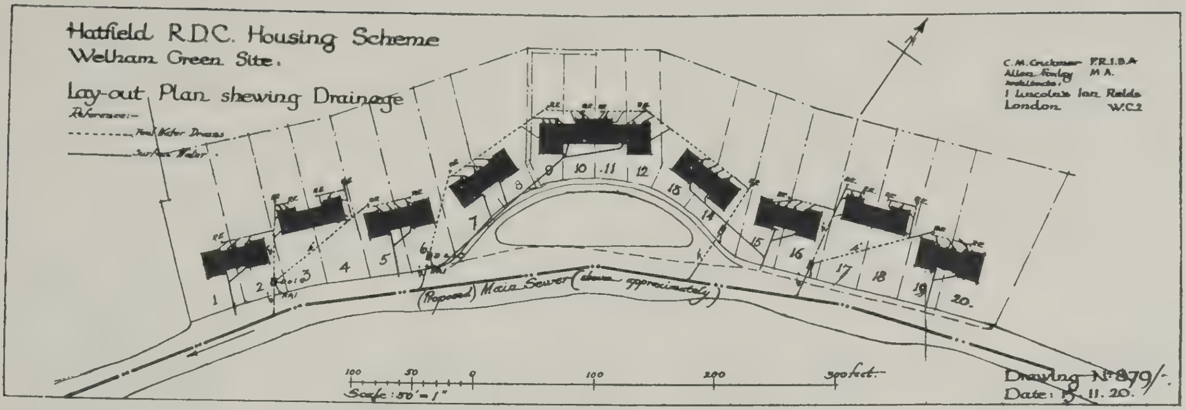
C. M. CRICKMER, F.R.I.B.A., and ALLEN FOXLEY, M.A., Architects

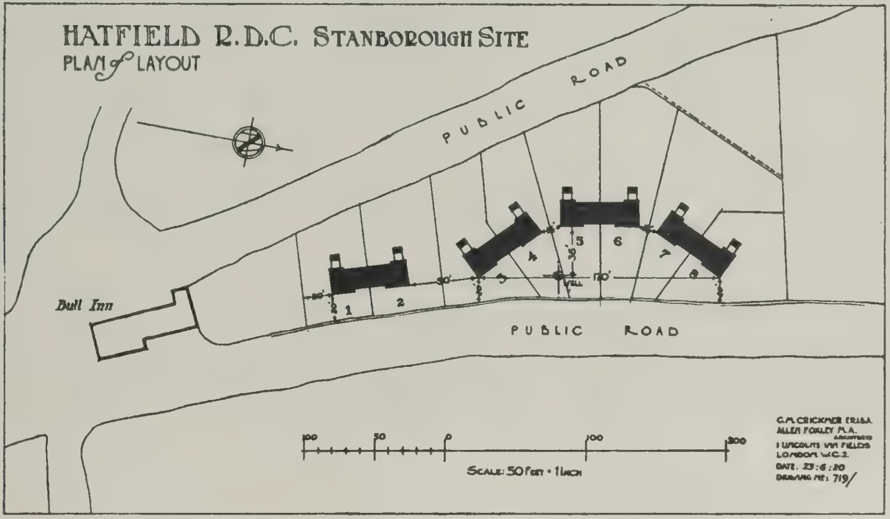
THIS scheme consists of seventy-two houses on four different sites, three of which are here illustrated. The house plans show various methods of meeting the requirements of the Ministry of Health on sites with various aspects. The architectural treatment is simple and effective, and the different groups make charmingly picturesque compositions. At Ground Lane there are thirty-six houses (Messrs. Miskin and Sons, of St. Albans, builders); at Welham Green twenty houses (Mr. J. Naden, of Hatfield, builder); and at Stanborough eight houses (also built by Mr. J. Naden). The steel windows are by Messrs. Henry Hope and Sons.

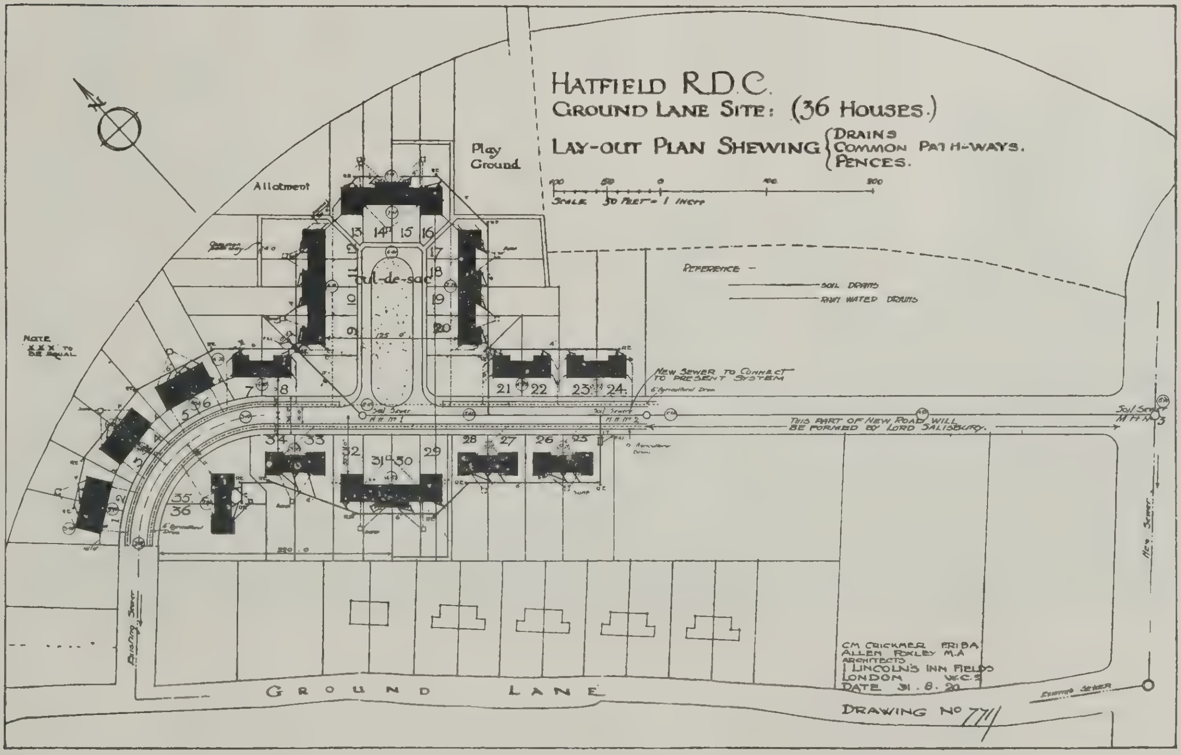




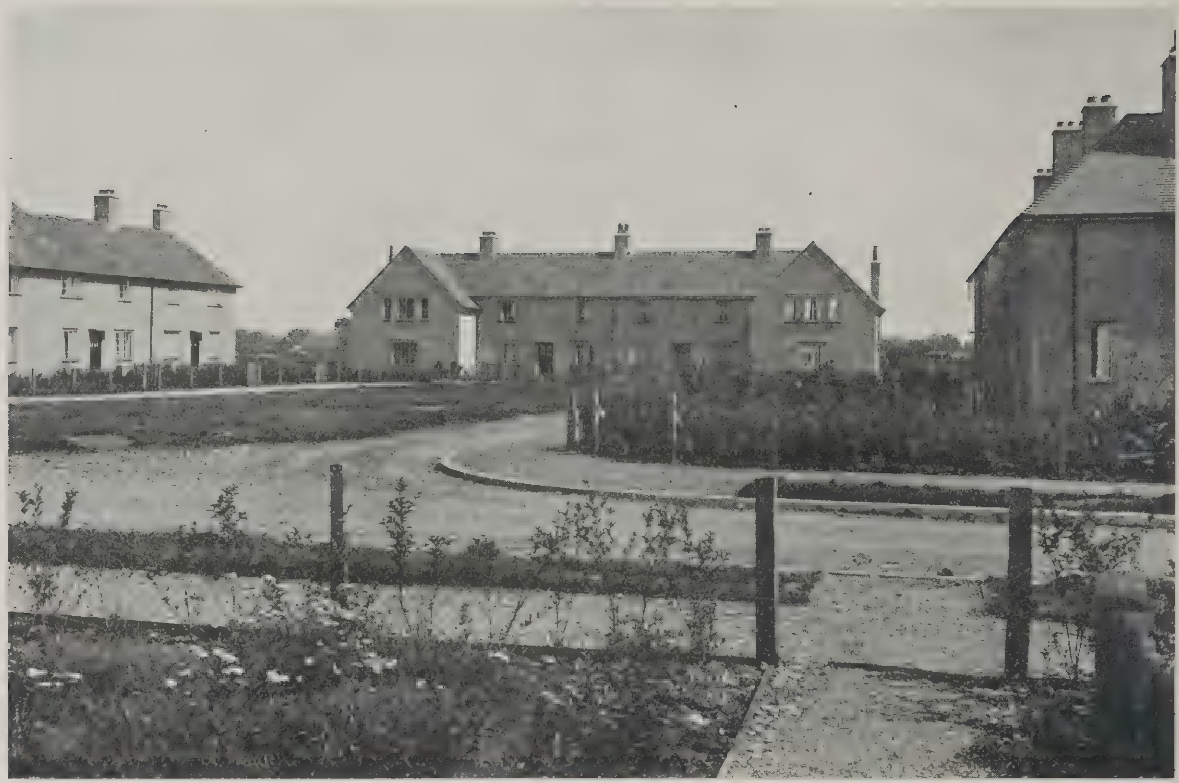
HOUSES ON THE STANBOROUGH SITE.



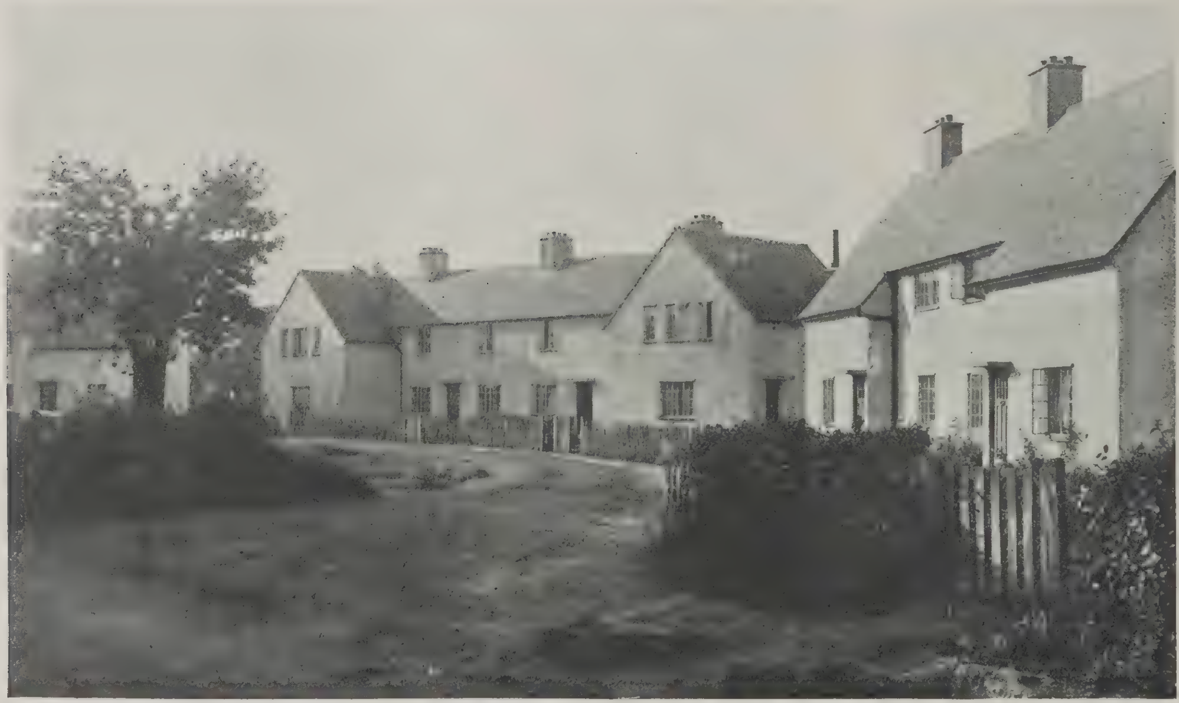




LAY-OUTS OF THE HATFIELD R.D.C. HOUSING SCHEME.
CRICKMER AND FOXLEY, ARCHITECTS.

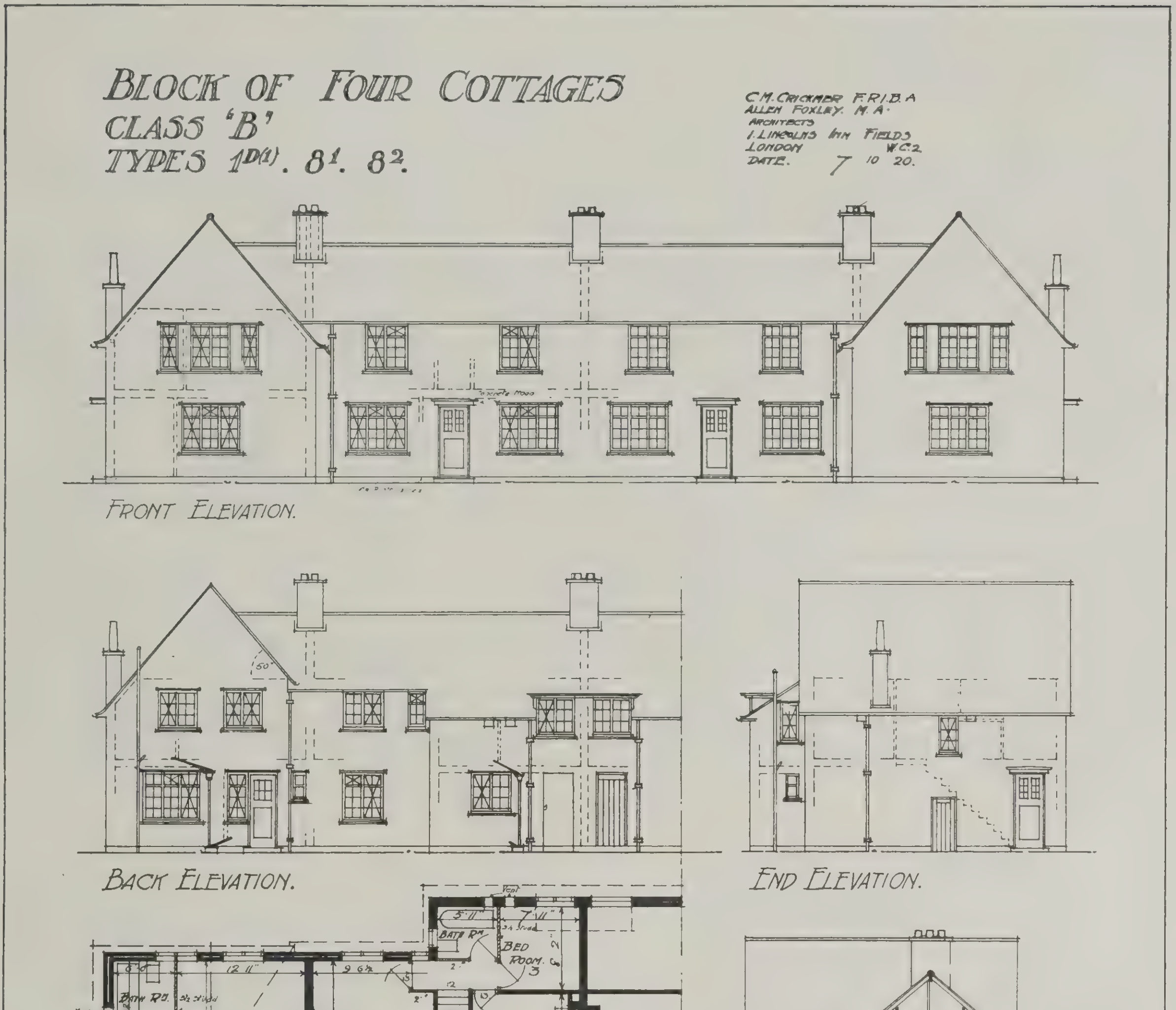


HOUSES AT GROUND LANE.



HOUSES AT WELHAM GREEN.

HATFIELD HOUSING SCHEME. CRICKMER AND FOXLEY, ARCHITECTS.



HATFIELD HOUSING SCHEME: PLANS AND ELEVATIONS OF HOUSES AT GROUND LANE.
CRICKMER AND FOXLEY, ARCHITECTS.

# Housing Scheme, The Durlocks, Folkestone

For Sir PHILIP SASSOON, Bart., M.P.

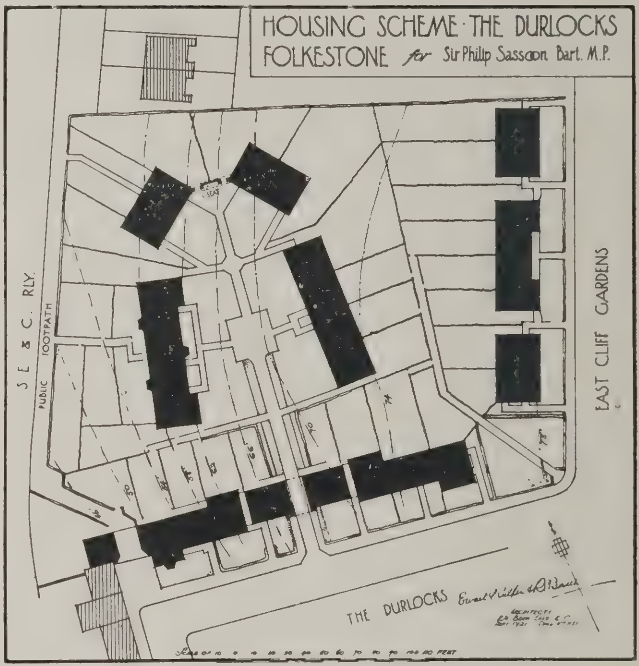
CULPIN and BOWERS, Architects

EVERY circumstance conspired to render the buildings at Folkestone, here illustrated, immune from the charge of monotony so frequently levelled at State-aided housing schemes. Perched high on the East Cliff, and overlooking the familiar harbour, the site is roughly rectangular, and is bounded on the east and south by existing roads and on the west by a public right of way adjoining the railway. A reference to the block plan on this page shows at a glance the lay-out adopted, which in itself calls for no particular comment until it is pointed out that from N.E. to S.W. the ground falls 36 ft. In order to obtain the requisite balance between the buildings flanking the new cul-de-sac, those on the right were planned as cottages with their first floors entirely in the roof, while those opposite consist of blocks of similar overall sizes and with their roofs at the same level, but with both stories entirely below the level of the eaves.

The scheme is a small one, comprising thirty-three dwellings, none having parlours; it includes a number of flats with only two bedrooms—at the time these were rather an innovation, but have since proved very successful, as has also the endeavour to make the most of the necessarily restricted space by forming the bathrooms as annexes to the sculleries, with folding doors standing back against the walls except when the bath is in use.

All the living-rooms have "Registroven" combination stoves with hot-water circulation to sink and bath. Gas-cookers and electric light are installed throughout.

The main interest of the scheme lies in the front block, which is illustrated in some detail. It involved the demolition of some old property at the south-west corner of the site, and was not finally embarked upon until the remainder of the scheme had been completed.


HOUSING SCHEME · THE DURLOCKS
FOLKESTONE for Sir Philip Sassoon Bart. M.P.
S E & C. RLY.
PUBLIC FOOTPATH
EAST CLIFF GARDENS
THE DURLOCKS

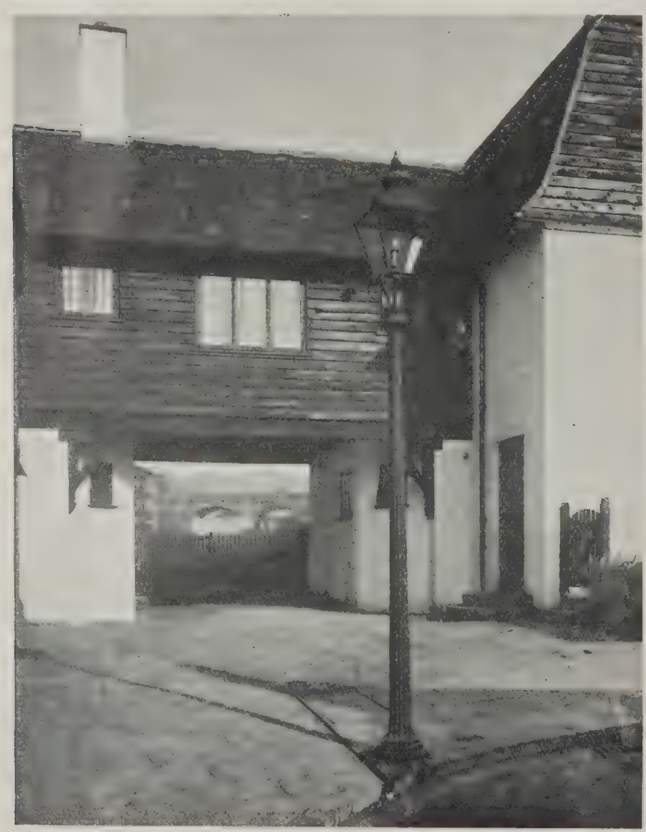


Photo : Halksworth Wheeler, Folkestone

THE COVERED WAY.

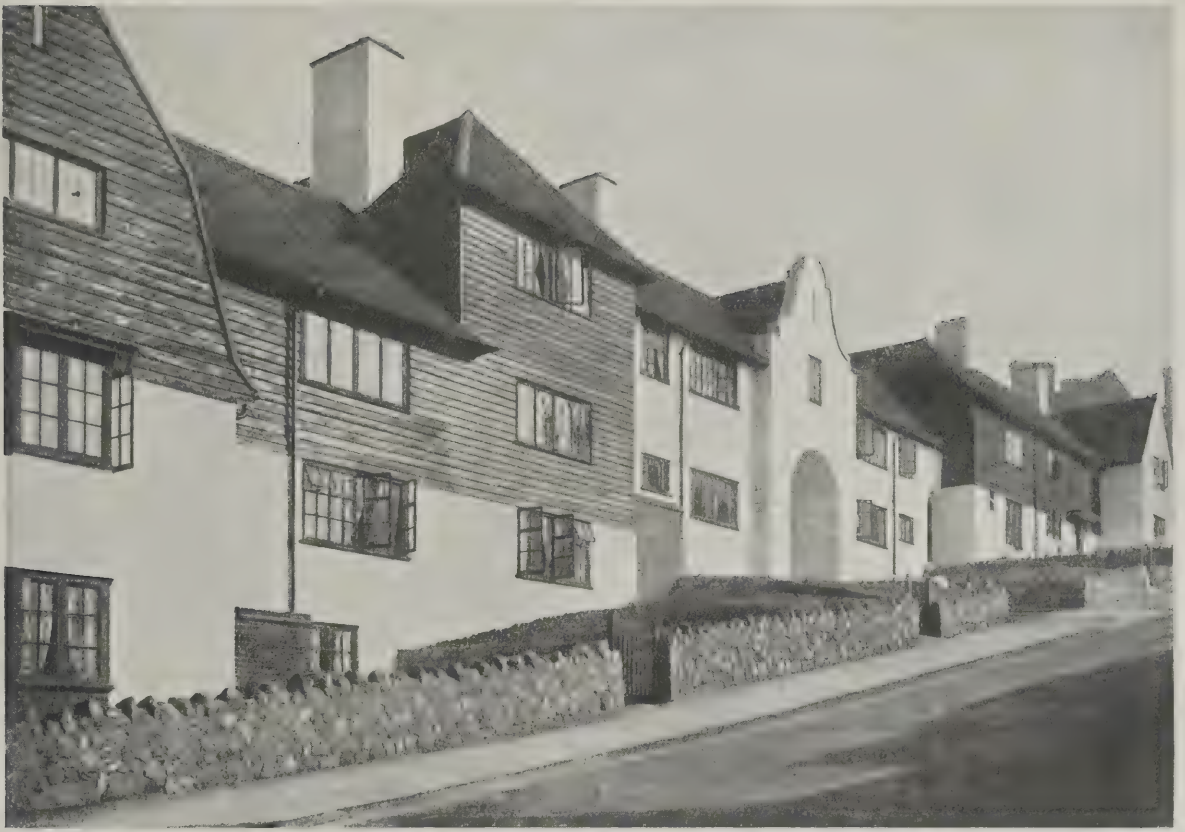
It consists of twelve dwellings which, owing to the necessarily stepped levels, are rather complicated, both as regards planning and the manner in which they fit together. The most exceptional case is that of the lowest dwelling of all, which is entered on the left of the lower covered way. The front door gives access to a landing with one bedroom and w.c. at this level, and the stairs lead down to another bedroom and the garden door, and up to the main floor with the largest bedroom, combined scullery and bathroom, and the living-room, this last being built over the covered way, which is the only position in which a southern aspect could be secured. The manner in which the other dwellings—some flats, some two-story cottages—are interlocked is almost equally unconventional, and can best be gathered from the plans and the longitudinal section.

Externally it was endeavoured to carry on the traditions of the old fishing town, with a central innovation in the shape of a Dutch gable, somewhat similar in form to those built by Mr. Herbert Baker at Lympne, and here introduced at the wish of Sir Philip Sassoon. The walls are of cavity brickwork, part faced with smooth white plaster and part hung with tarred weather boarding. Owing to the exposed situation the roofs are boarded, felted, counter-battened and tiled, old tiles being used as far as practicable. The casement windows are of wood with wood bars generally, but leaded glazing in plain rectangles where they occur in weather-boarded surfaces. Casements not easily accessible from the outside are hung on Parkes hinges to facilitate cleaning. All external joinery and ironwork is painted black.

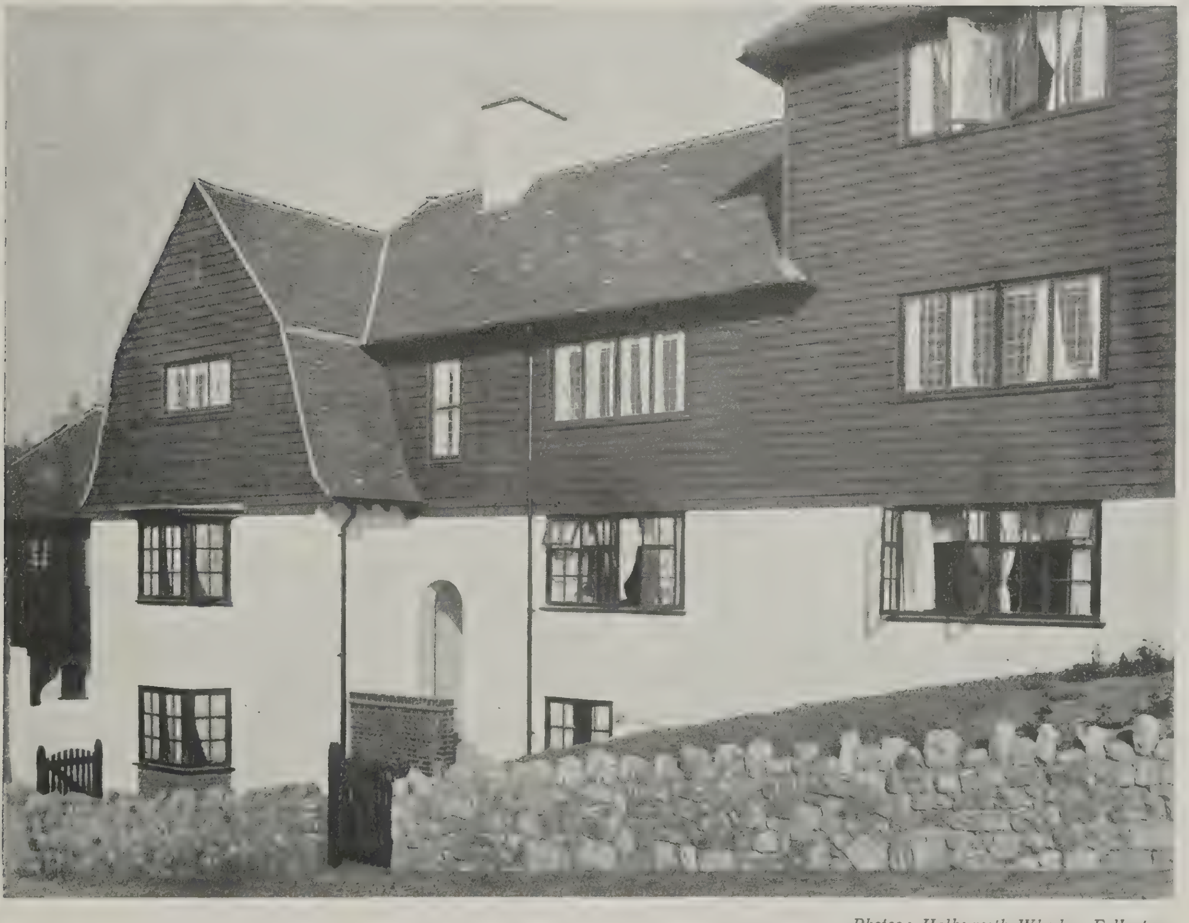
The lower passage-way has oak beams, mainly salvage from the old buildings, that on the face being trussed up with heavy-framed oak brackets—seen in one of the photographs. The floor over the beams in this case, and wherever one occurs between two separate dwellings, is of concrete reinforced with "Self-Sentering."

One of the more normal blocks is illustrated on page 36. This is the one on the left of the cul-de-sac, and comprises

(*Continued on page 37.*)



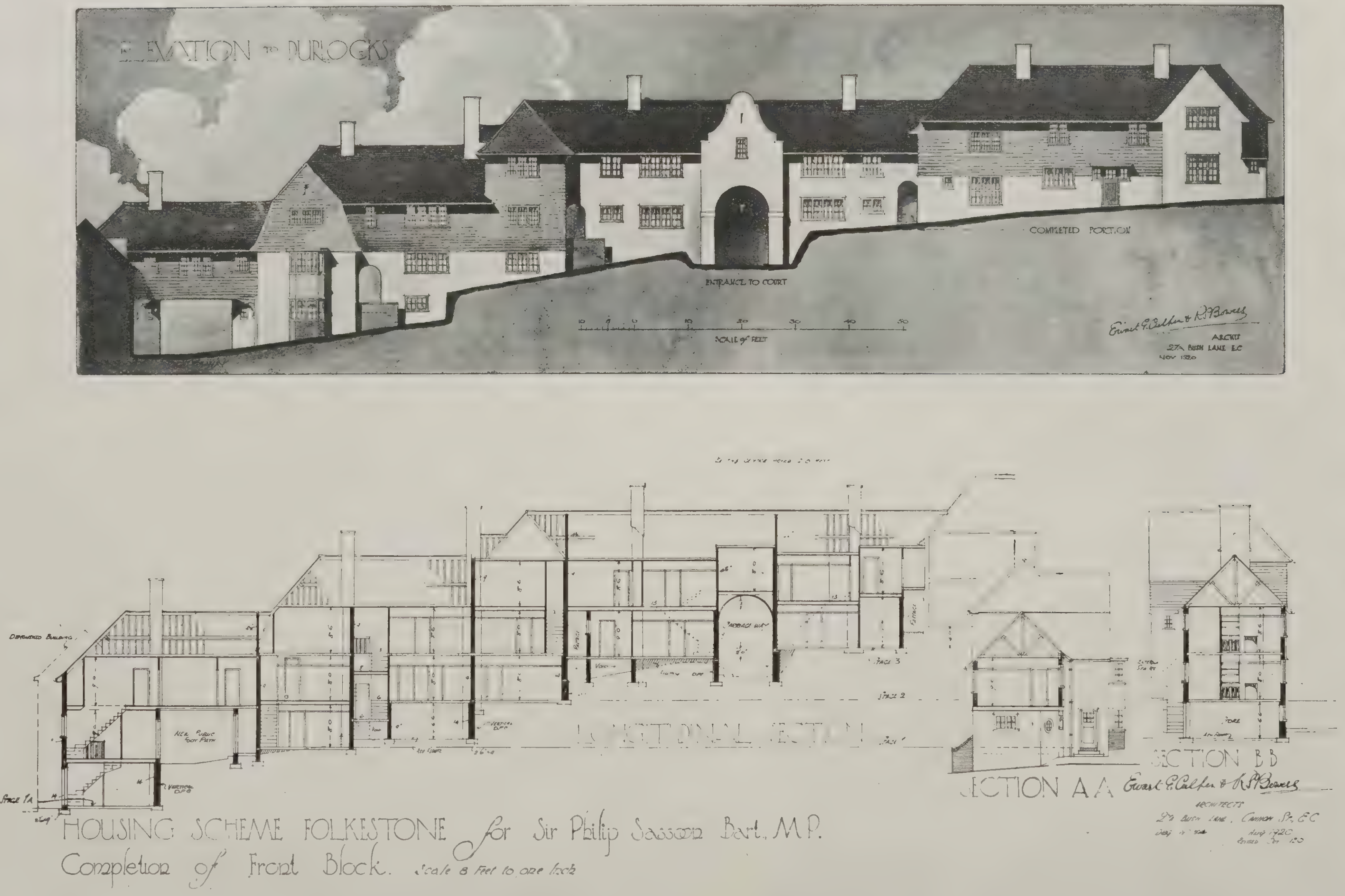
GENERAL VIEW OF FRONT BLOCK.



*Photos: Halksworth Wheeler, Folkestone.*

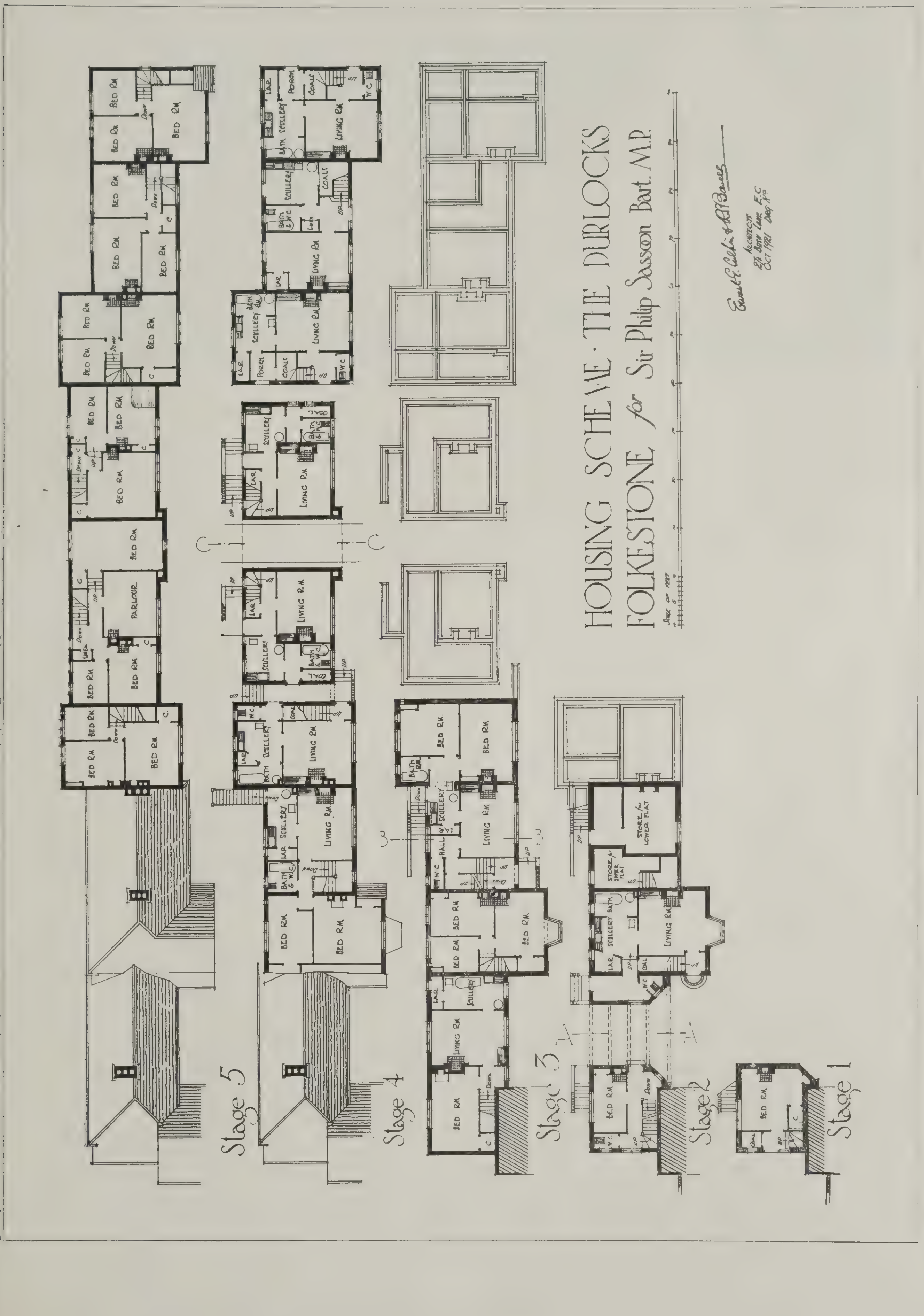
DETAIL VIEW OF PART OF FRONT BLOCK.

FOLKESTONE HOUSING SCHEME. CULPIN AND BOWERS, ARCHITECTS.


ELEVATION TO DURLOCKS
ENTRANCE TO COURT
COMPLETED PORTION
10 0 10 20 30 40 50
SCALE of FEET
Ewart G. Culpin & R. S. Bowers
ARCHTS
27A BUSH LANE E.C
NOV 1920
LONGITUDINAL SECTION
SECTION A A
SECTION B B
STORE
Ewart G. Culpin & R. S. Bowers
ARCHITECTS
27A BUSH LANE, CANNON St, E.C
Aug 1920
Revised Oct 1920
HOUSING SCHEME FOLKESTONE for Sir Philip Sassoon Bart. M.P.
Completion of Front Block. Scale 8 Feet to one Inch

FOLKESTONE HOUSING SCHEME: ELEVATION AND LONGITUDINAL SECTION.

CULPIN AND BOWERS, ARCHITECTS.



FOLKESTONE HOUSING SCHEME: PLANS OF FRONT BLOCK.
CULPIN AND BOWERS, ARCHITECTS.

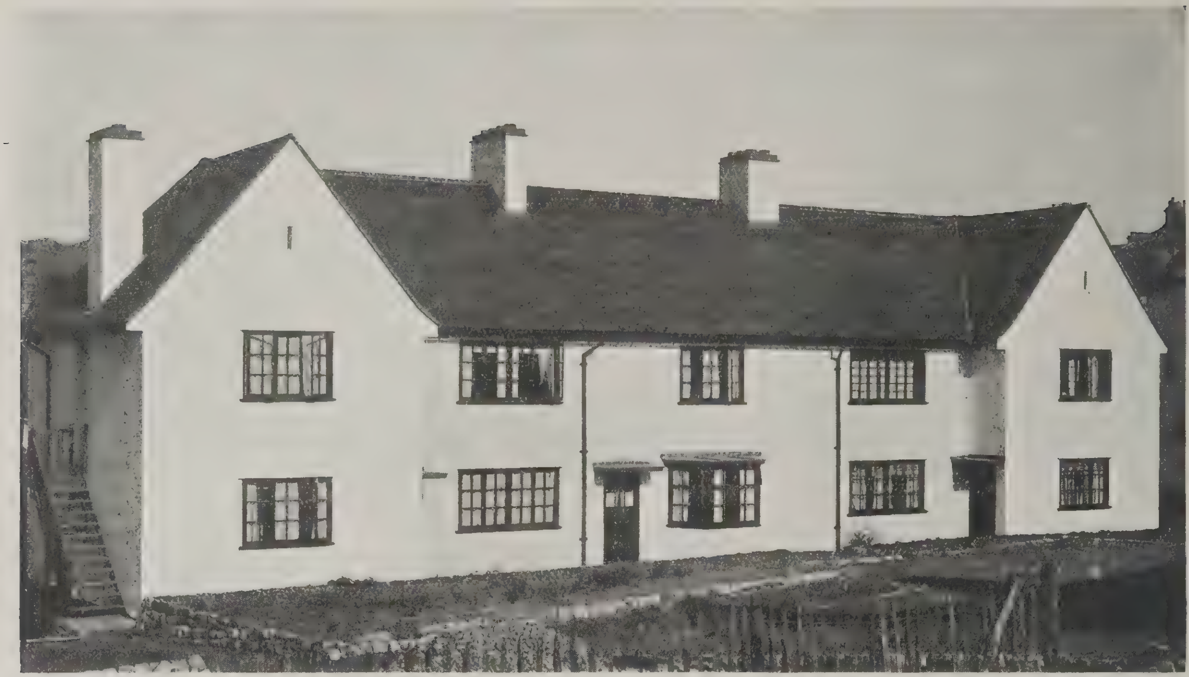
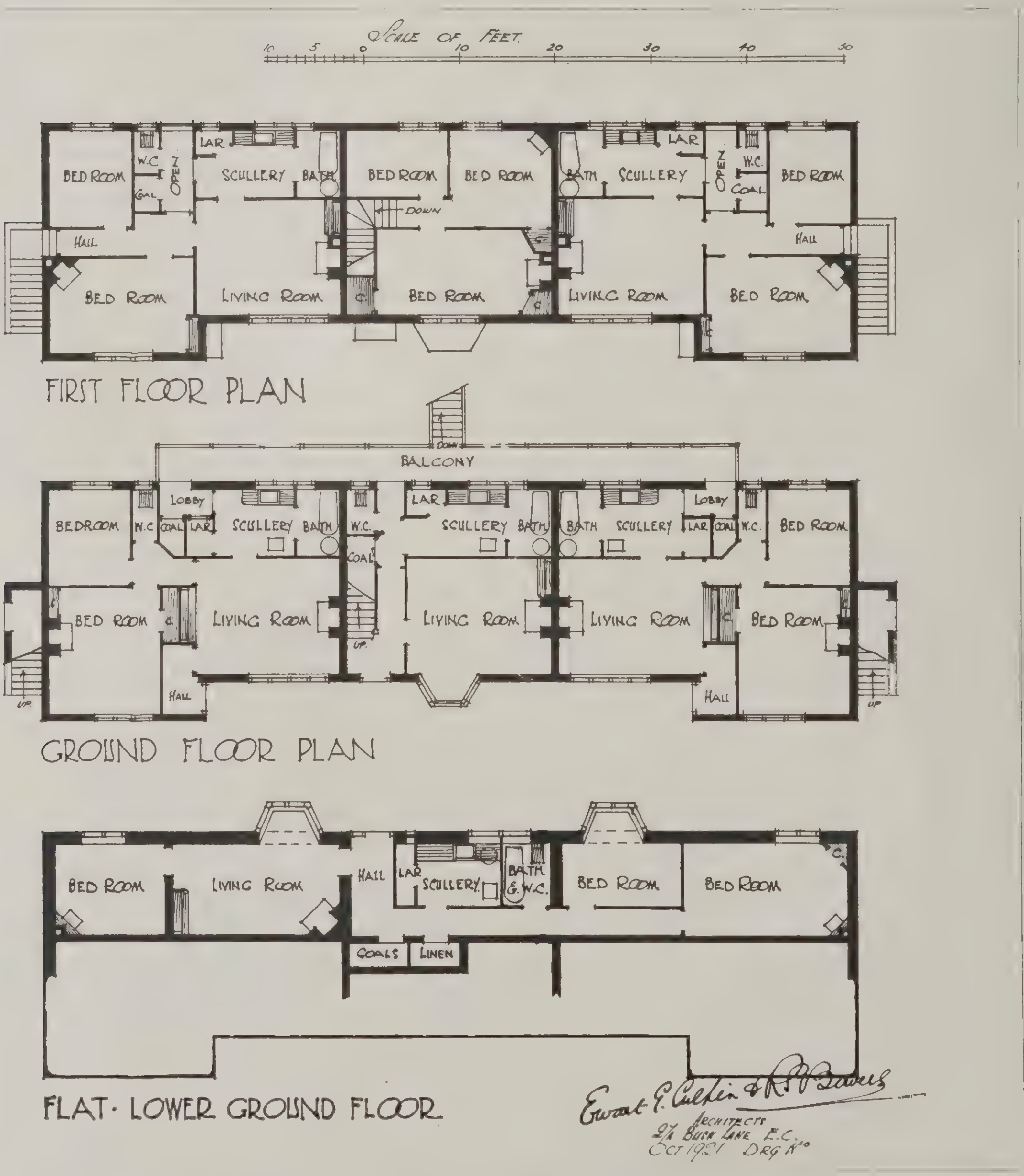


*Photo: Halksworth Wheeler, Folkestone.*



FOLKESTONE HOUSING SCHEME: A GROUP OF THREE HOUSES, WITH A BASEMENT FLAT.
CULPIN AND BOWERS, ARCHITECTS.

a central two-story cottage with two small flats at either end, the upper flat in each case being approached by an independent stairway on the flank. Owing to an accentuation of the slope of the ground at this point it was necessary to form small storage basements along the back of this block, and the story of these basements is one likely to interest most architects. When the work was approaching completion Sir Philip Sassoon, realizing that such abundant storage was hardly necessary, instructed the architects to see what could be done to utilize the space to better advantage. The basement flat shown on the plans was the result. It was inexpensive, and is reasonably convenient, but its tremendous length and shallow depth probably render its plan unique in the annals of housing.

Much of the success of the project was due to the keen personal interest of Sir Philip Sassoon, not only in the foundation of the public utility society formed to promote the scheme, but in every detail of the actual work, while Mr. O. Marx, of Folkestone, proved an ideal contractor.

The work was carried out under Messrs. Ewart G. Culpin and R. S. Bowers, architects, of Bush Lane, E.C., and Mr. F. W. Charles Barker, surveyor, of the same address; while Mr. Wm. Beeston, M.S.A., of Dover, held a watching brief for the architects.

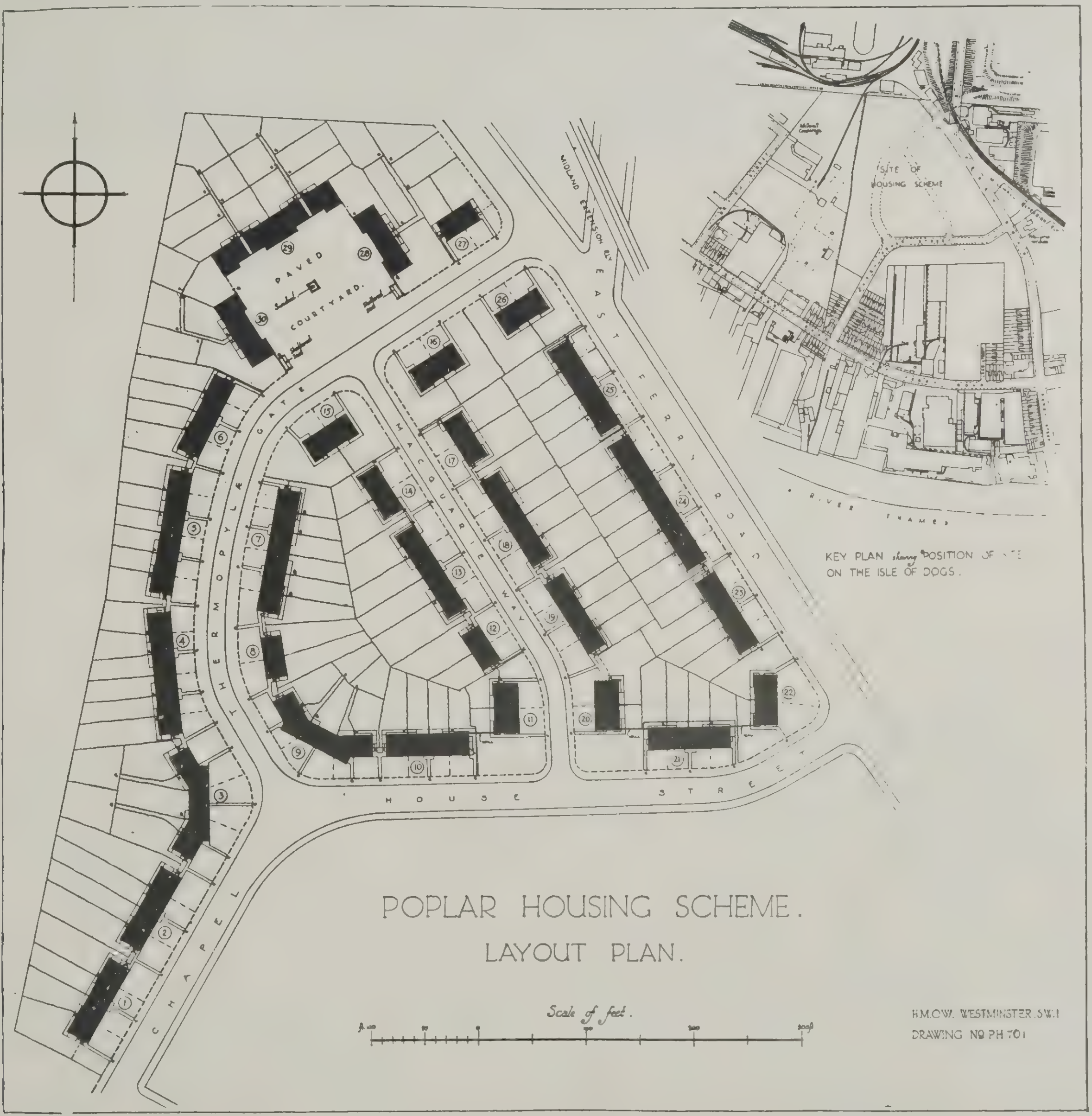
# Poplar Housing Scheme

## By H.M. OFFICE OF WORKS

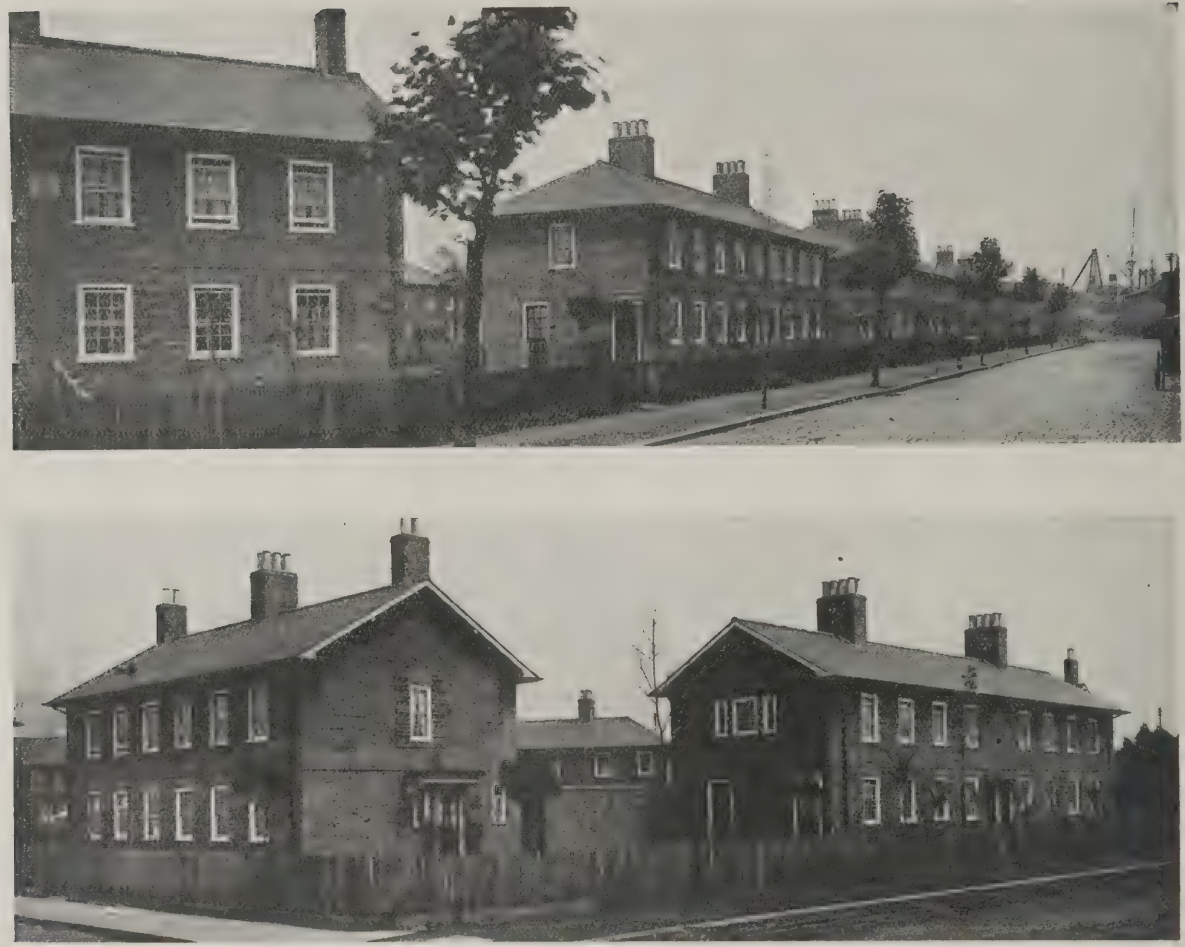
THIS scheme, a comparatively small one compared with others carried out by H.M. Office of Works, is situated between Chapel House Street and East Ferry Road in Cubitt Town, Isle of Dogs, and occupies about 7½ acres. It is interesting in showing what can be done with what appeared at first to be an unpromising site in an unattractive factory area.

The scheme was prepared by the Housing Section of H.M. Office of Works for the accommodation of 120 families, and approved by the Ministry of Health, a lay-out having been prepared by Mr. Harley Heckford, M.I.C.E., Borough Engineer and Surveyor to the Metropolitan Borough of Poplar, and approved by the Housing Board.

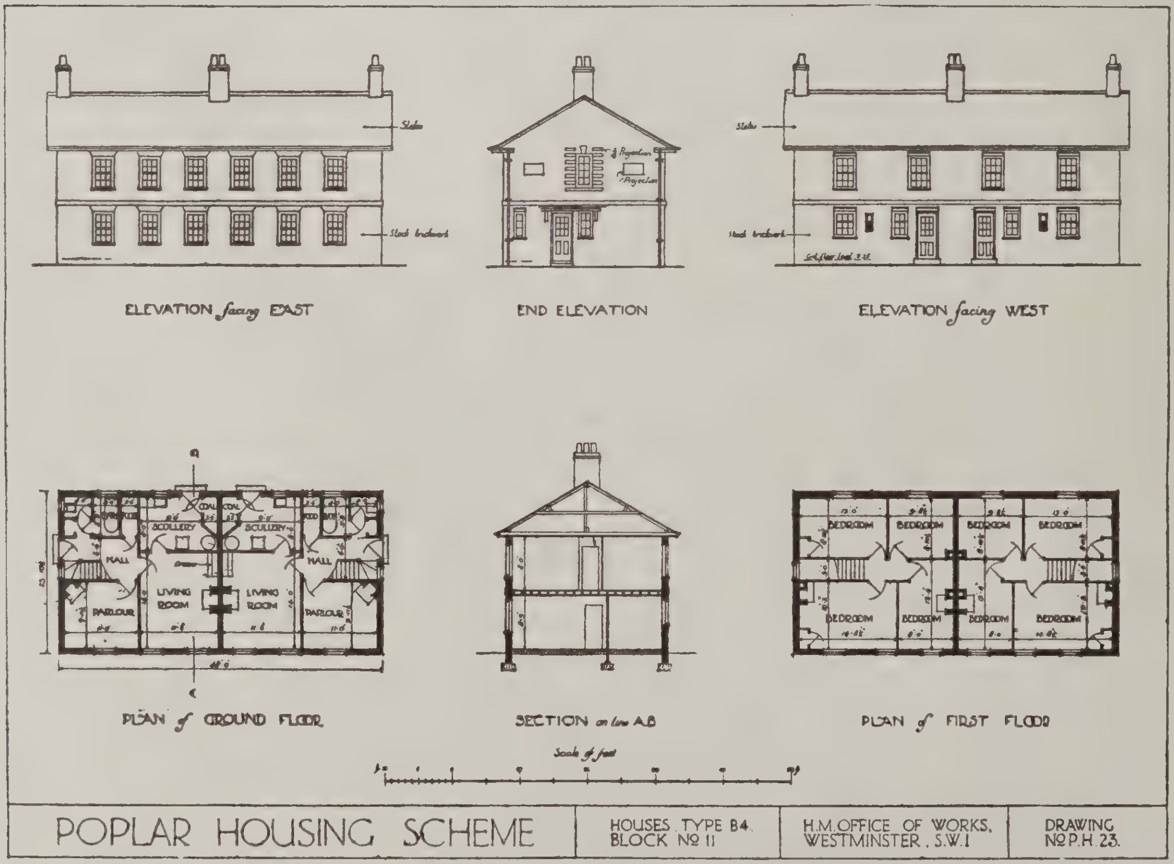
The dwellings comprise sixty "A" type houses, with living-room, scullery, three bedrooms, bathroom, and the usual offices; thirty "B" type houses which have a parlour in addition to the foregoing; six "B4" houses with living-room, parlour, scullery, four bedrooms, and bathroom; and



THE LAY-OUT.



GENERAL VIEWS.



POPLAR HOUSING SCHEME. DESIGNED BY H.M. OFFICE OF WORKS.

twenty-four "A2" type flats with living-room, scullery, two bedrooms, bathroom, etc. The houses are of two stories, and the flats of three; the latter, erected round three sides of a paved quadrangle, have mansard roofs. The dwellings, including the flats, are sixteen to the acre. The walls are of London stock bricks, and the roofs slated. Electric lighting is provided in each of the 120 tenements by the Poplar Borough Council's electricity undertaking, and gas-cookers by the Commercial Gas Company. In addition to cookers, gas-heating stoves are provided in the parlours of thirty houses.

The roads, sewers, and drainage connections under the roads were constructed by the Works Department of the Poplar Borough Council, and the houses by Messrs. Griggs and Sons, Builders, Manchester Road, E.C.4. Scheme started January, 1920; completed January, 1921.

# Camberwell Housing Scheme

## By H.M. OFFICE OF WORKS

THIS scheme was carried out by the Housing Section, H.M. Office of Works, by direct labour for the Borough Council of Camberwell. The scheme comprises three sites, namely, Red Post Hill, Hawkeslade Road, and Lanbury Road, the two latter sites being situated in the Nunhead district.

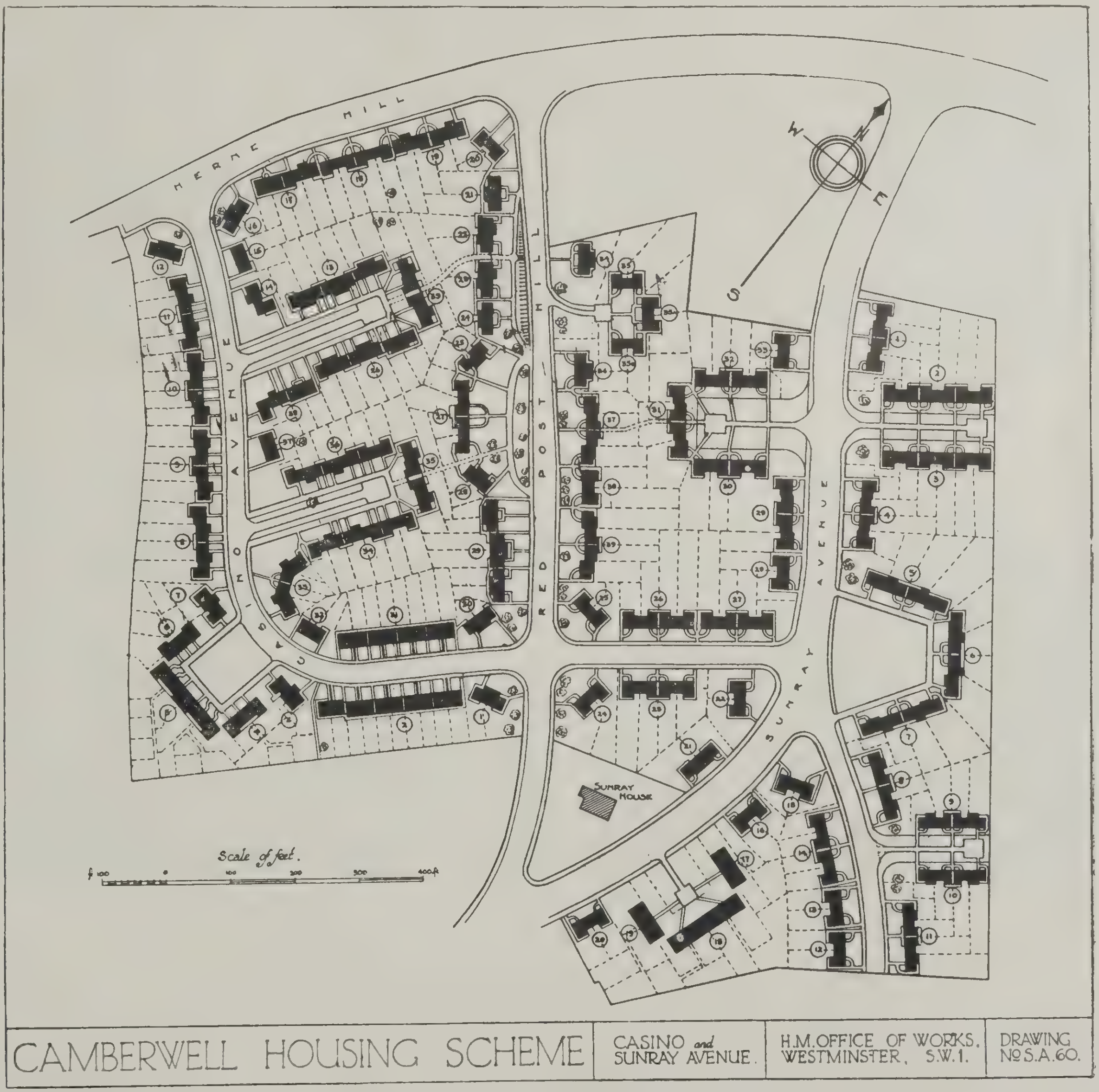
Red Post Hill site is hilly and well wooded, and in laying out the schemes trees have been preserved wherever possible, and a beautiful area has been allotted to recreation at the lower end of the site.

The houses, which average twelve to the acre, number 292 on Red Post Hill site, comprising fifty type "A," 202 type "B," and forty flats. On the Hawkeslade Road site there are eighty-four dwellings, namely, twenty-four type "A," fifty-two type "B," and eight flats, and at Lanbury Road there are fifty-two houses, sixteen type "A," thirty-six type "B," making a total on the three sites of 428 dwellings.

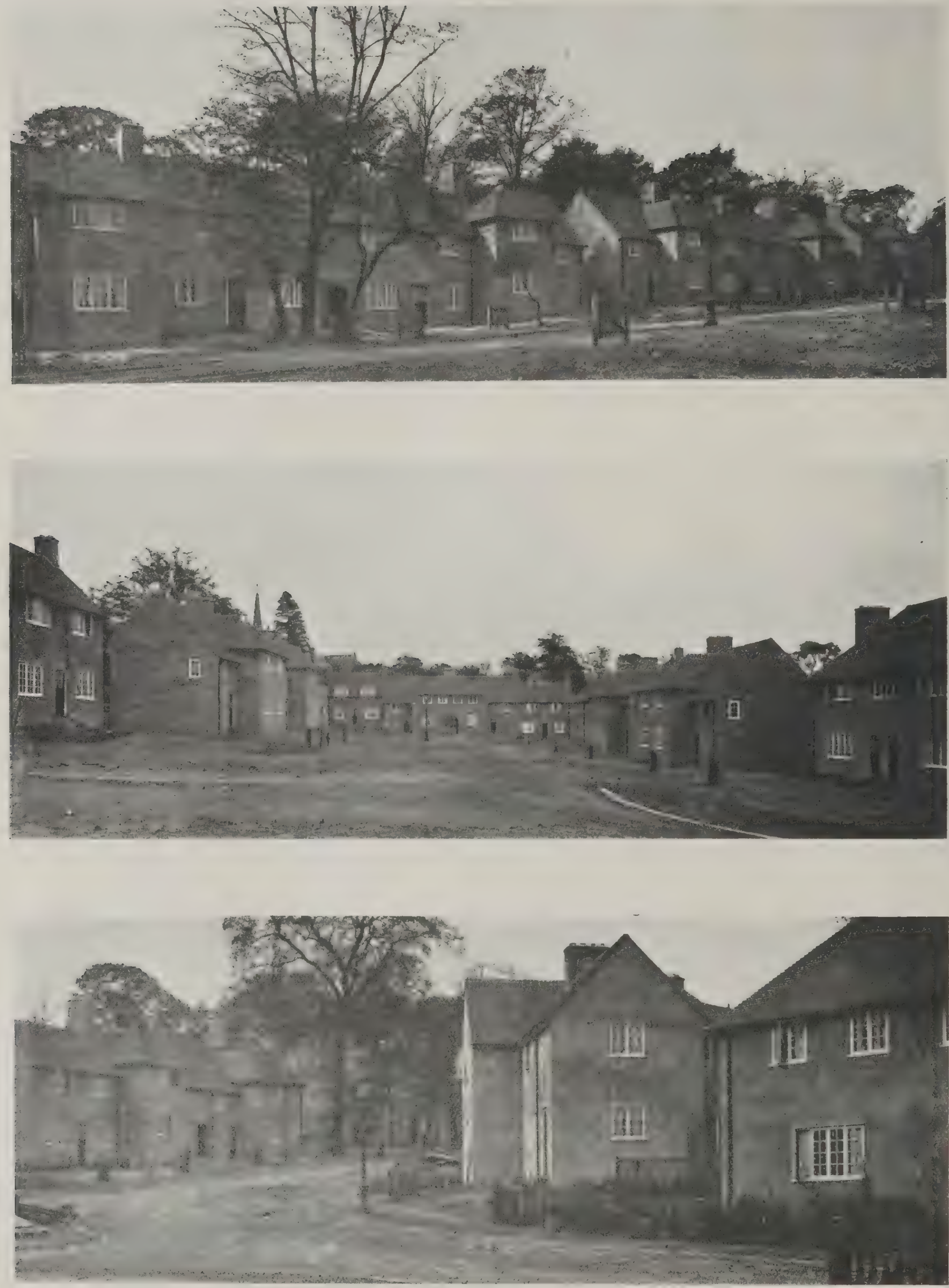
Some of the houses on the Red Post Hill site are constructed of stock bricks and slates, and some of Fletton bricks, rough cast on the exterior, and with tiled roofs at 40 degrees pitch, and casement windows.

On the two other sites stock bricks are used throughout for the walls, the roofs being slated at a 30 degrees pitch. The houses have sash windows.

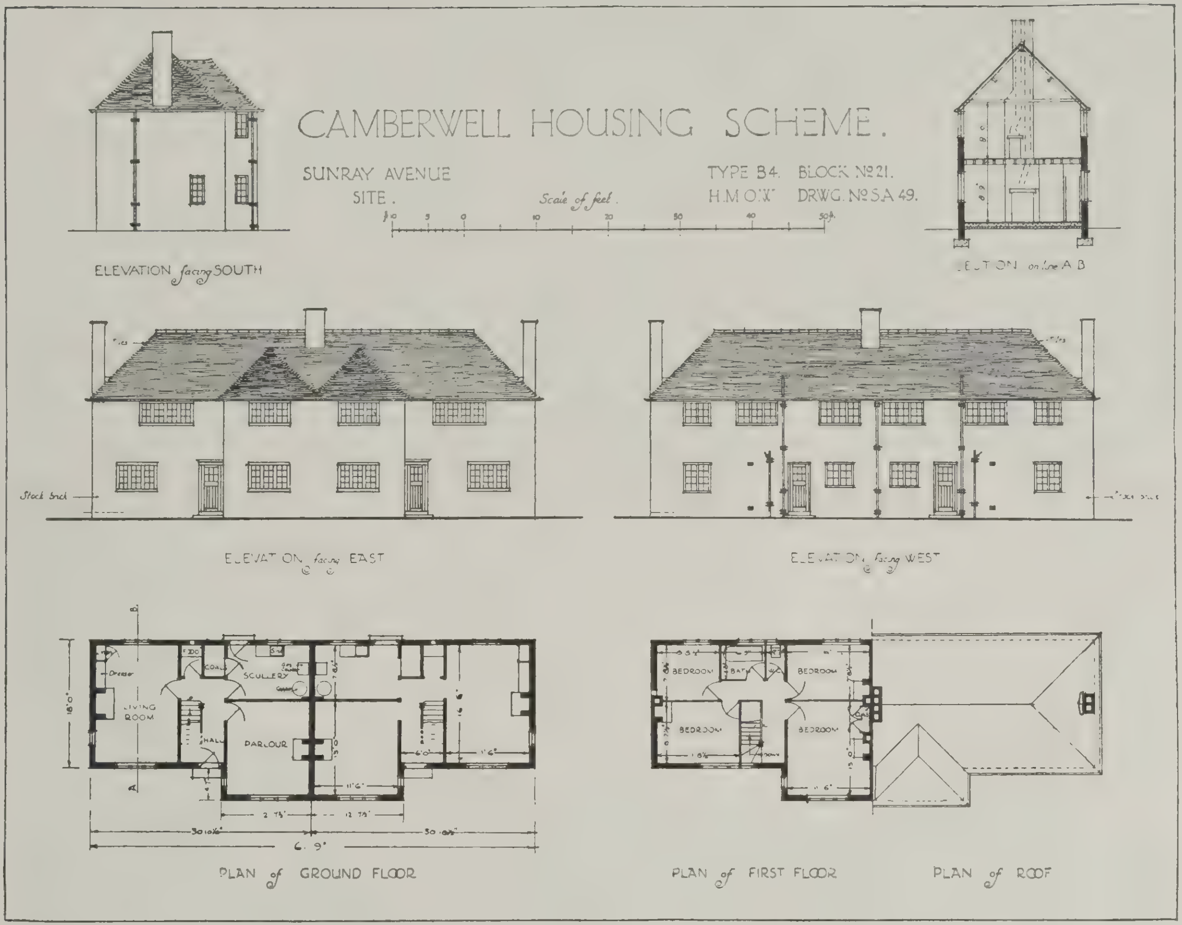
The scheme was commenced in April, 1920, but Hawkeslade Road and Lanbury Road schemes have been completed for some time. Only very few houses on the Red Post Hill site now remain to be handed over to the local authorities.

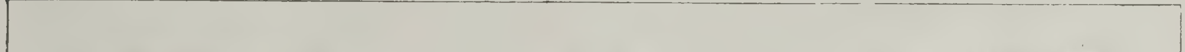


THE LAY-OUT



CAMBERWELL HOUSING SCHEME: SOME GENERAL VIEWS




FRONT ELEVATION
SIDE ELEVATION
BACK ELEVATION
½" DETAIL 1st FLOOR WINDOWS FRONT ELEVATION
½" DETAIL 1st FLOOR WINDOWS
LIVING ROOM
PARLOUR
GROUND FLOOR PLAN
SECTION
CAMBERWELL HOUSING SCHEME
SUNRAY AVENUE SITE.
H.M. OFFICE OF WORKS WESTMINSTER S.W.1.
DRAWING No. S.A. 59.

CAMBERWELL HOUSING SCHEME: TYPES OF HOUSES.
DESIGNED BY H.M. OFFICE OF WORKS.

# Banbury Housing Scheme

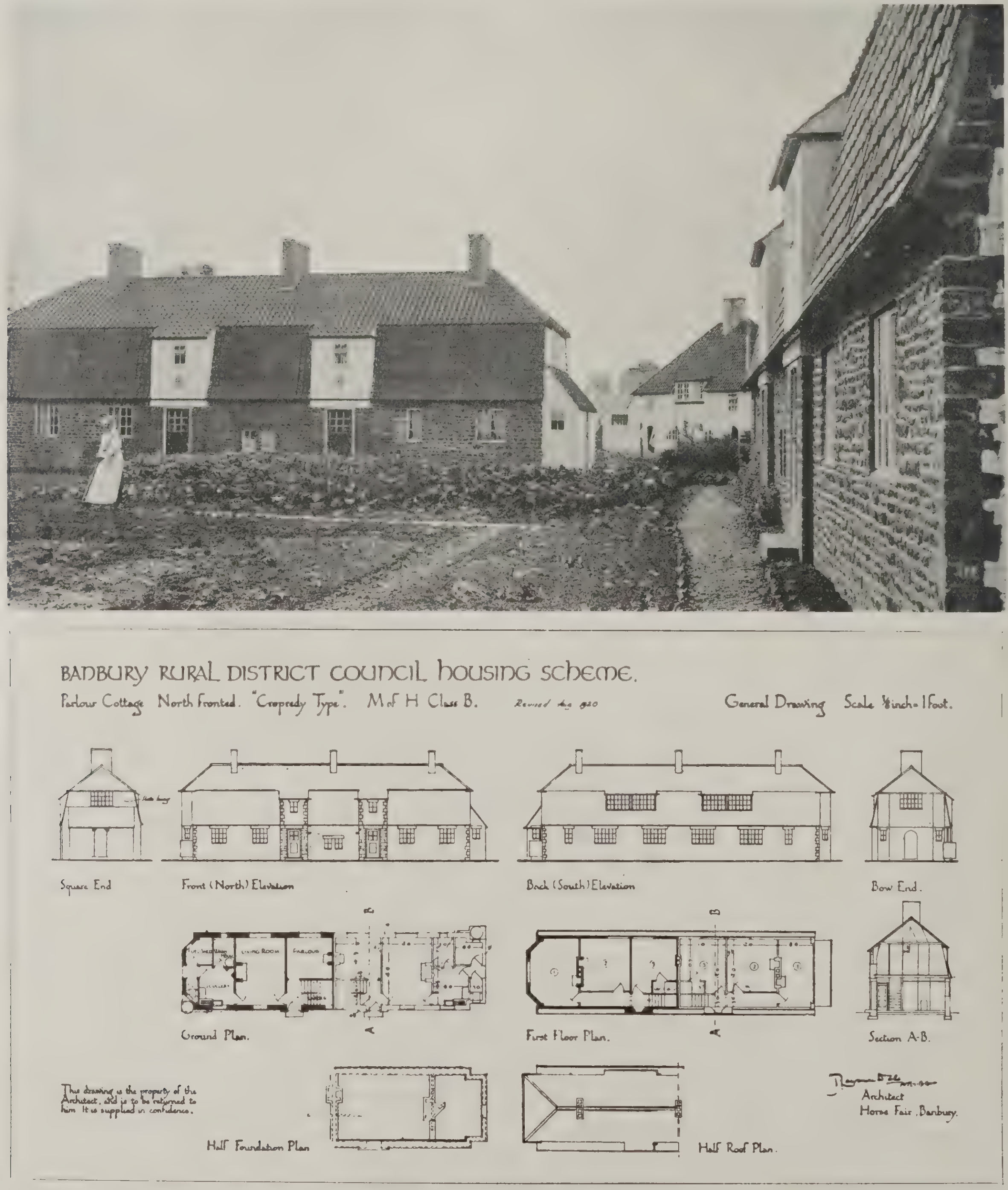
## T. LAWRENCE DALE, F.R.I.B.A., Architect

THE rural district of Banbury lies at the extreme north of Oxfordshire, and rests almost entirely on a surface bed of ironstone. The architectural character of the district is that of the Cotswolds, but thatch is more common than stone slates. The new houses were designed to harmonize with the character of the villages in which they are situated.

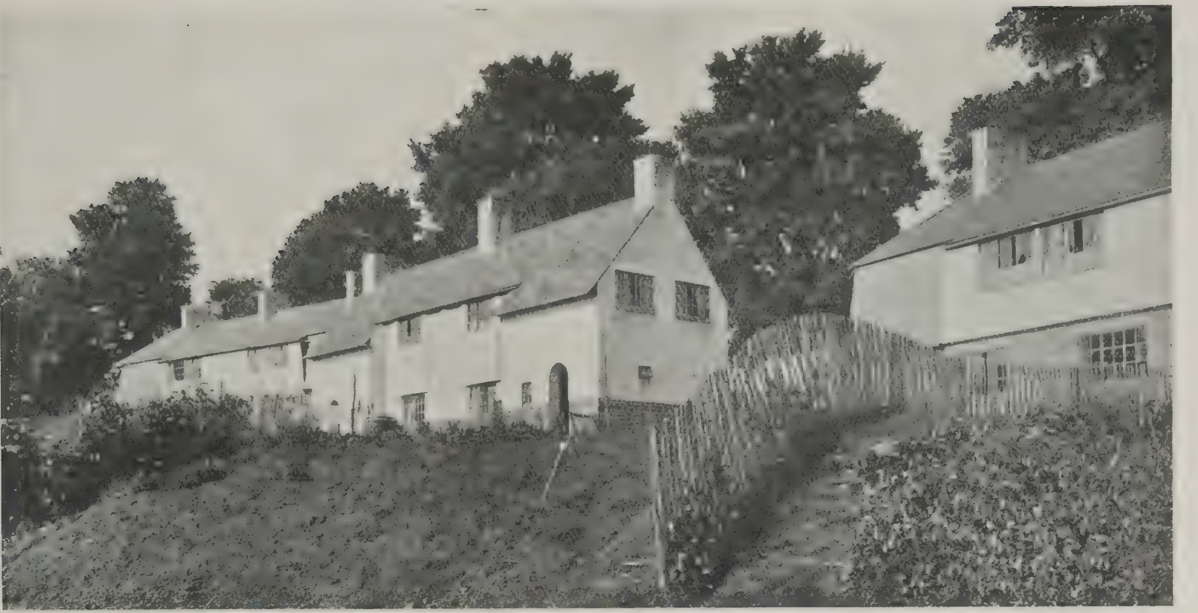
The scheme consists of 170 houses built in groups, varying from four to twenty-six, in all the parishes in the district. The houses at Wroxton lie on the main Stratford-on-Avon road, and are built of the local ironstone and covered with grey-green Westmorland slates. The mansard roof, besides producing the low proportion characteristic of the old thatched cottages in the village, reduces the amount of stone-walling, and adds to the thickness of the wall to the first floor area. The water supply is by a well situated in the centre of the group. Care has been taken to preserve the old trees. The site at Hook Norton presented many difficulties by reason of the levels and the fact that old quarries and patches of made ground were encountered. The whole of the stone for this scheme was quarried from the site. The roofs are covered with Dutch pantiles.

Generally the sanitation is by earth closets, which have proved entirely satisfactory, the slop water being taken to septic tanks. The ground floors are covered with "Ebnerite" flooring, steel sashes having been supplied by Messrs. Gibbons, of Wolverhampton.

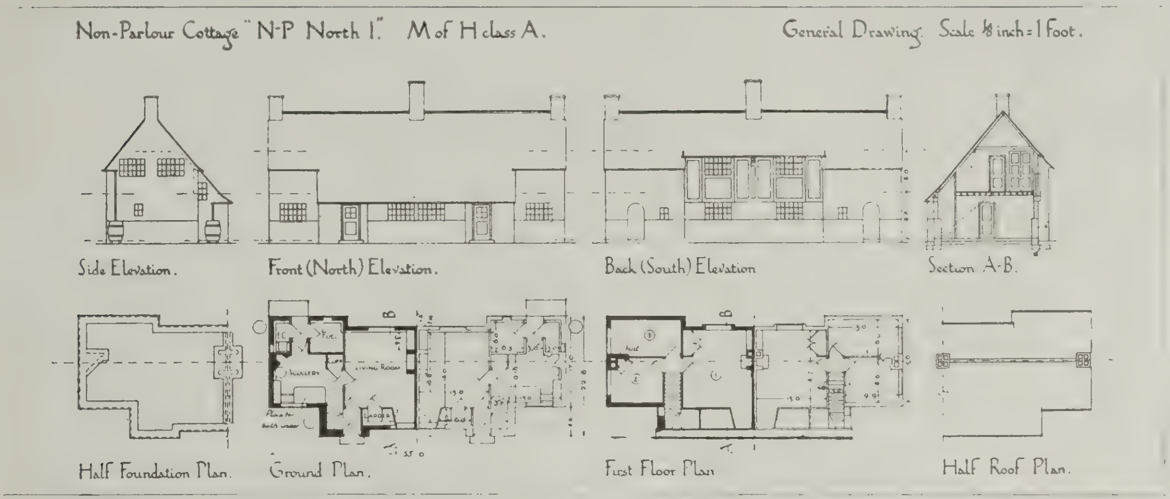
The general contractors for the greater number of houses were Messrs. Henry Boot and Sons (London), Ltd., other contractors being Messrs. Wheeler Bros., Reading; The Harpenden Building Company; Messrs. Hopcraft, of Deddington; and Messrs. Poulton, of Sibford Gower.

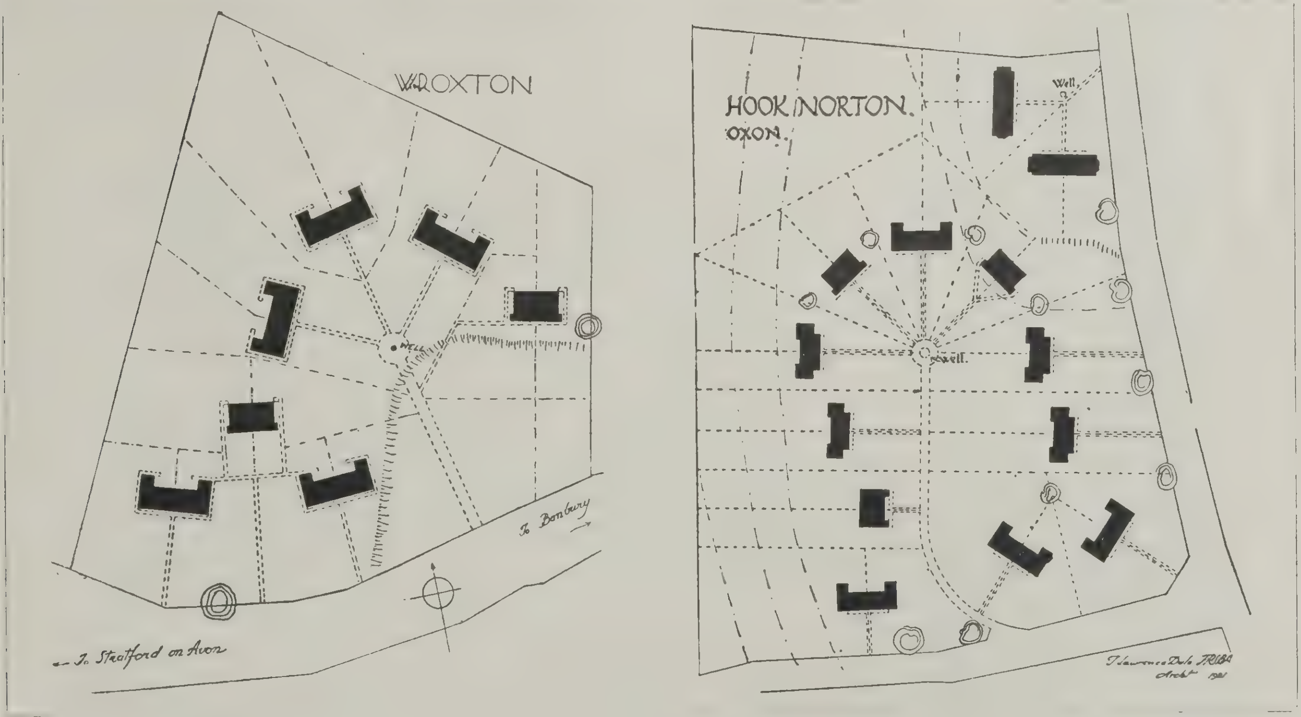

BANBURY RURAL DISTRICT COUNCIL HOUSING SCHEME.
Parlour Cottage North Fronted. "Cropredy Type". M of H Class B.
Revised Aug 920
General Drawing Scale ⅛ inch = 1 Foot.
Square End
Front (North) Elevation
Back (South) Elevation
Bow End.
Ground Plan.
First Floor Plan.
Section A-B.
This drawing is the property of the Architect, and is to be returned to him. It is supplied in confidence.
Half Foundation Plan
Half Roof Plan.
Architect
Horse Fair, Banbury.

HOUSES AT HOOK NORTON.



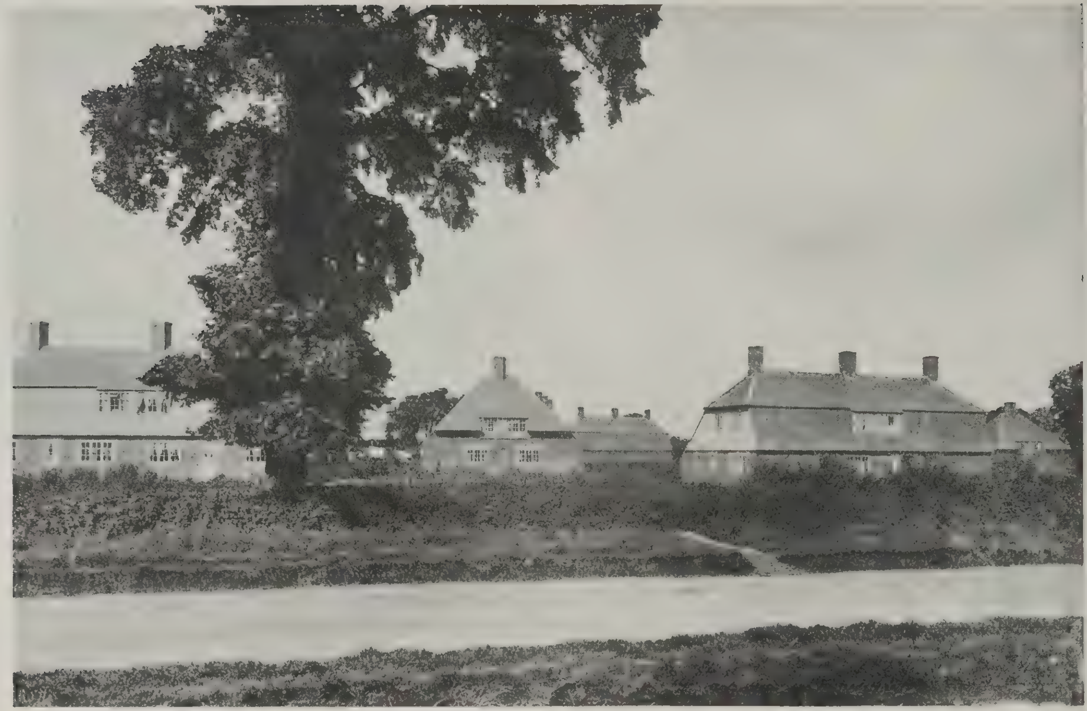
HOUSES AT MOLLINGTON.



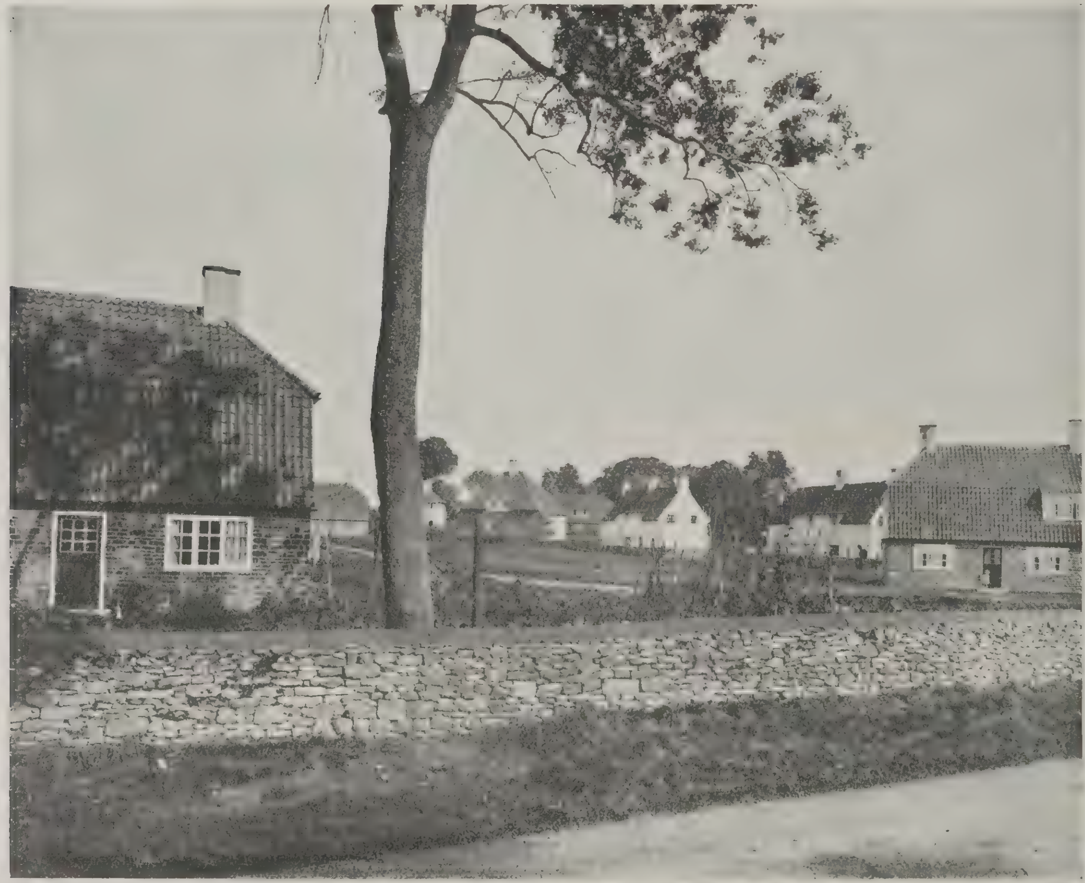


LAY-OUT PLANS.

BANBURY HOUSING SCHEME. T. LAWRENCE DALE, F.R.I.B.A., ARCHITECT.



HOUSES AT WROXTON.



HOUSES AT HOOK NORTON

BANBURY HOUSING SCHEME. T. LAWRENCE DALE, F.R.I.B.A., ARCHITECT.

# Housing Schemes at Lemington and Throckley, Northumberland

### HARVEY & WICKS, and ADSHEAD & RAMSEY, Architects

ORIGINALLY the Newburn-on-Tyne Urban District Council decided to develop two sites, one at Throckley and one at Lemington, situated about two miles apart, and to build 500 houses on each. Owing to the curtailment of the housing scheme programme, however, only 500 of these houses have been built altogether, viz., 250 at Throckley and 250 at Lemington.

*Lemington.*—The building site at Lemington is on the side of the hill approached by a short communication road on the main Newburn to Newcastle Road. The chief feature of the lay-out is the horseshoe centre with site for school on the lower part.

Very careful consideration has been given to the various widths of roads, and to the treatment of grass margins and tree-lined avenues.

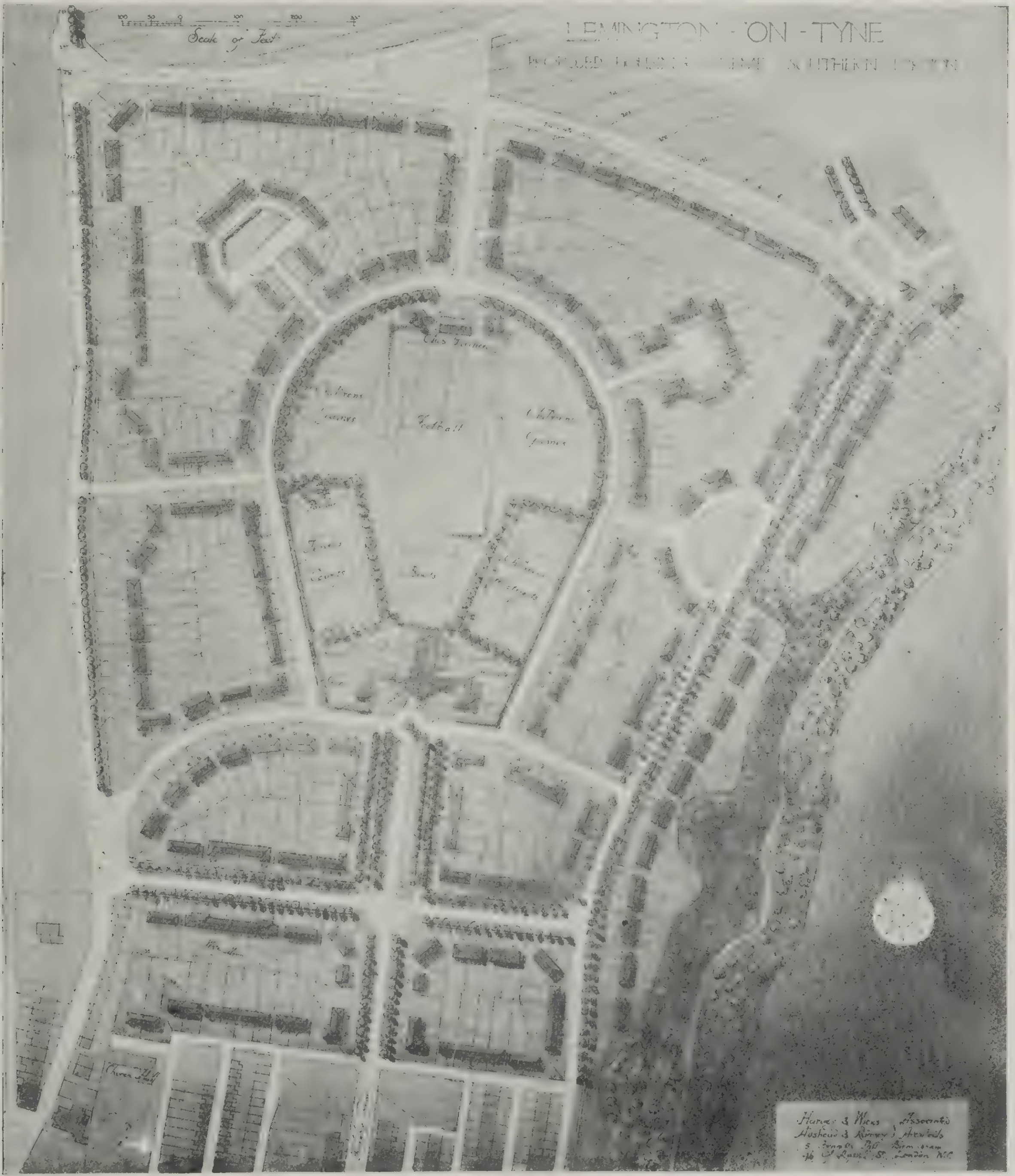
*Throckley.*—As at Lemington, the Throckley site is also on the side of a hill bounded by the public road on the west side, with a deep dene or ravine on the east.

On the western road, at the southern entrance to the estate, arrangements have been made for a small shopping centre.

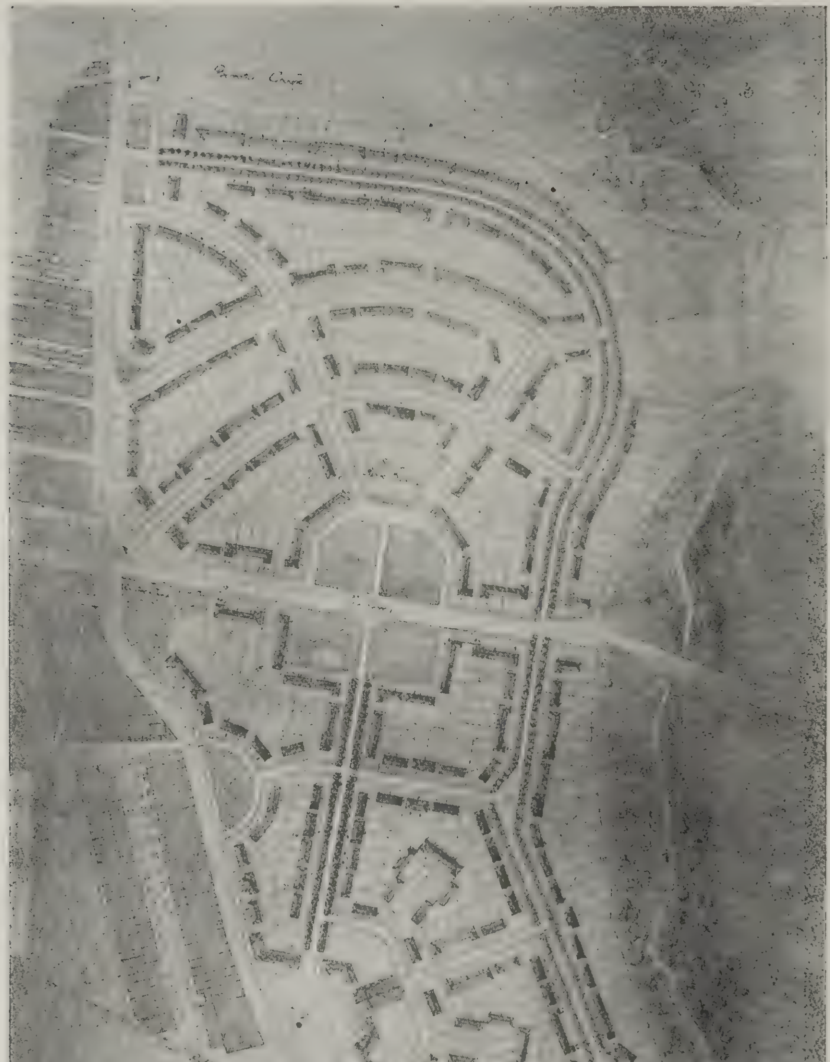
One of the chief points to be considered in this lay-out was the necessity for communication between the lower end of the western road and the main Newcastle Road which runs along the northern extremity of the site.

It is interesting to note that the old Roman wall which

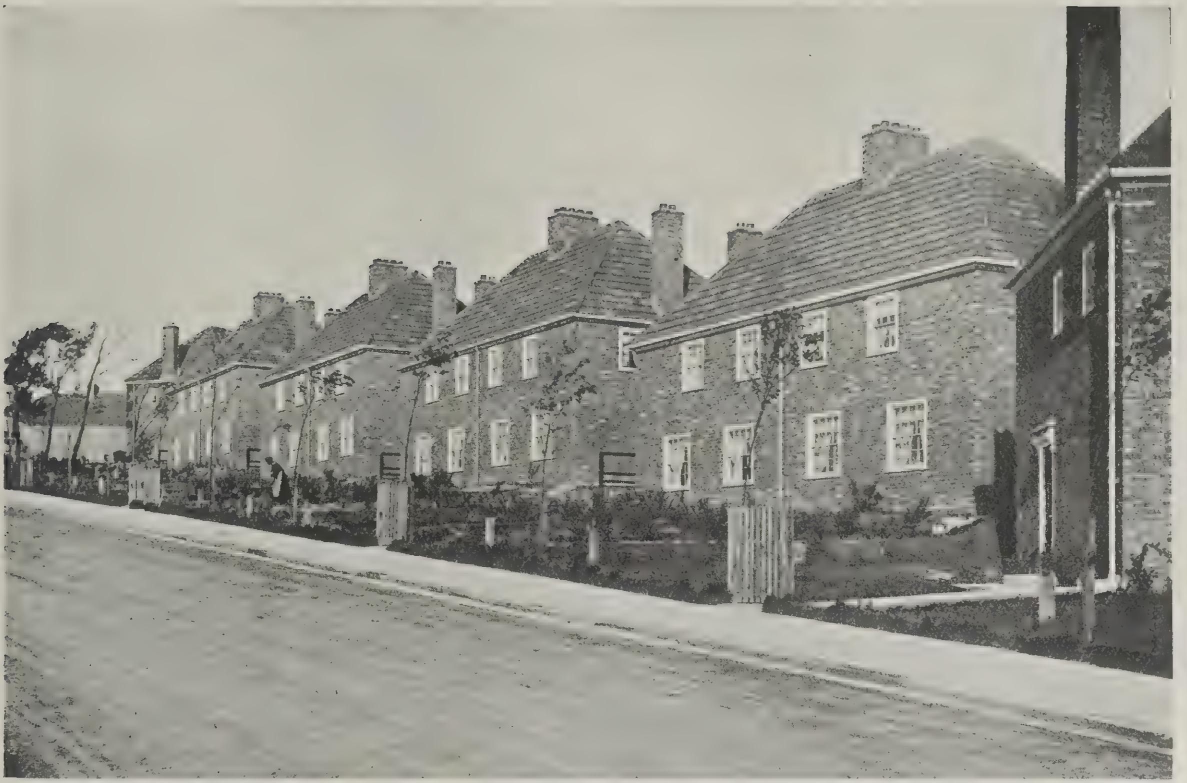
(*Continued on page* 48).

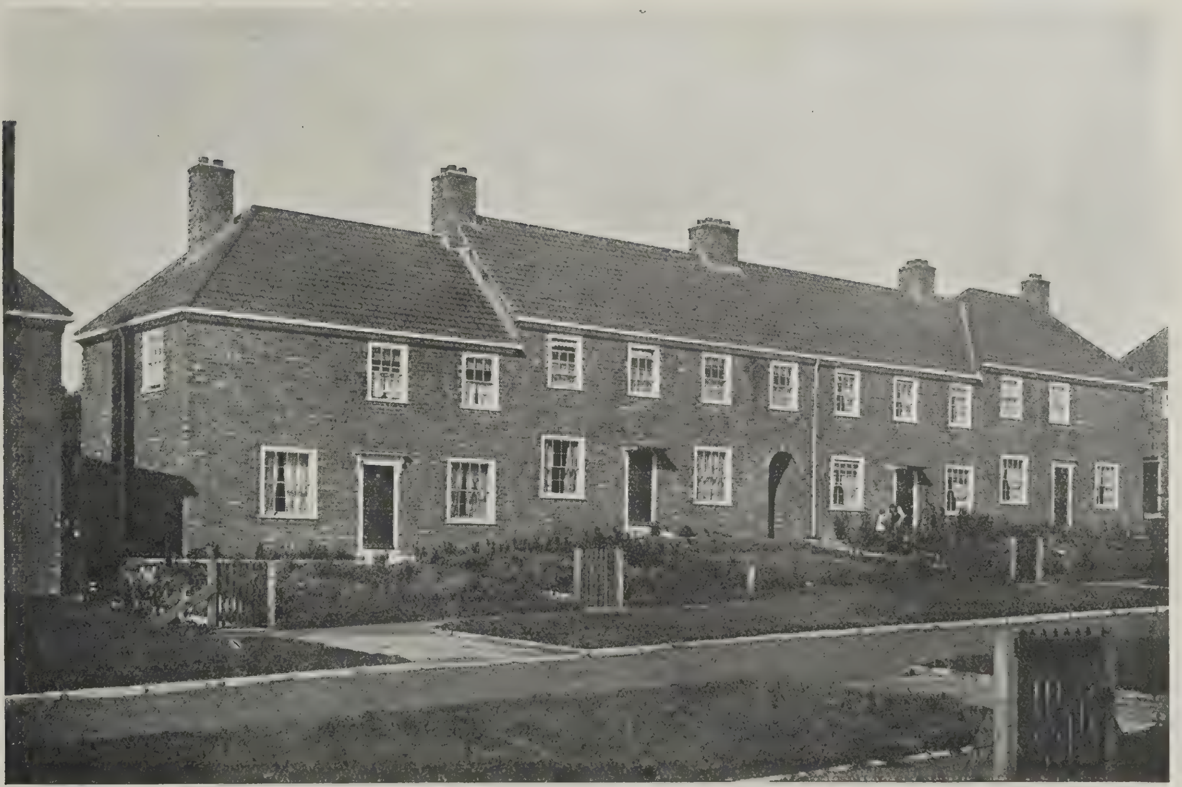


LAY-OUT OF LEMINGTON-ON-TYNE HOUSING SCHEME.



LAY-OUT OF THROCKLEY HOUSING SCHEME.





NEWBURN-ON-TYNE HOUSING SCHEMES: SOME TYPICAL VIEWS.
HARVEY & WICKS AND ADSHEAD & RAMSEY, ARCHITECTS.

(*Continued from page* 45.)

originally ran right across England, and was built to keep out the Picts and Scots (immediately to the south of the Newcastle Road), practically forms the northern boundary of the scheme. Portions of this wall were discovered during the progress of building operations.

The houses both at Lemington and Throckley are built of a local reddish brown coloured brick of rather rough texture, and the roofs are covered with Major's patent double Roman tiles.

The majority of the houses have sash windows, but in some cases where a gabled roof has been used, casements have been employed on the first-floor windows, in conjunction with sash windows on the ground floor, an interesting example of sash and casement treatment which is frequently found in old cottages, and, in particular, in many parts of Suffolk and Norfolk. In all probability the original cottages had all the windows of the casement type, but afterwards when sash windows came into general use, windows of this type were introduced into the principal ground-floor rooms.

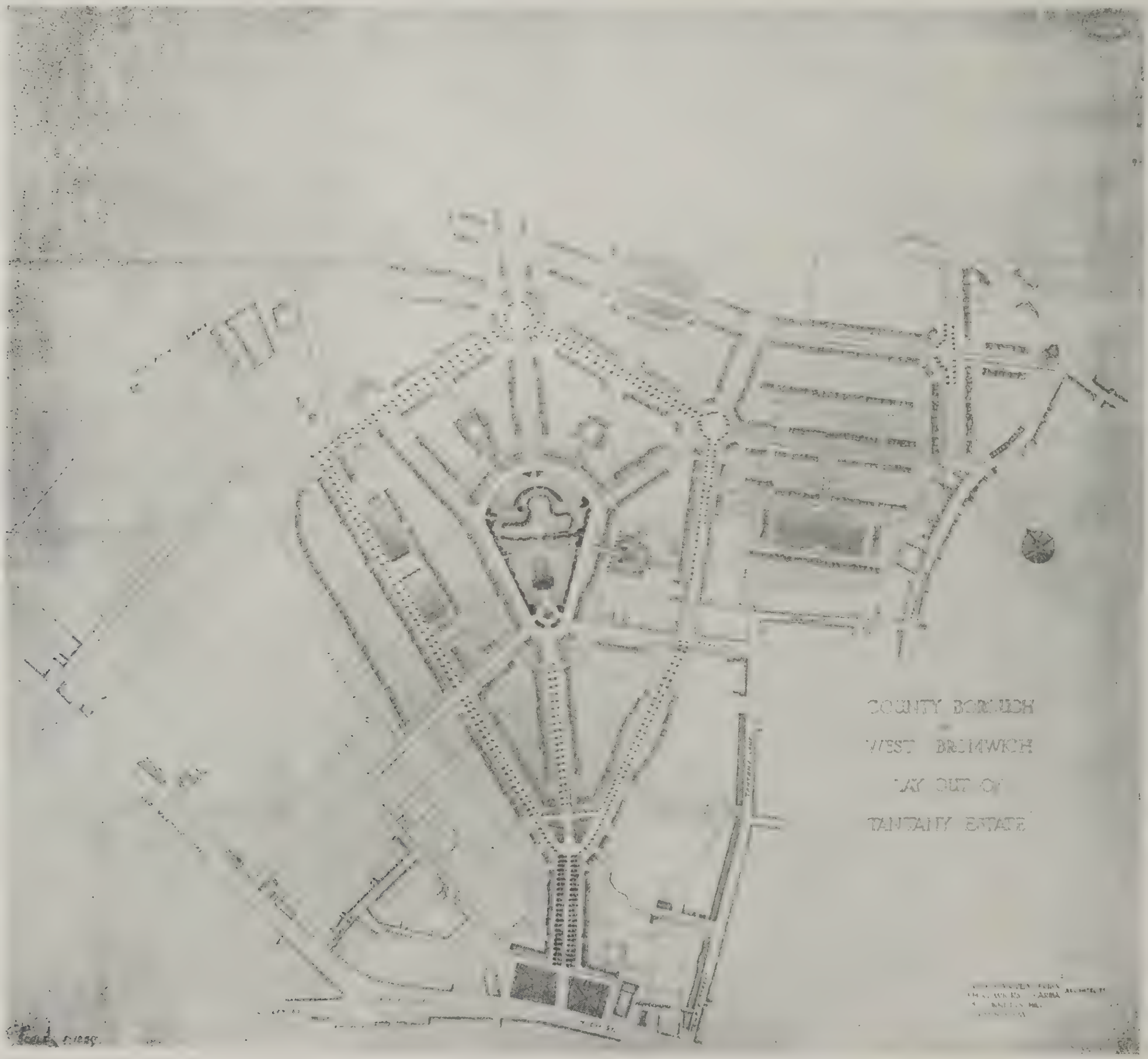
Both at Lemington and Throckley every effort was made to introduce variety into the schemes by the use of different types, in pairs and in groups of fours, and special attention was given to the treatment of the entrance doors. Many otherwise excellent schemes have been, to some extent, spoilt by a monotonous use of the same type of entrance door throughout.

# The Tantany Estate, West Bromwich

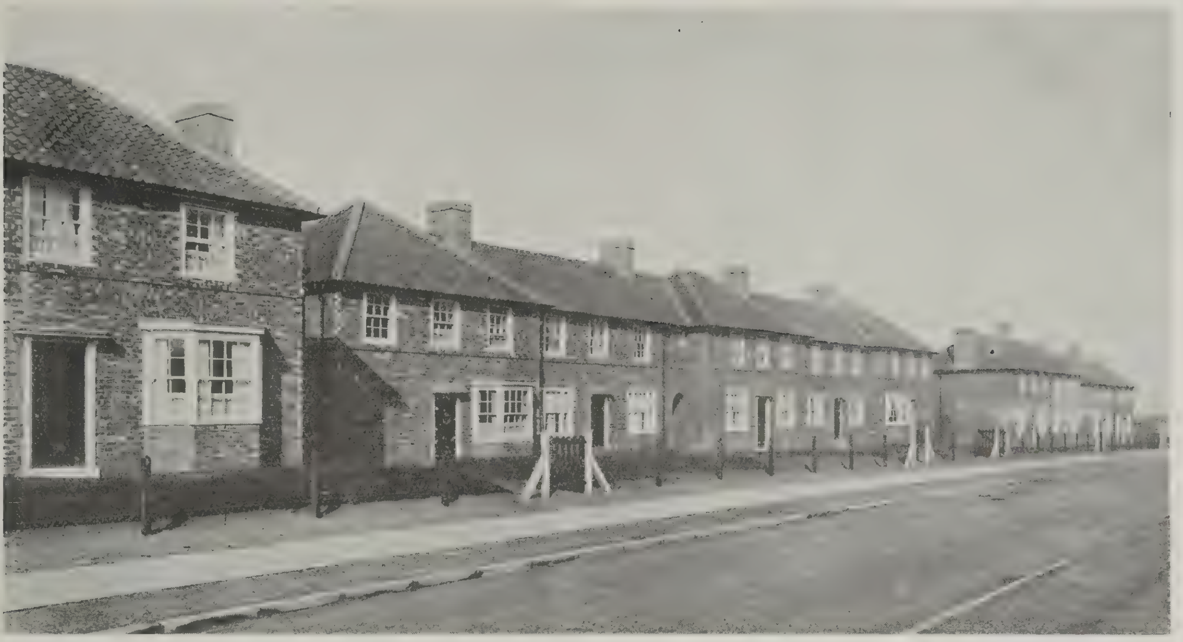
## W. ALEXANDER HARVEY and H. GRAHAM WICKS, F. and A.R.I.B.A., Architects

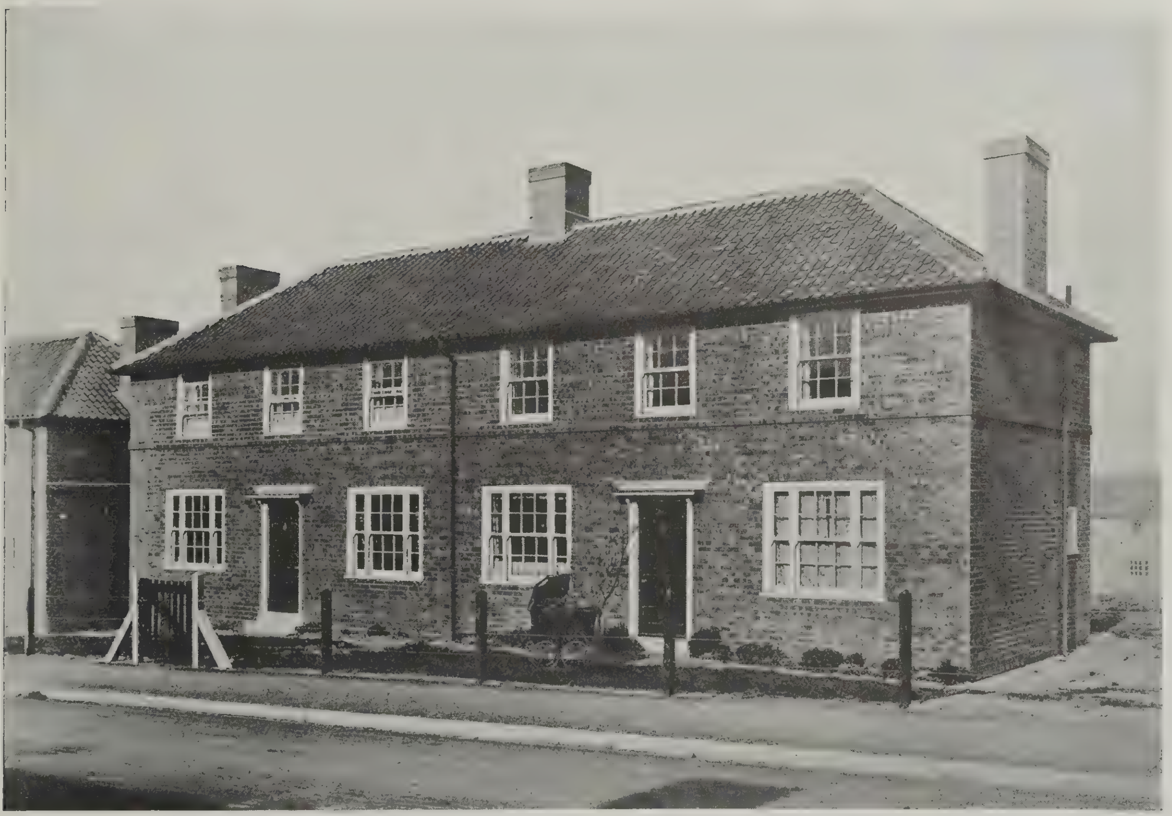
THE area of the Tantany Estate, West Bromwich, is approximately 95 acres. The site is typical of the Black Country, and is very undulating. The lay-out was largely governed by the existence of two large pit mounds and certain existing roads. Sites have been reserved for shops and public buildings. The large open space in the centre of the estate is a pit mound, and will be laid out and planted in due course; 605 houses have been erected by Messrs. H. Boot and Sons, Ltd., of Sheffield and London, and 112 houses of the Dorman Long type by Messrs. Whitehouse and Sons, Birmingham.

The houses are charming examples of domestic design, based on the "Georgian" model. They have sash windows and tiled roofs, and in some of the groups (as shown in the upper photograph on page 49) effective use is made of bay windows.



LAY-OUT OF THE TANTANY ESTATE, WEST BROMWICH





THE TANTANY ESTATE, WEST BROMWICH: SOME TYPICAL HOUSES.
HARVEY AND WICKS, ARCHITECTS.

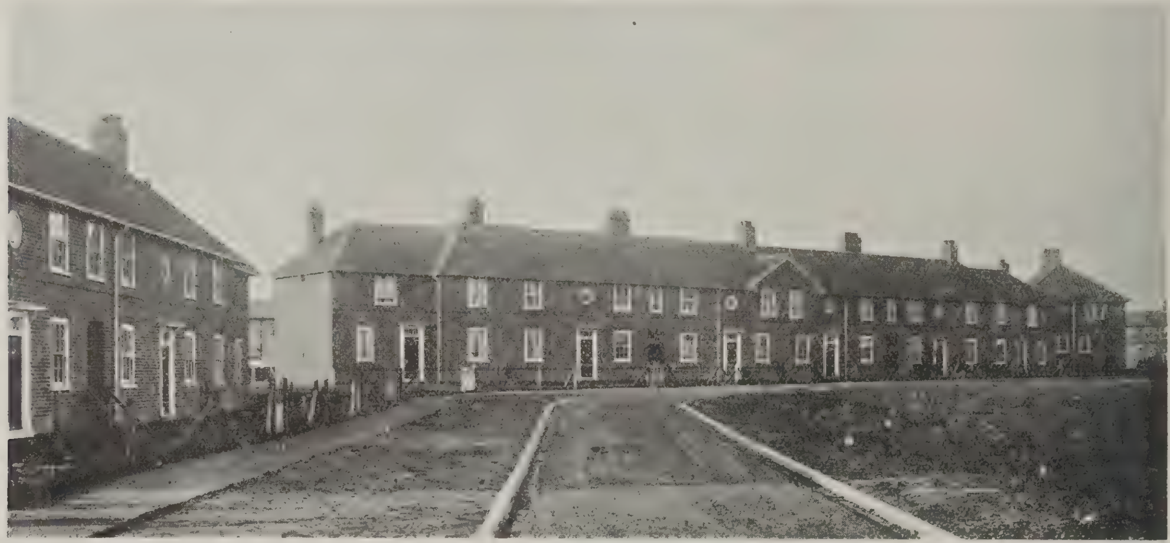
# The Mile Cross Estate, Norwich

## STANLEY J. WEARING, A.R.I.B.A., Architect

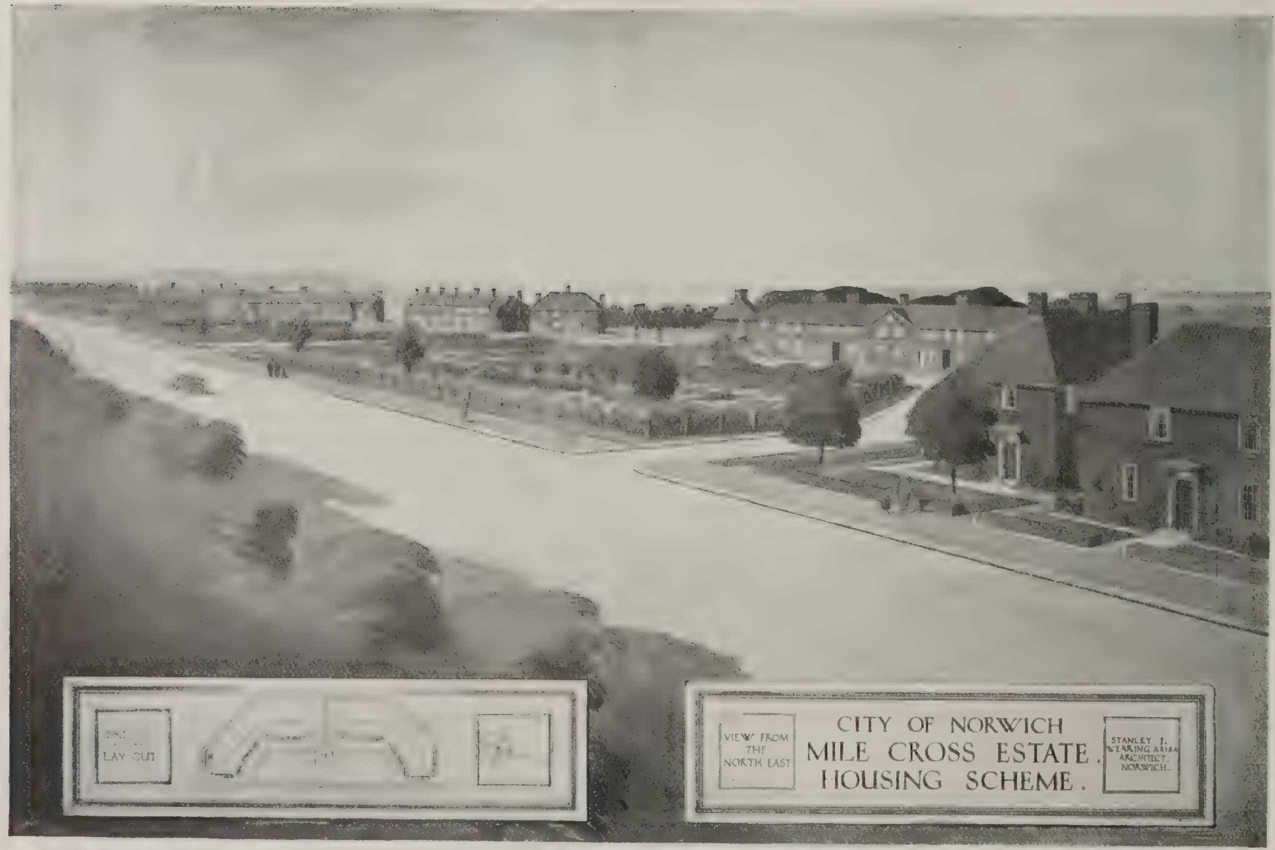
THERE is an abundance of good early-nineteenth-century work in Norwich, a style which lends itself to a simple and dignified treatment for work of this nature, hence its adoption in this scheme. The bricks used are local red ones, those for facing varying considerably in colour. The roofs are covered with red pantiles, and all external woodwork is painted white. As houses face in different directions, it was necessary to adopt different type plans, which also gave slight variation in elevation without destroying the general harmony.

Only the houses on one side of the sweep in the lay-out and perspective shown have been erected. Tenders were obtained to complete the other side a few months back, but owing to the cost coming out at £500 each they were not proceeded with.

Professor S. D. Adshead, M.A., F.R.I.B.A., is the consultant architect to the Corporation.

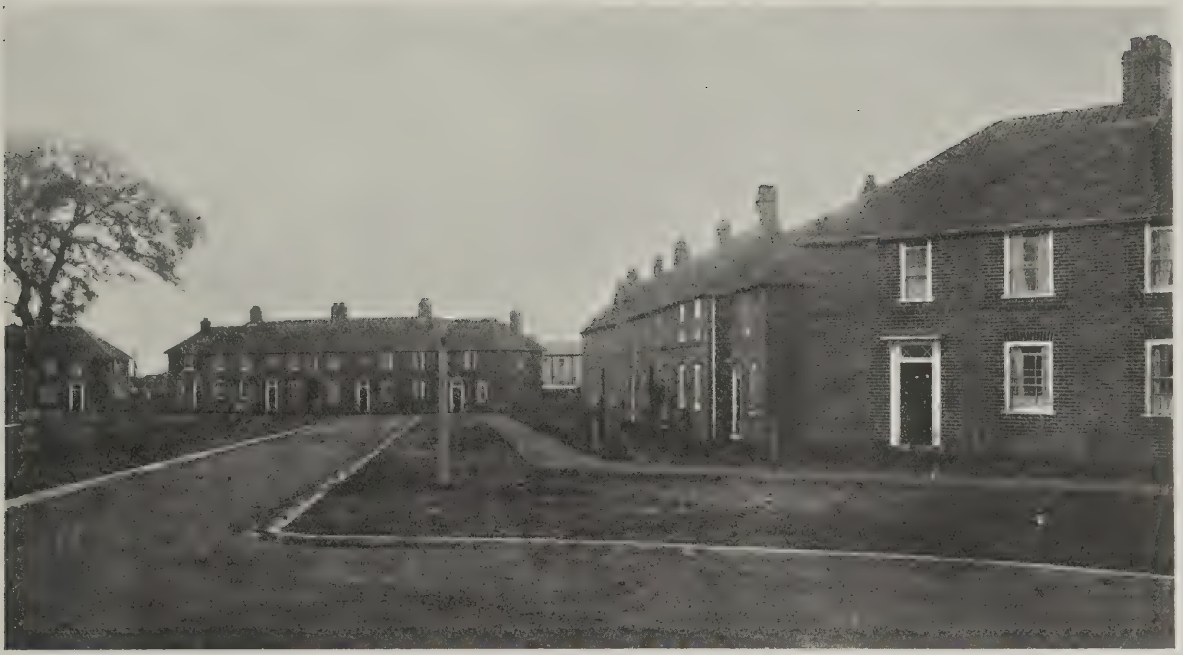


A GROUP OF SIX HOUSES.

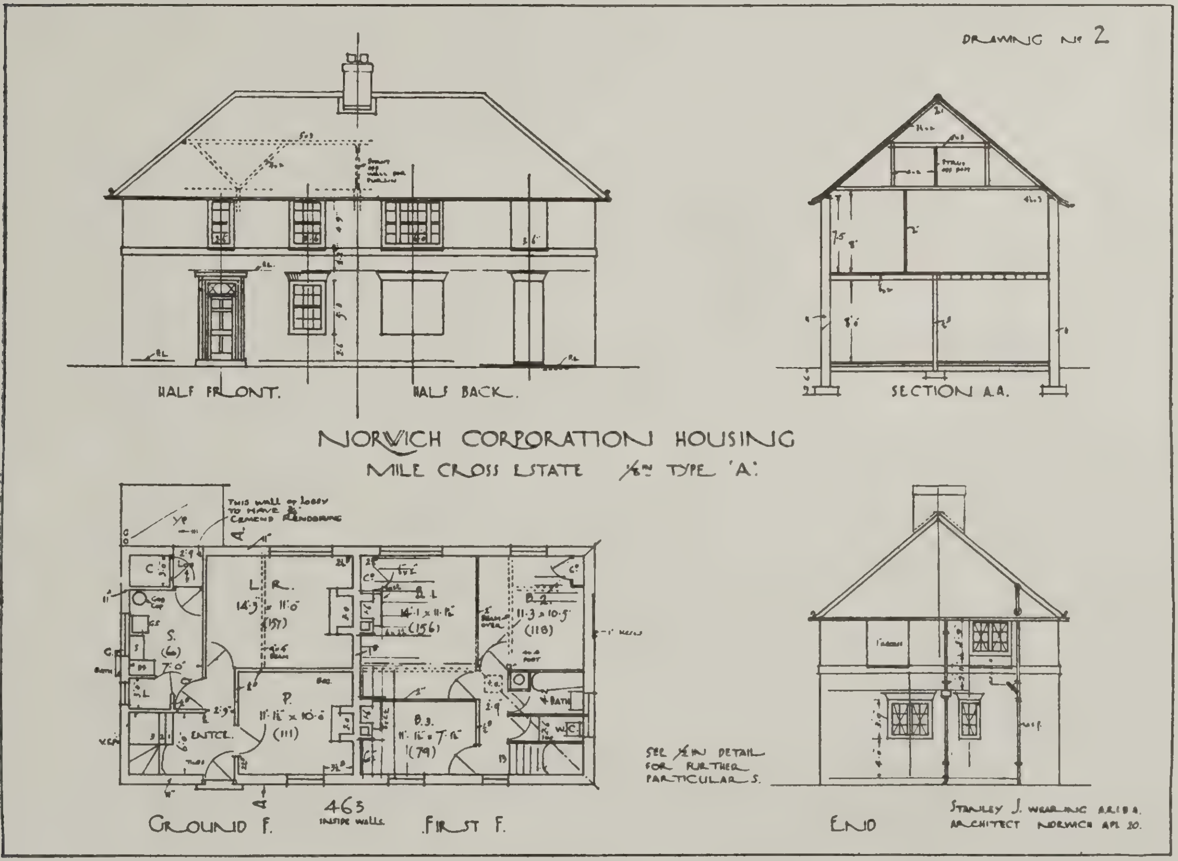


LAY OUT
VIEW FROM THE NORTH EAST
CITY OF NORWICH
MILE CROSS ESTATE.
HOUSING SCHEME.
STANLEY J. WEARING A.R.I.B.A. ARCHITECT. NORWICH.

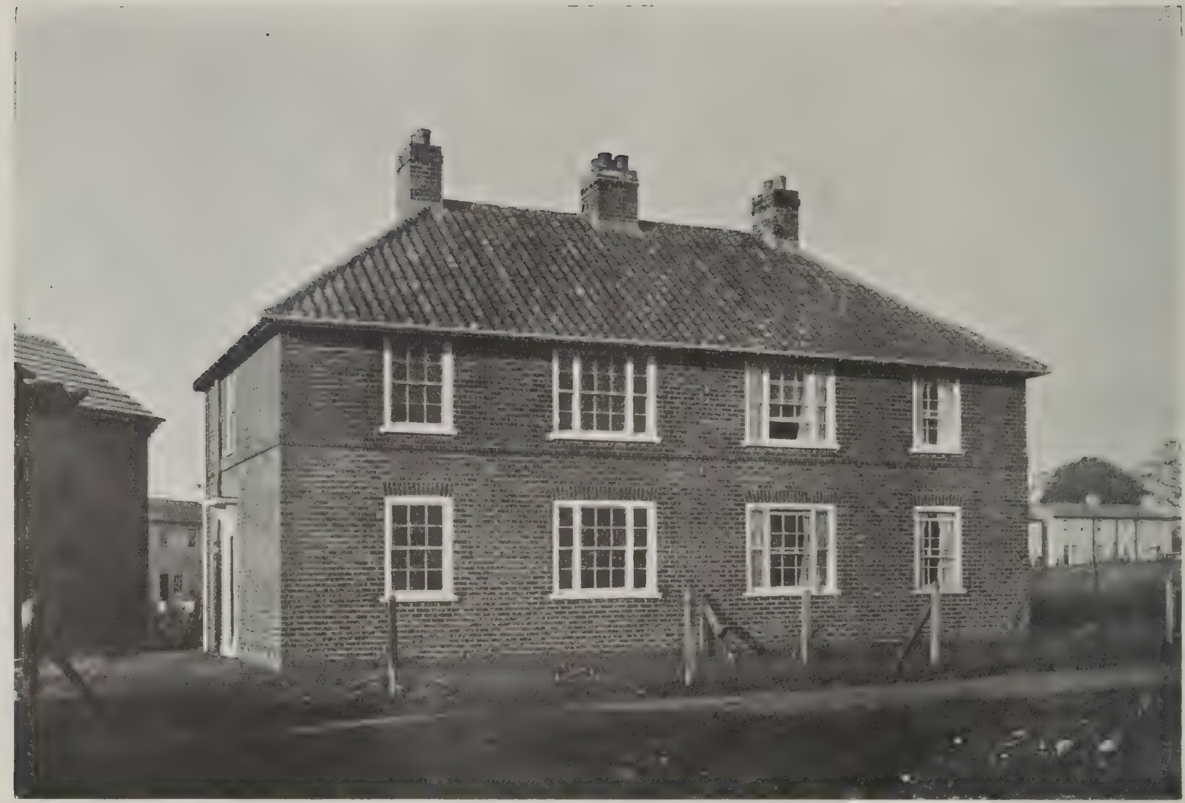
A BIRD'S-EYE VIEW OF THE MILE CROSS ESTATE.

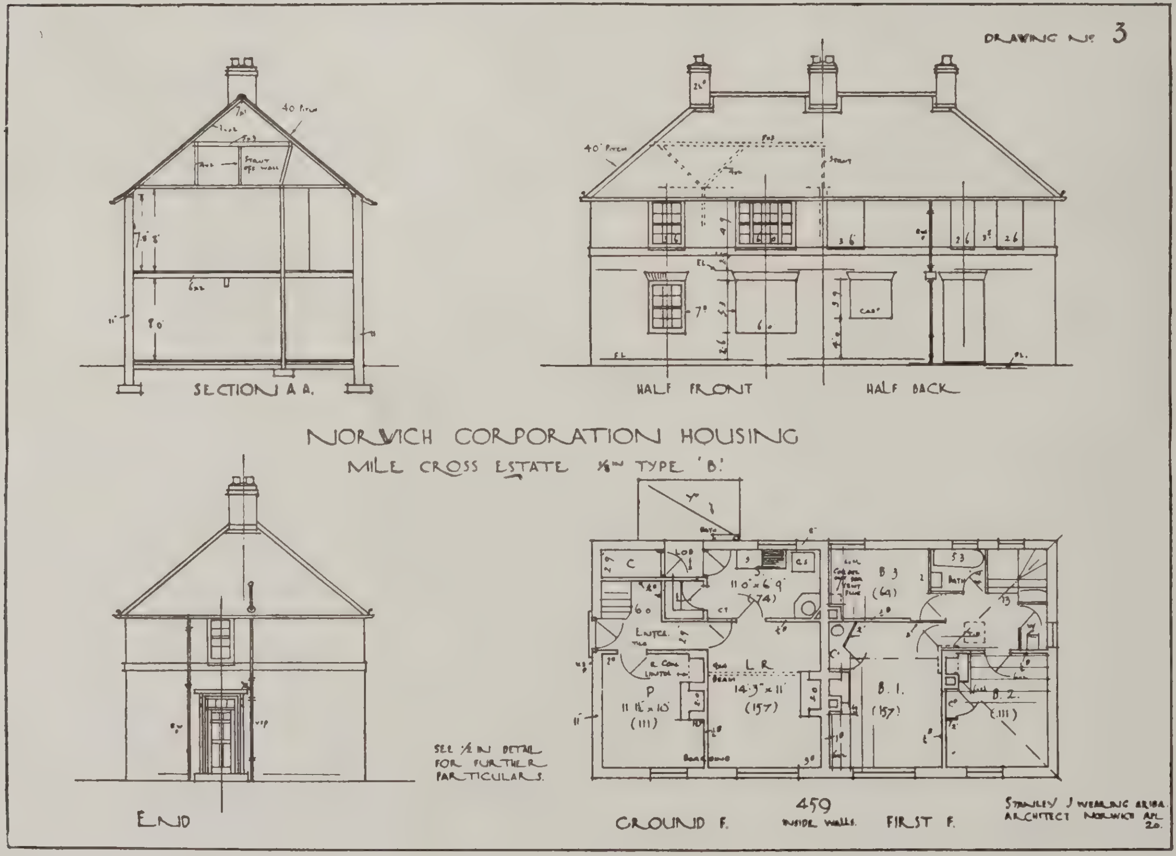


A GENERAL VIEW.



THE MILE CROSS ESTATE, NORWICH. STANLEY J. WEARING, A.R.I.B.A., ARCHITECT.





THE MILE CROSS ESTATE, NORWICH: A PAIR OF HOUSES.
STANLEY J. WEARING, A.R.I.B.A., ARCHITECT.

# Rhiwbina Garden Village

## T. ALWYN LLOYD, F.R.I.B.A., Architect

THIS garden village has been built by the Cardiff Workers' Co-operative Garden Village Society, Ltd. The site is 3½ miles from Cardiff, beautifully placed under the foot-hills, and well wooded. For a Welsh site, it is conveniently flat, and there is a pleasant stream preserved as a feature, with bridges giving access to ten houses.

Building was commenced in 1913—seventy houses being completed as a first section. Building was taken up again after the war, and in August 1920 a contract for the erection of ninety-three houses, with the necessary roads and sewers, was let, and such good progress was made that all the houses were occupied by the early part of 1922. A contract for a further section of twenty-six houses in Lon-Isa was let by the society in May last.

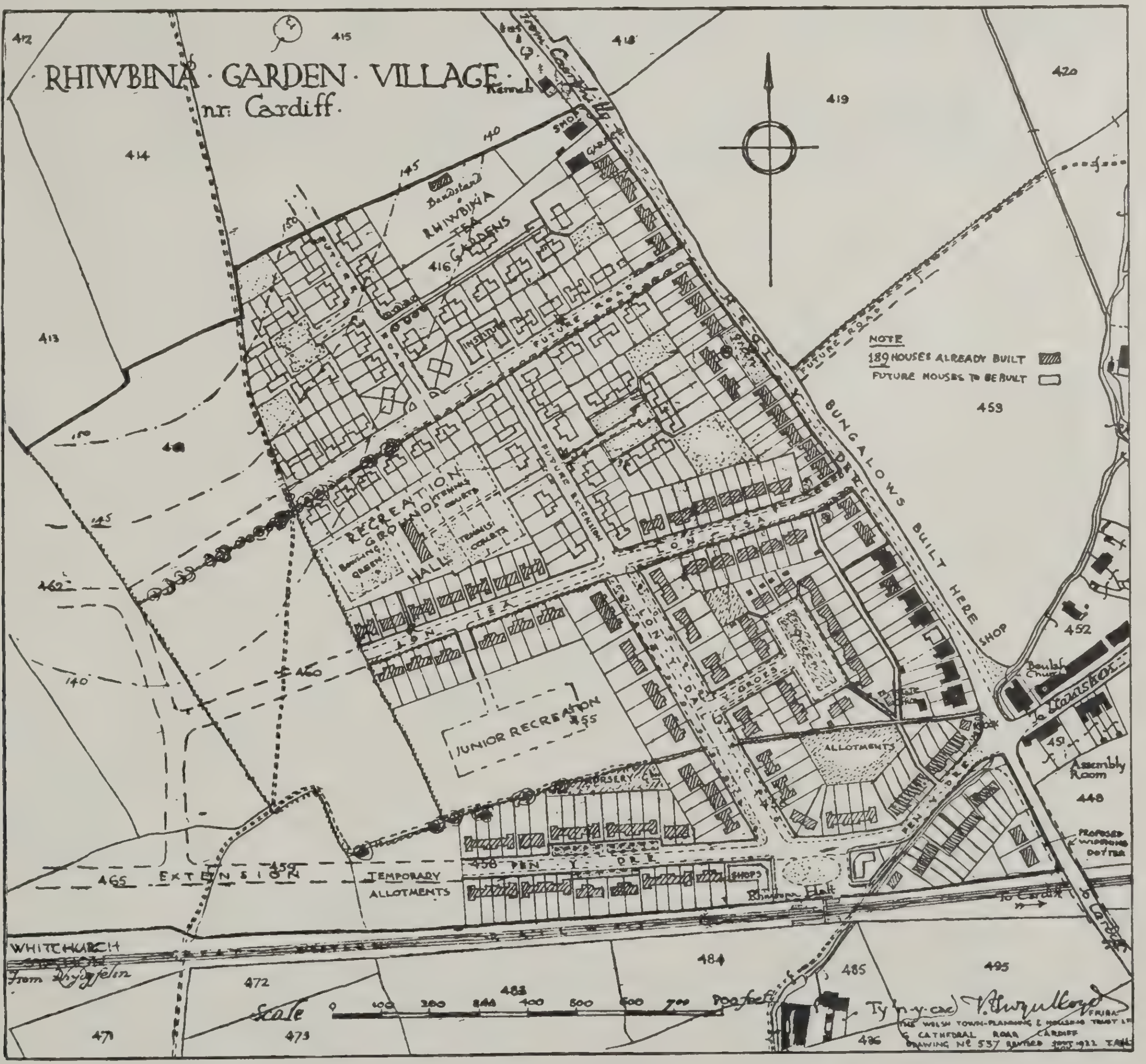
The whole estate consists of over 100 acres, part of which at present forms the Whitchurch golf course; but the portion which it is hoped to develop during the next few years provides for the building of an additional 150 houses. There is a long frontage to the main road, of which advantage has been taken in view of the high cost of road-making in 1920. "Pen-y-dre," a new road on which thirty-four houses have been built, will ultimately form part of a "through" relief road from Llanishen to Coryton under the Cardiff Corporation town-planning scheme. The railway forms the southern boundary of the property, and ample space has been left in the lay-out outside the Rhiwbina Halt for the provision of shopping sites and a formal station approach.

There is a large recreation ground on the village; eight tennis courts have been laid out, together with bowling green and croquet lawn. A new recreation hall has been recently built by the club, giving accommodation for an audience of 300 for concerts and other entertainments, besides changing rooms, etc. At one end of the estate refreshment rooms have been erected with well laid out tea gardens adjoining, where open-air concerts are given.

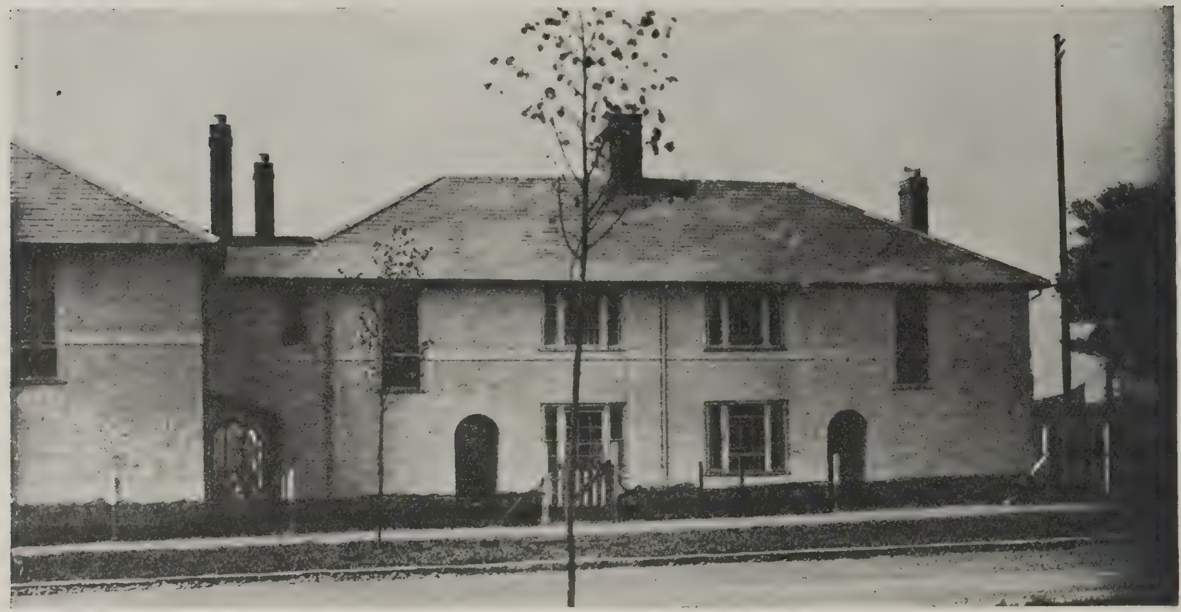
The houses recently built are of nine types, all with parlours, mostly with three bedrooms, but some have four. The materials used in construction are 11 in. hollow external walls, covered with fine cement, cast and colour-washed, with blue brindled bricks for chimneys and porches. A few groups are built with Cattybrook brindled facings with light joints. The latter groups are covered with thick green Arvon slates, and the whitewashed groups have blue and purple slates of uneven colours. The windows throughout are double-hung sashes; the internal doors being mainly "Woco" Columbia pine, stained and polished. The floors of living-rooms and parlours are of wood-blocks, the halls and sculleries being paved with quarry tiles.

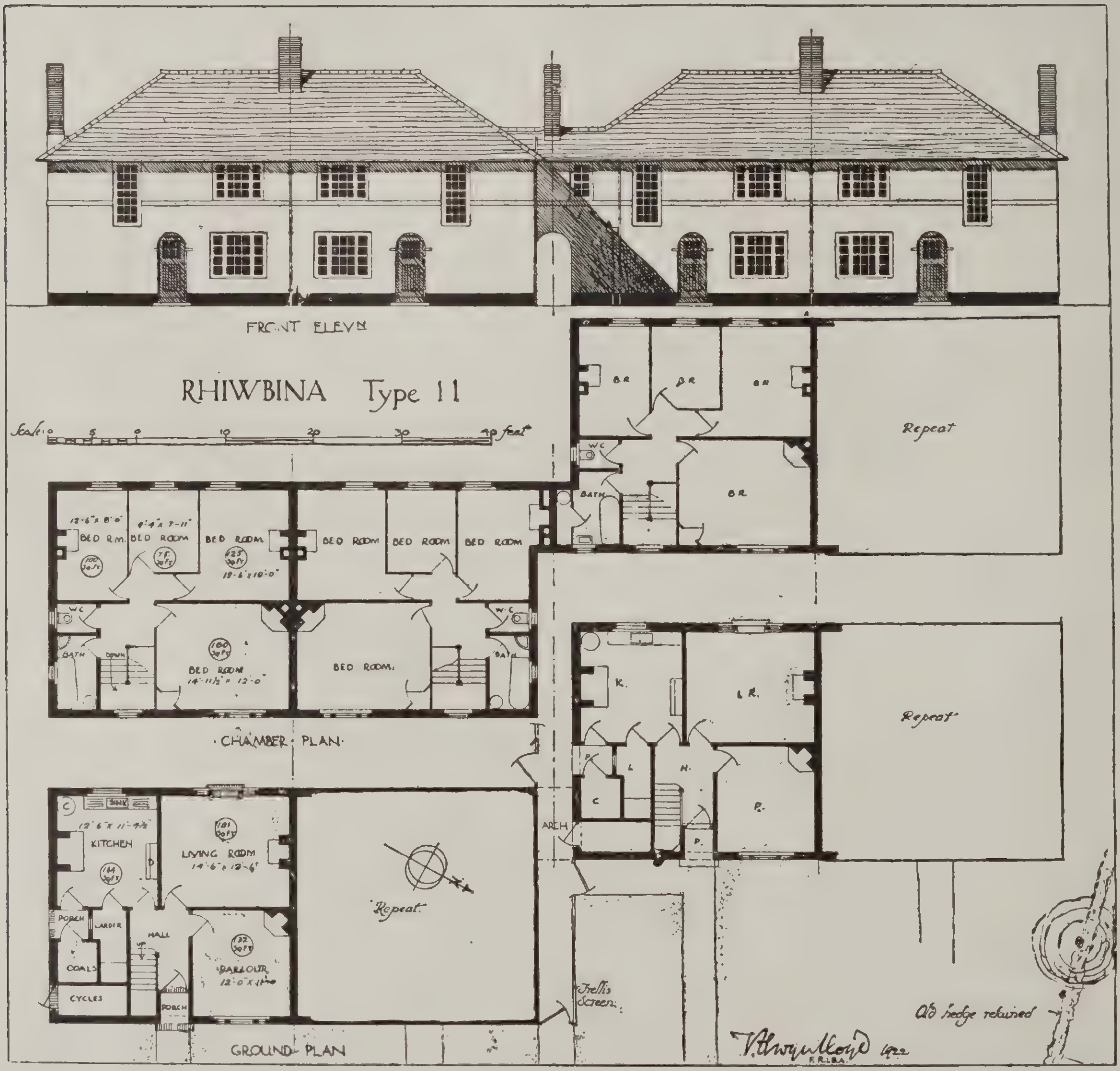
The general contractors for the ninety-three houses and roads were Messrs. Rogers and Davies, Ltd., of Cardiff.

(*Continued on page* 56.)

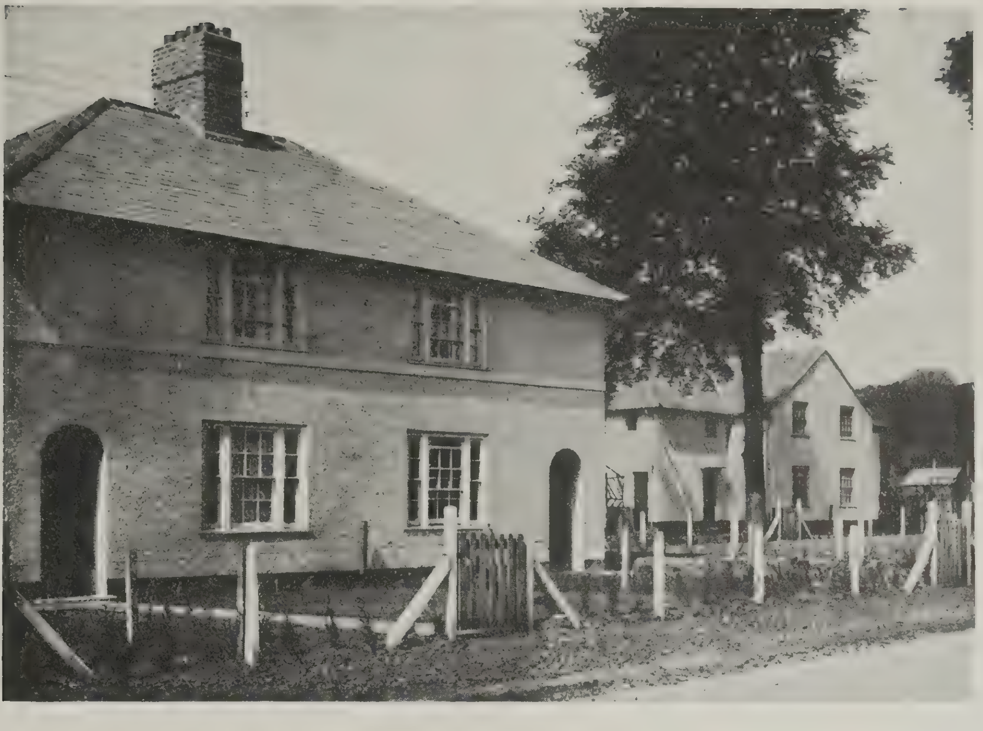


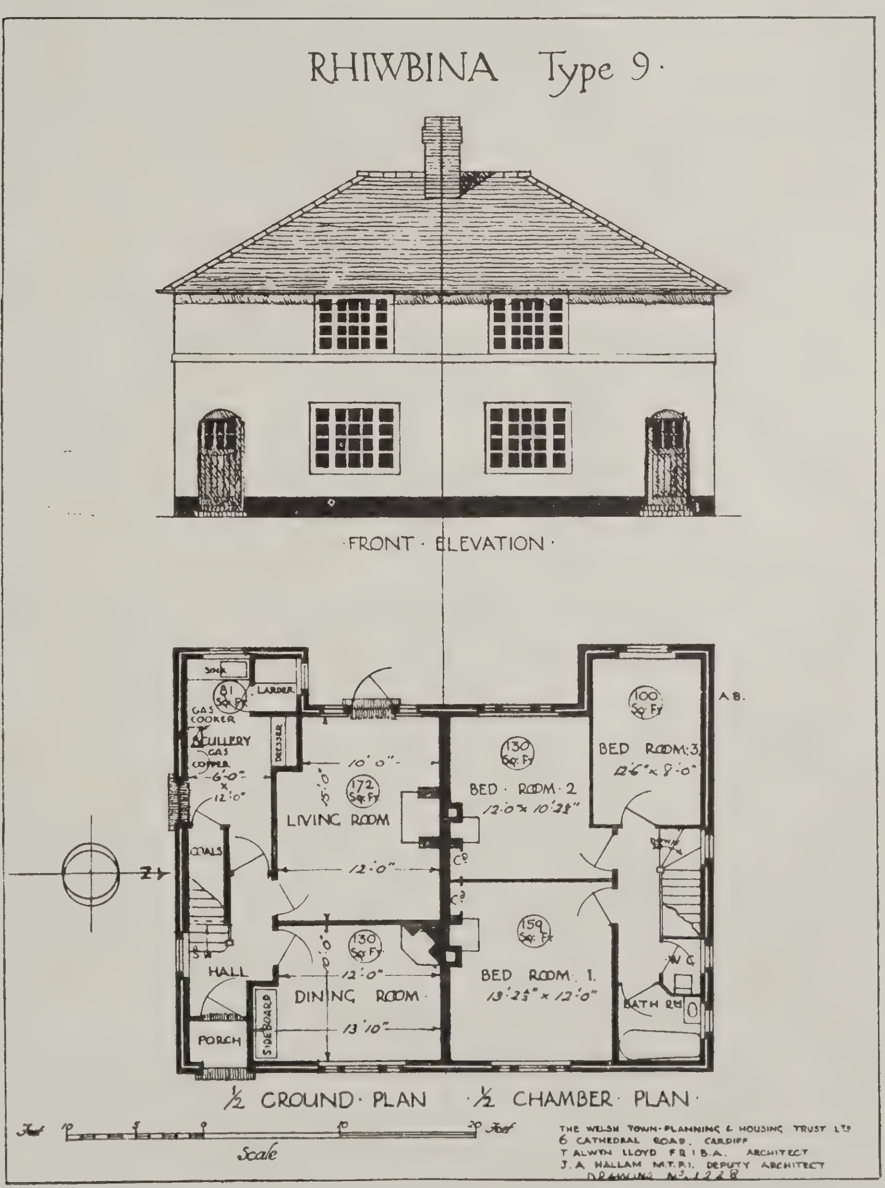
THE LAY-OUT.





RHIWBINA GARDEN VILLAGE: A GROUP OF FOUR HOUSES.
T. ALWYN LLOYD, F.R.I.B.A., ARCHITECT.





RHIWBINA GARDEN VILLAGE: A PAIR OF HOUSES.

T. ALWYN LLOYD, F.R.I.B.A., ARCHITECT

(*Continued from page* 53.)

Sub-contracts were carried out as follows: Joinery supplied by Messrs. Gibbon and Sons, Ltd., Cardiff; grates and ironmongery by Messrs. Williams and Borgars, Ltd., and D. Morgan and Sons, Ltd., Cardiff; plumbing, B. Williams; painting and decorating, G. H. Thompson, Cardiff. Messrs. Rogers and Davies, Ltd., were also the contractors for the recreation hall.

The contractors for the twenty-six houses and road now in course of construction are the National Building Guild, Ltd., timber and joinery are by Messrs. Newart Works, Ltd., Cardiff; and grates and sanitary goods by Williams and Borgars.

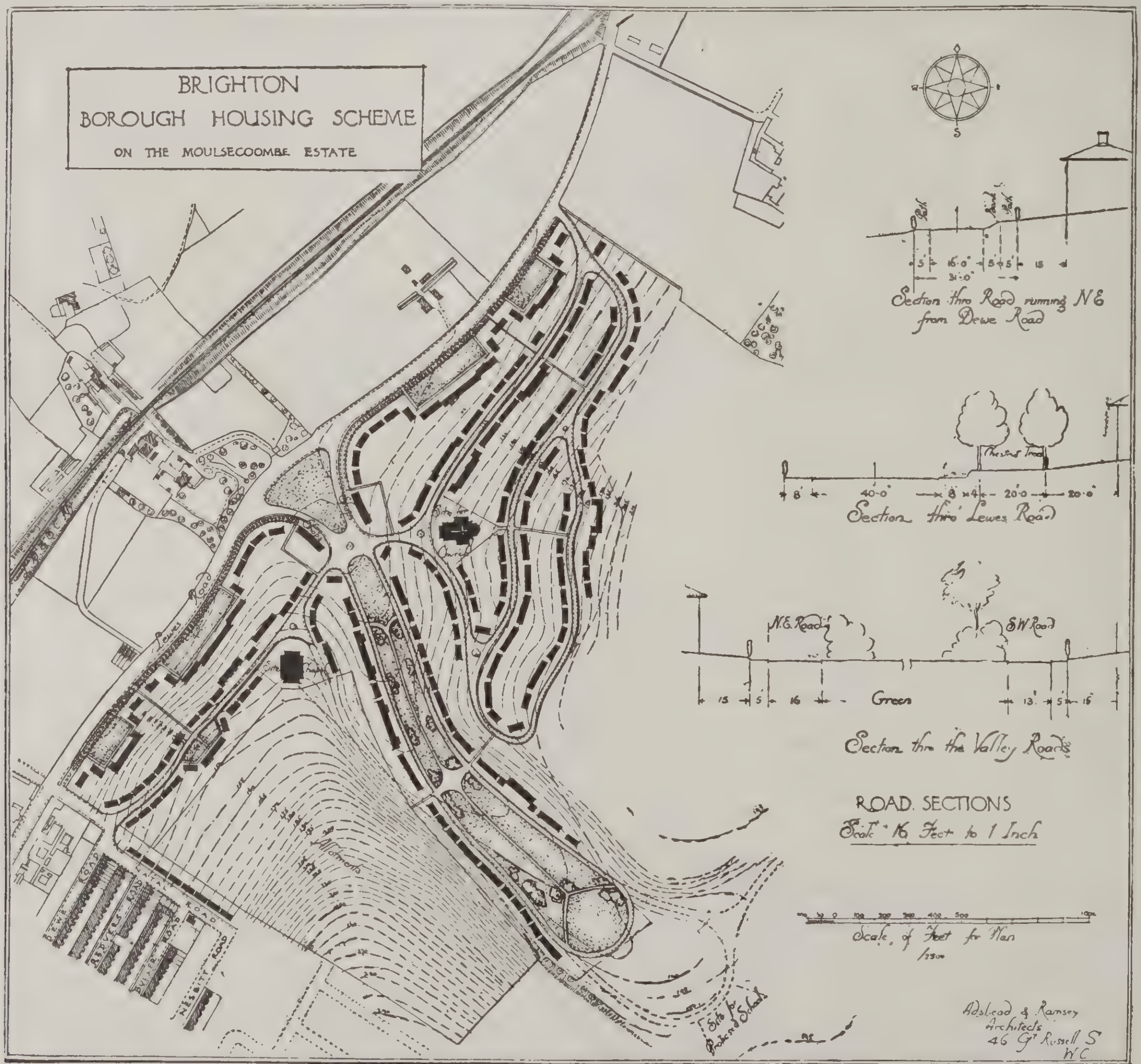
The architect is Mr. T. Alwyn Lloyd, F.R.I.B.A., M.T.P.I., of the Welsh Town-Planning and Housing Trust, Ltd., Cardiff, who has been assisted by Mr. J. A. Hallam, M.T.P.I., the deputy architect of the Trust.

# The Moulsecoombe Estate, Brighton

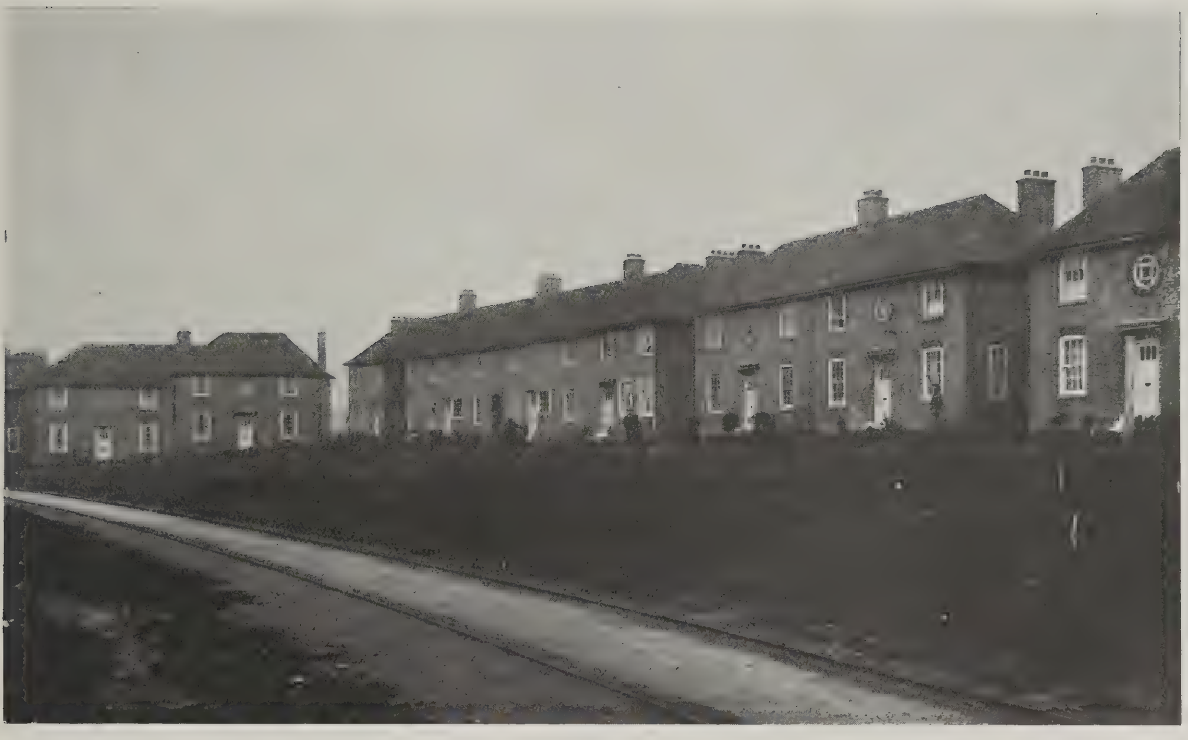
THIS estate has been carried out from the designs of four firms of Brighton architects, viz., Messrs. Clayton and Black, Messrs. Garrett and Son, Mr. Wallis Long, and Mr. W. T. Overton. The lay-out was designed by Messrs. Adshead and Ramsey; 480 houses have been erected, those illustrated being the work of Messrs. Clayton and Black and Wallis Long.

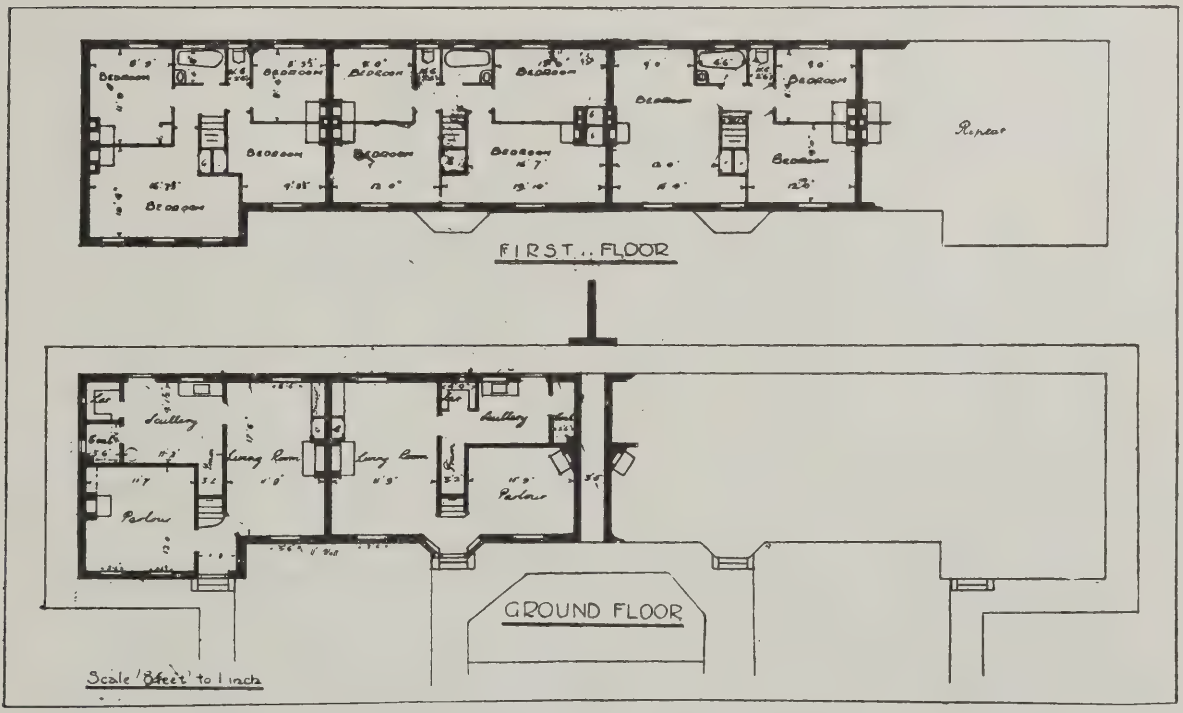
The following sizes of the rooms in one of the type A houses may be quoted as typical of the accommodation provided: Living room, 17 ft. by 11 ft.; scullery, 12 ft. by 7 ft.; parlour, 12 ft. by 10 ft.; three bedrooms, 13 ft. 9 in. by 8 ft. 6 in., 11 ft. 3 in. by 11 ft. 3 in., 9 ft. 10 in. by 12 ft. 3 in. The bathroom (with a lavatory basin and hot and cold water) is within easy access of the bedrooms; there are cupboards in every bedroom, drawers in all kitchens, and deep sinks are provided in all sculleries, with plugs and hot and cold water, so that they can be used for washing purposes as well as for washing-up. Gas cookers can be installed if desired, a point having been run into each house for that purpose, and there is electric light throughout.

The scheme owed much in its early stages to the zeal of Major Clements, Housing Surveyor for Brighton, whose duties, after he left to join the Ministry of Transport, were carried on by Mr. H. Tillstone, the present Borough Surveyor. The Ministry of Health authorities associated with the undertaking included Mr. Walker Smith, Director of Housing; Mr. Stephen Easten, Director of Production; and Mr. C. H. Eyles, the District Commissioner.



THE LAY-OUT.





MOULSECOOMBE HOUSING SCHEME, BRIGHTON.

SOME HOUSES DESIGNED BY CLAYTON & BLACK, ARCHITECTS.

# Aylesbury Housing Scheme

MURRELL and PIGOTT, AA.R.I.B.A., R. G. MUIR, F.R.I.B.A., and C. H. B. QUENNELL, F.R.I.B.A., Architects

THIS scheme was carried out by a panel of architects nominated by the R.I.B.A., Mr. C. H. B. Quennell, F.R.I.B.A., being responsible for the general lay-out and road planning, and Mr. R. G. Muir, F.R.I.B.A., of Raymond Buildings, and Messrs. Murrell and Pigott, AA.R.I.B.A., of Bedford Row, for the houses.

A large level site was purchased on the south side of the town and adjacent to the station, a special railway siding being run to the boundary of the site. Owing to the extent of the ground available, an open type of lay-out was possible, and the great majority of the houses were planned as semi-detached.

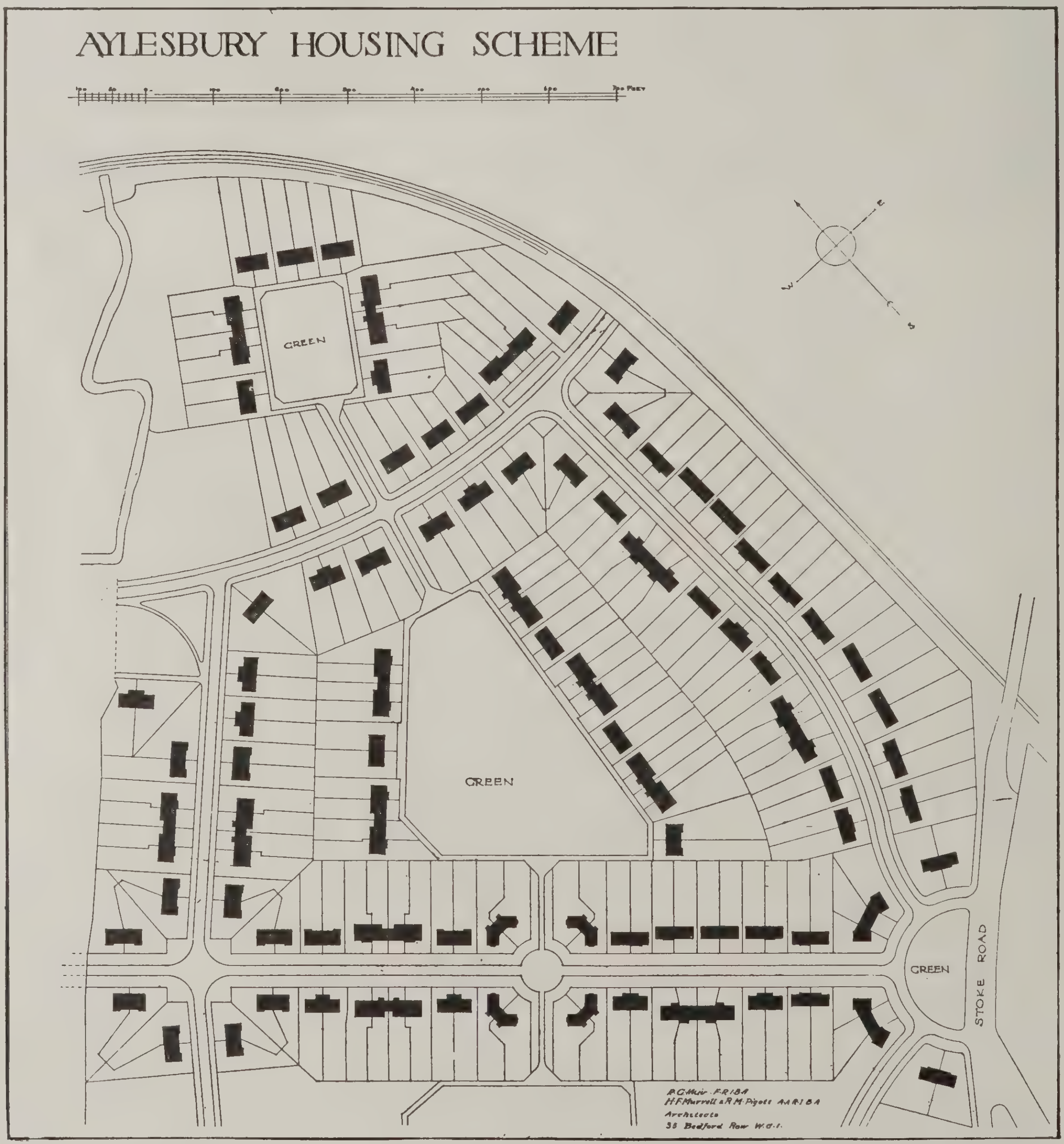
A large number of types were adopted, giving considerable variety, and special types were designed for quadrants and similar positions.

The facings generally are in lime rough-cast, bricks being introduced as available. All the roofs are of Broseley tiles, sand-faced tiles not being obtainable at the time the scheme was in progress.

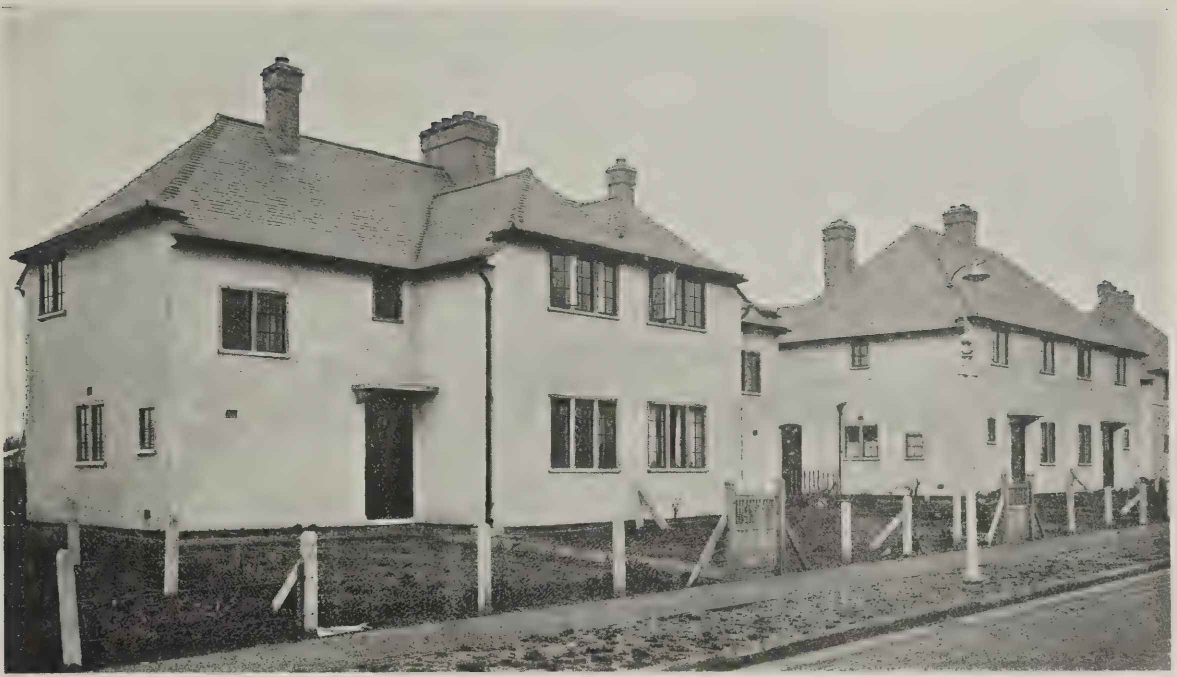
Artificial stone window frames the full thickness of the wall, and artificial stone mullions with metal casements, give an added interest to the houses, this method being found as economical in execution as any type of window finishing, and more economical for maintenance.

At the present moment about 120 houses have been completed, the scheme as originally designed comprising 400 houses.

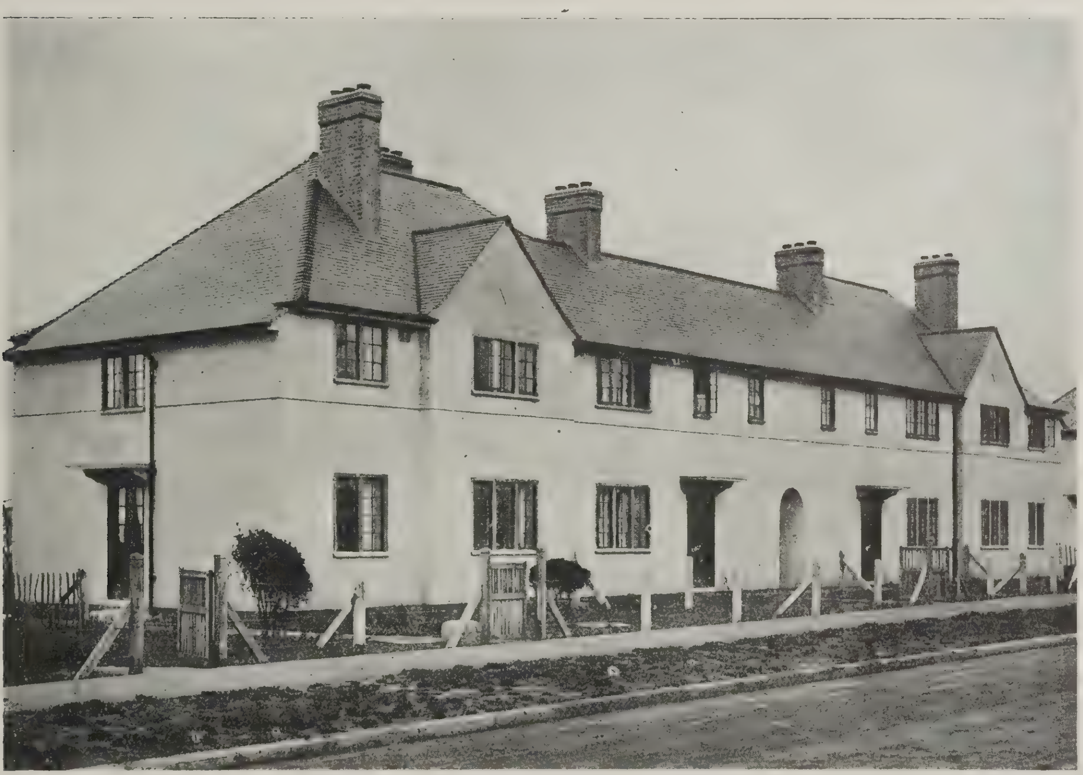
The success of the scheme has been largely due to the care and interest taken by the Housing Committee of the Borough Council under the chairmanship of Councillor R. Eaton.



THE LAY-OUT.

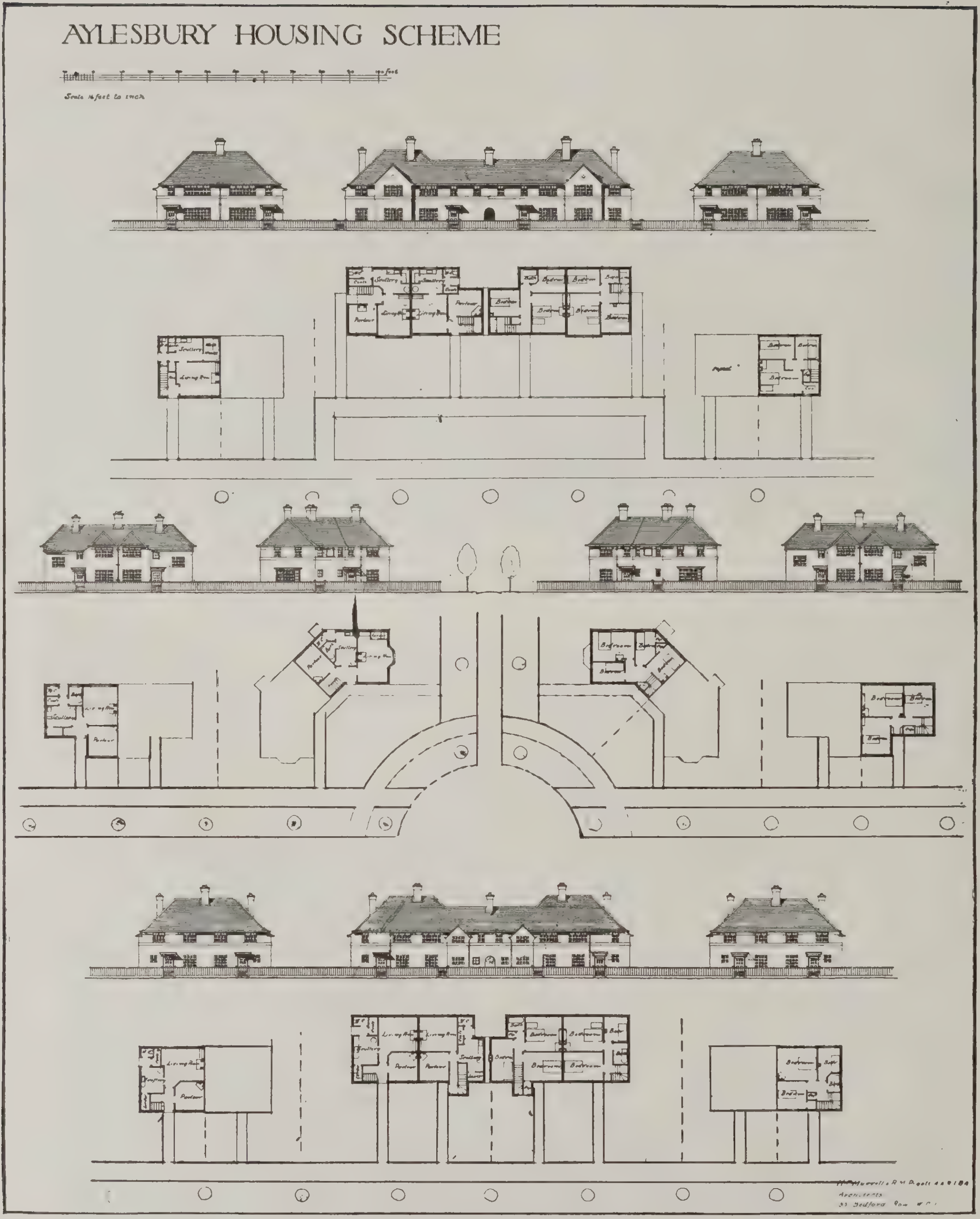


SEMI-DETACHED HOUSES.

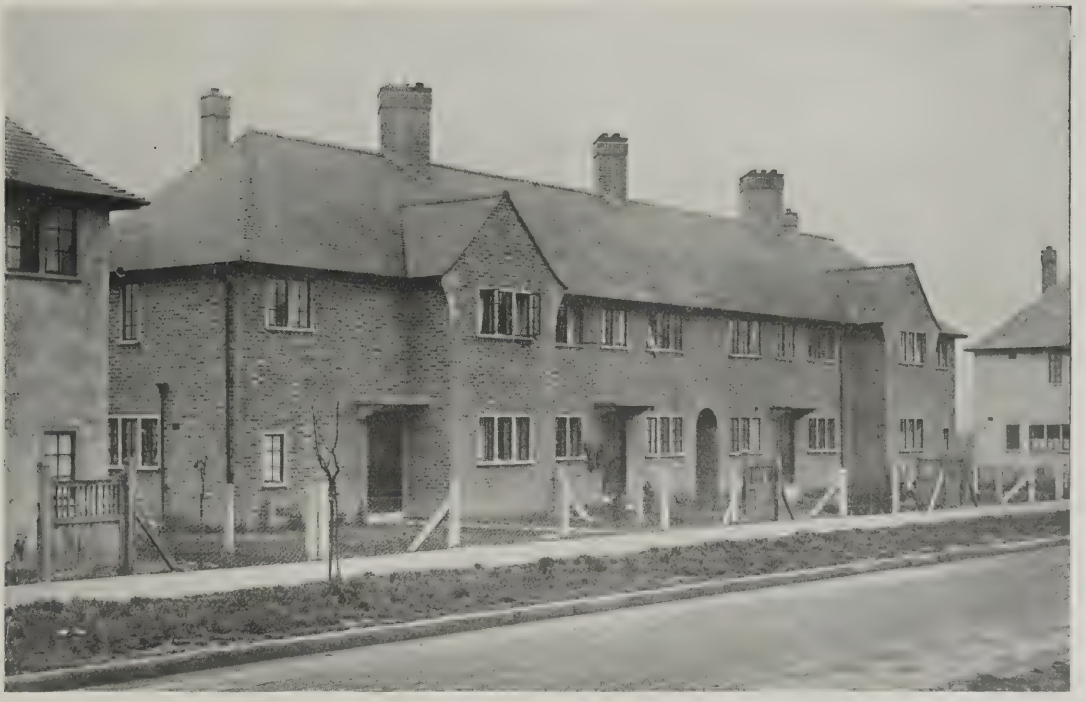


A BLOCK OF FOUR HOUSES.

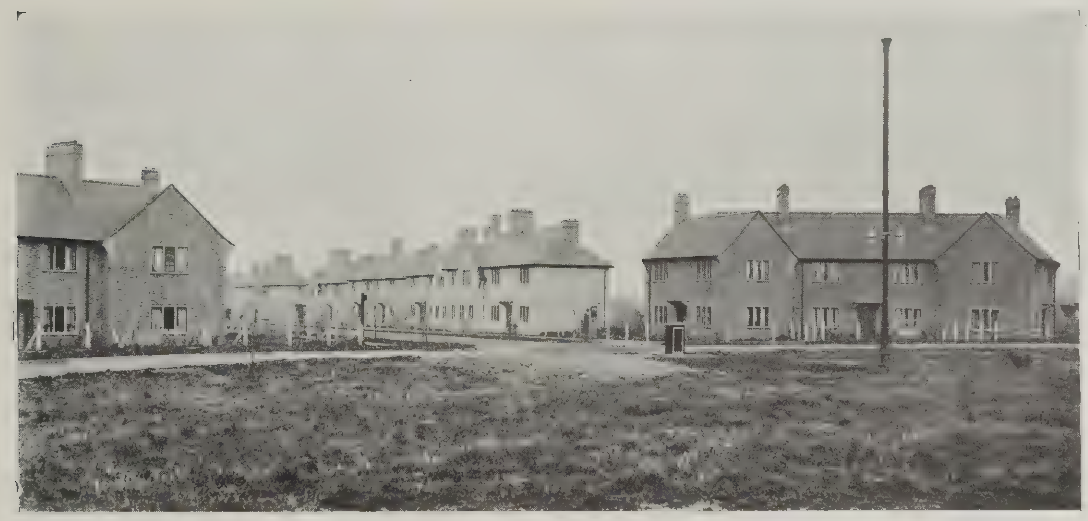
AYLESBURY HOUSING SCHEME. MURRELL & PIGOTT, AA.R.I.B.A., ARCHITECTS.



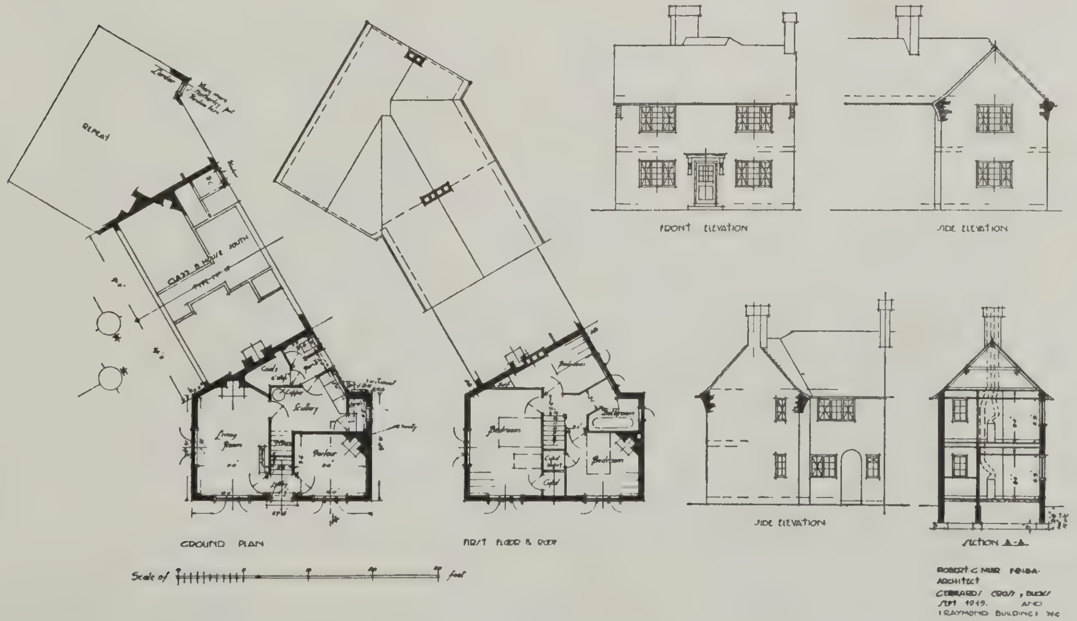
AYLESBURY HOUSING SCHEME: GROUPS OF HOUSES.
MURRELL AND PIGOTT, AA.R.I.B.A., ARCHITECTS.



A BLOCK OF FOUR HOUSES, PREBENDAL AVENUE.



VIEW OF CRESCENT ADJOINING STOKE ROAD.



AYLESBURY HOUSING SCHEME: A GROUP OF SPECIAL HOUSES. R. G. MUIR, F.R.I.B.A., ARCHITECT.

# Sedgley (Staffordshire) Housing Scheme

## T. ALWYN LLOYD, F.R.I.B.A., Architect

ONE of the largest housing schemes to be carried out in the area of a single local authority is nearing completion at Sedgley, Staffordshire. In addition to the prevailing shortage of new houses, Sedgley has its special local problems connected with slum clearances. Hundreds of houses inhabited by working-class people able to pay a reasonable rent are under closing orders for demolition, and these will be drastically dealt with as soon as the new houses are finished. Already several sections of insanitary property have been demolished, and their sites will be utilized under reconstruction or for road improvements.

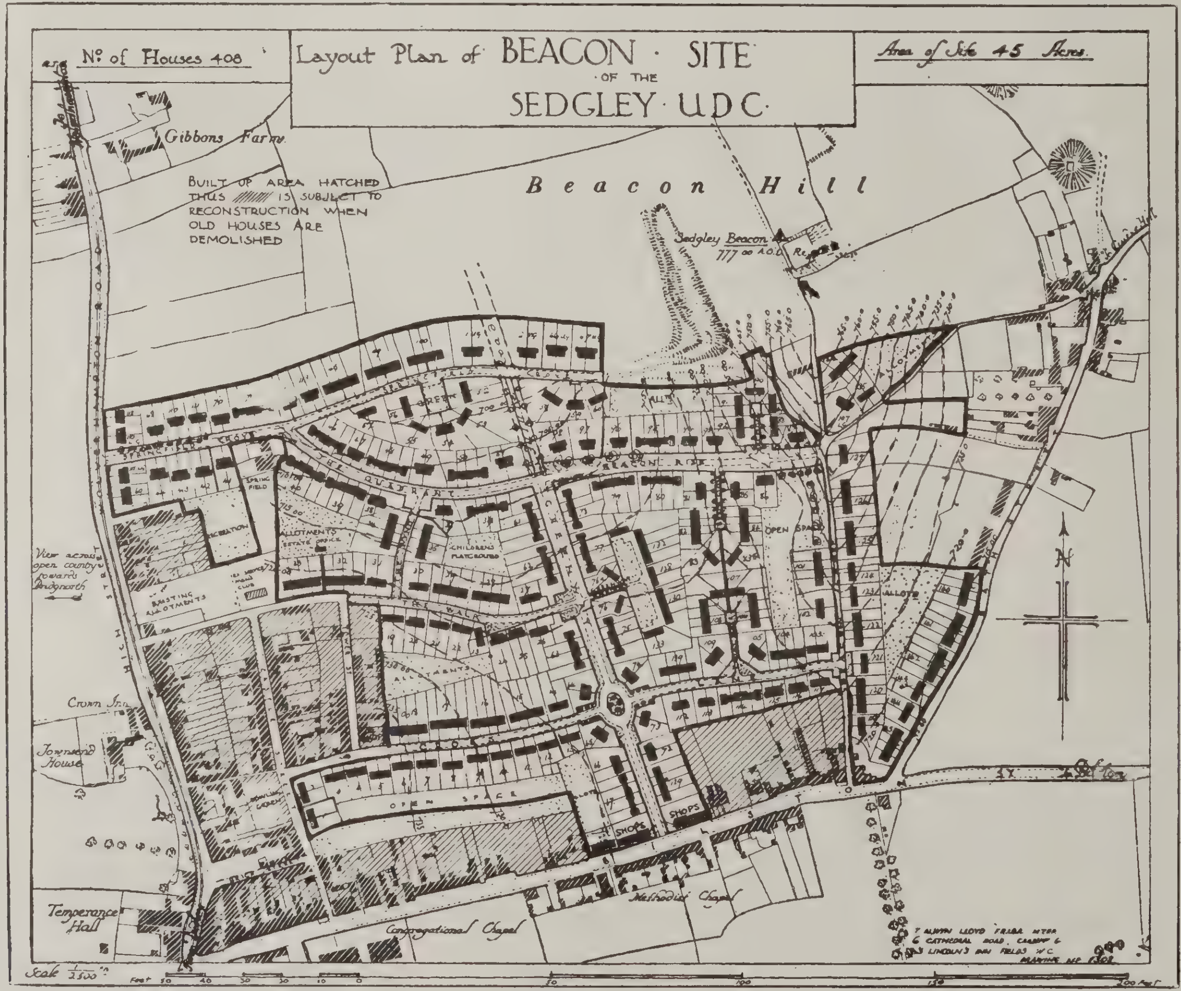
The area of the Sedgley Council is rather widely scattered, and for this reason the 800 new houses have been built on three sites, as follows: Beacon Hill, 408; Clarence Street, Upper Gornal, 156; and Lower Gornal, 236. The Council were fortunate in obtaining fine open sites adjacent to thickly populated districts in the Black Country. The Beacon is the most pleasing, the houses being placed on the slopes of Beacon Hill, which attains an altitude of 770 ft. Out of an area of 45 acres, some 5¼ acres have been allocated to open spaces—allotments, recreation, children's playground, and estate nursery. In addition to these, there are private greens on to which squares and crescents of houses face. The wide road known as "Greenway" has been taken through the centre of the site, which will ultimately be carried through northwards and open up an undeveloped portion in the Council's town-planning scheme. On each site the existing hedges and trees dictated the positions of the roads, and have been preserved as features where possible.

The 800 houses comprise several types of accommodation, about 60 per cent. being class A, and 40 per cent. class B (parlour houses). The external walls are mainly 11 in. Black Country multi-coloured facings, with light joints, but variety has been obtained by building some of the blocks in 9 in. brickwork covered with rough-cast. The roofs are mainly covered with blue, purple, and green slates, but in selected groups facing culs-de-sac or greens there are hand-made tile roofs. All houses have double-hung sash windows, primed and painted three coats inside and out.

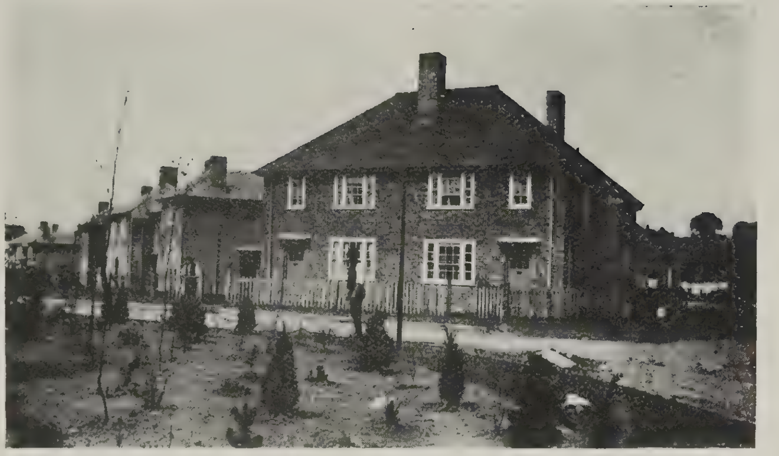
The general contractors for the 800 houses and for the roads and sewers on the three sites are Messrs. Wilson Lovatt and Sons, Ltd., of Wolverhampton; sub-contracts having been carried out as follows: Plumbing and painting, Messrs. Manley and Regulus, Wolverhampton; slating and tiling, Messrs. Ellis, Partridge & Co., Ltd., Leicester; tar macadam roads and footways, Messrs. Tarslag, Ltd., Stockton-on-Tees; grates and ranges, Messrs. S. Smith and Sons, Ltd., Smethwick, and Messrs. Williams and Borgars, Ltd., Cardiff; ironmongery, Messrs. J. Moreton & Co., Ltd., Wolverhampton; sanitary goods, Messrs. Cannon Iron Foundries, Bilston, and Messrs. Twyfords, Ltd.

Building was commenced in the autumn of 1920, and it is expected that the whole scheme will be completed early this year.

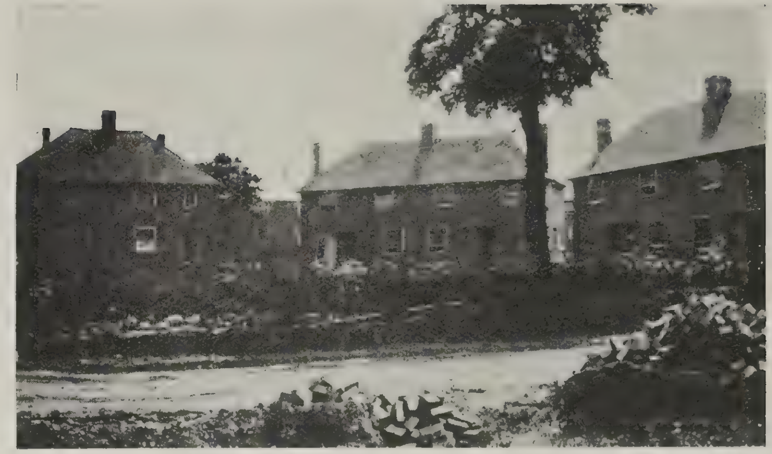
The architect is Mr. T. Alwyn Lloyd, F.R.I.B.A., M.T.P.I., of Cardiff and Lincoln's Inn Fields, W.C.2; and Mr. R. E. Jones is the Council's Building Superintendent on the works.



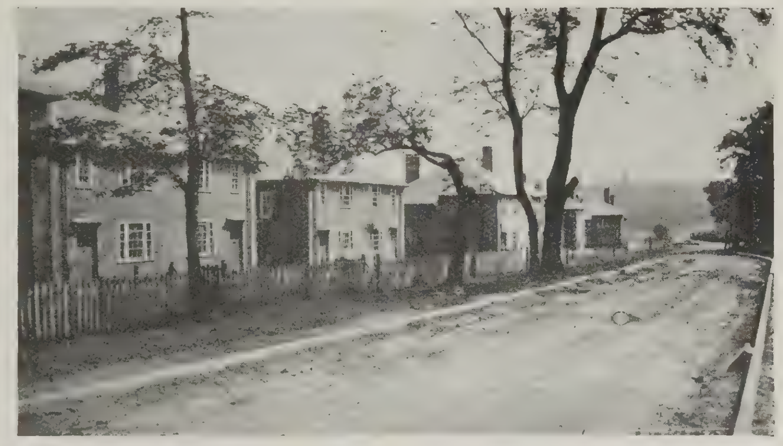
THE LAY-OUT.



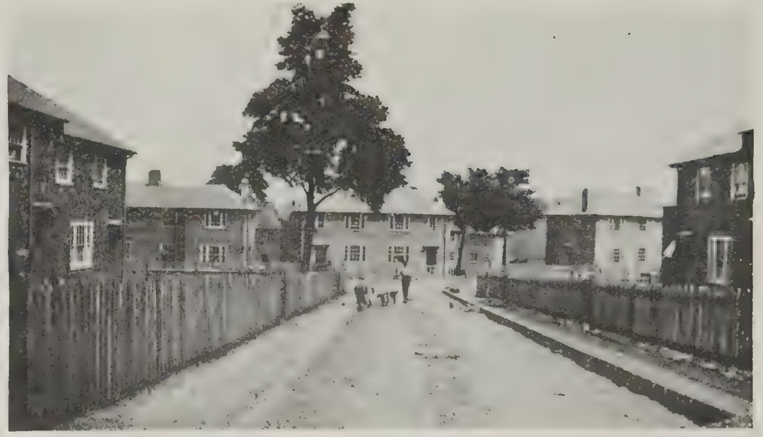
TYPE 3A: GREENWAY.



"SPRINGFIELD GREEN."

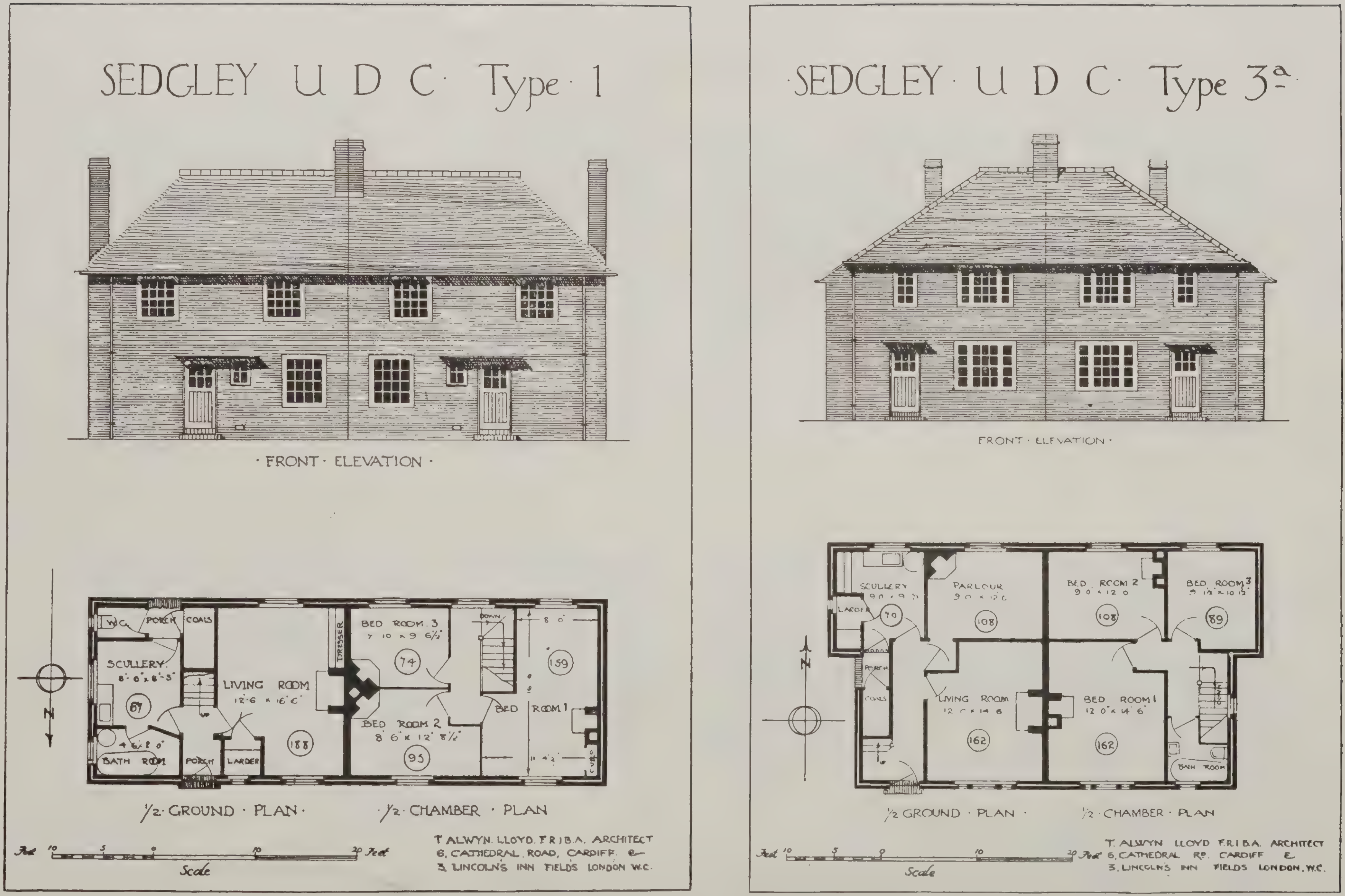


BEACON SITE: SPRINGFIELD GROVE.



BEACON SITE: "THE WYND."

SEDGLEY HOUSING SCHEME. T. ALWYN LLOYD, F.R.I.B.A., ARCHITECT.



SEDGLEY HOUSING SCHEME: TYPES OF HOUSES.

T. ALWYN LLOYD, F.R.I.B.A., ARCHITECT.

# Boythorpe Housing Scheme, Chesterfield

By VINCENT SMITH, Borough Surveyor, PERCY B. HOUFTON, and a Panel of Architects

THIS scheme is the largest of several carried out by the Council under the National Housing Scheme, and, where it is yet incomplete, sanctions to build have been given by the Ministry of Health.

The site is an elevated one to the south of the town, and forms part of an area scheduled for a town-planning scheme. The lay-out has been considered with a view to the roads of the estate linking up eventually with future developments. There are 326 houses, divided into fifty-three type A (three bedrooms), 243 type B, and thirty type B4.

The scheme has been carried out by a panel of seven local architects acting in conjunction with a consulting architect and the borough officials. The lay-out was prepared by the consulting architect, Mr. Percy B. Houfton, in consultation with the Borough Surveyor, Major Vincent Smith, O.B.E., who carried out all the roads and sewers on the estate. The panel of architects engaged includes all the practising members of the profession in the town, as follows: Mr. W. M. Ashmore, Mr. Bailey Deeping, Mr. W. A. Derbyshire, Mr. W. Cecil Jackson, Messrs. Rollinson and Sons, Messrs. W. H. Wagstaff and Sons, and Messrs. Wilcockson and Cutts.

The plans illustrated are type plans prepared by the consulting architect. In work, these have been modified in detail by the panel architects to suit various aspects and to produce satisfactory grouping. A measure of agreement as to elevations was arrived at by fixing a uniform pitch of roof, height of windows, doors, and eaves, etc. From this stage the elevations were prepared by the architects concerned. The effect is to give a certain appearance of unity to the scheme as a whole, with a considerable amount of variety in details. By arrangement with the contractors these small variations were not regarded as extras.

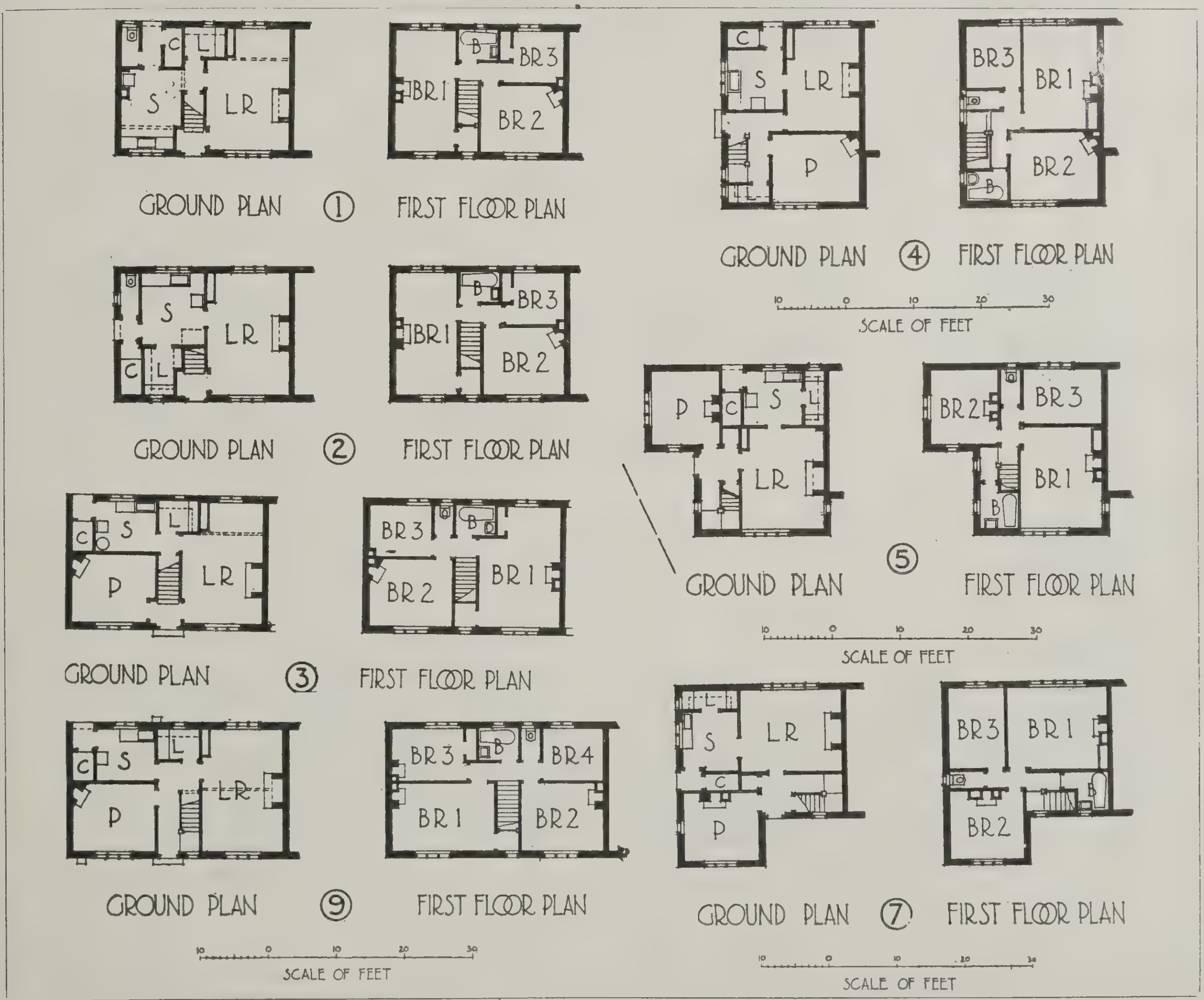
The greater part of the work was carried out by the Chesterfield Federated Builders on the following prices agreed in June 1920: A type houses £872, B type £962, and B4 £1,052. The figures were inclusive of the highest rate of wages for an A grade town. Subsequently contracts were placed on tenders submitted in competition at lower figures as prices declined.

The contractors engaged were as follows: Messrs. G. F. Kirk, Ltd., W. Tomlinson, A. Heath, G. Webber, S. Wheatcroft, J. Collis and Sons, and E. Revill, all of Chesterfield; and Messrs. Thompson and Dickson, Doncaster; W. T. Kemp, Skegby; Moses Simpson, Sheffield; C. Higton and Sons, Sheffield; Swift Bros. and Haslam, Doncaster; and R. Lehane & Co., Ltd., Darley Dale.

The contractor for the roads and sewers was Mr. Herbert Ashley, of Mansfield.

Mr. W. M. Simmons had entire charge of the scheme as clerk of works, and he is also responsible for the photographs reproduced.

The Housing Committee of the Council have had the benefit of the wide building experience of their chairman, Alderman William Rhodes, J.P.


C
L
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GROUND PLAN ① FIRST FLOOR PLAN
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BR3
BR1
BR2
C
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BR1
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GROUND PLAN ④ FIRST FLOOR PLAN
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GROUND PLAN ⑤ FIRST FLOOR PLAN
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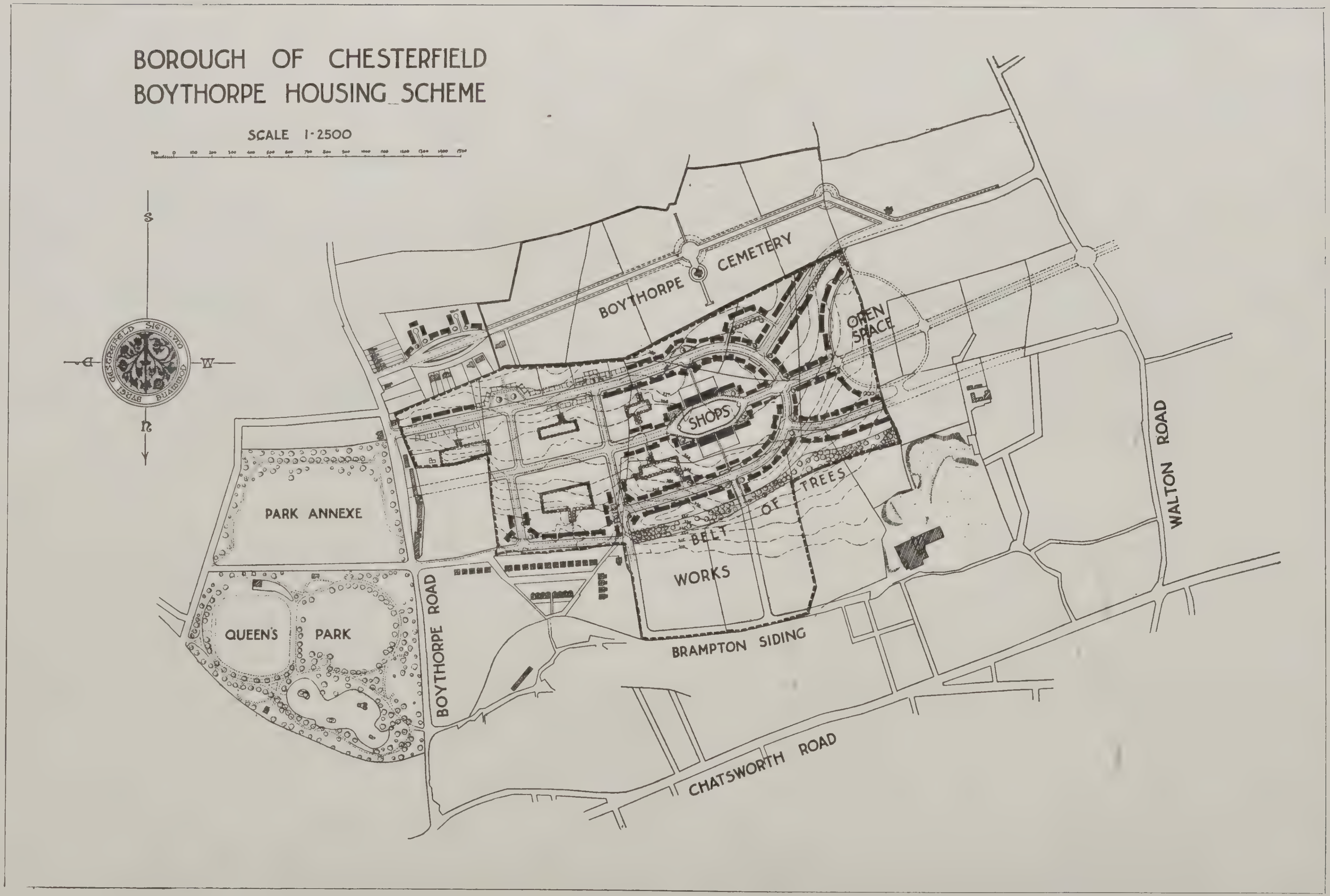
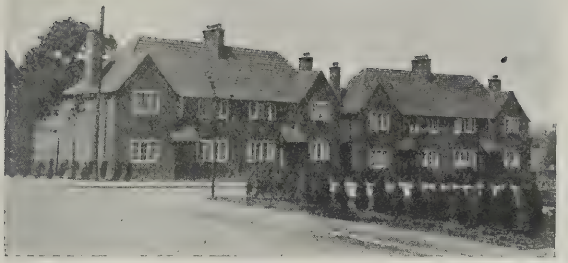
SCALE OF FEET

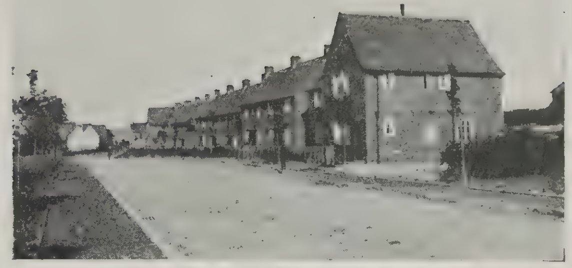
SOME TYPICAL HOUSE PLANS.



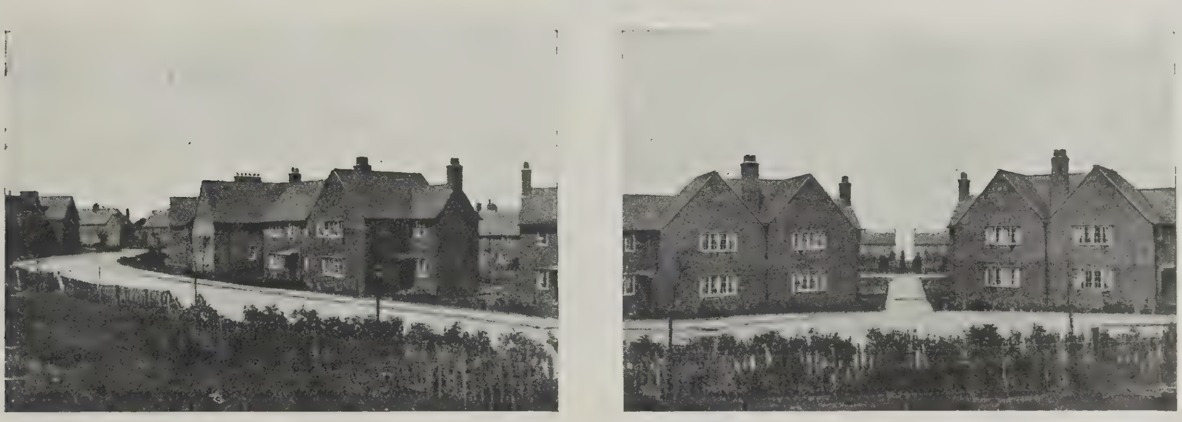
LAY-OUT OF BOYTHORPE HOUSING SCHEME, CHESTERFIELD.
VINCENT SMITH, BOROUGH SURVEYOR. PERCY B. HOUFTON, ARCHITECT.



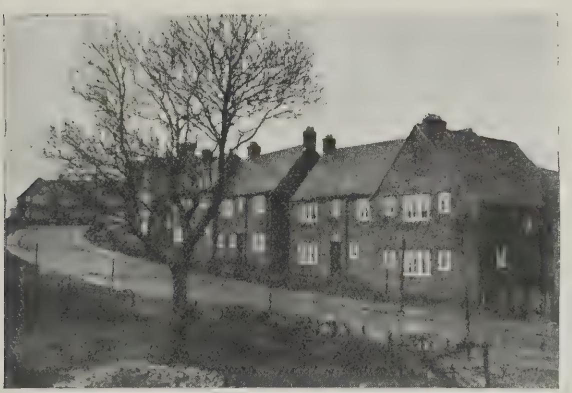
W. M. ASHMORE, ARCHITECT.



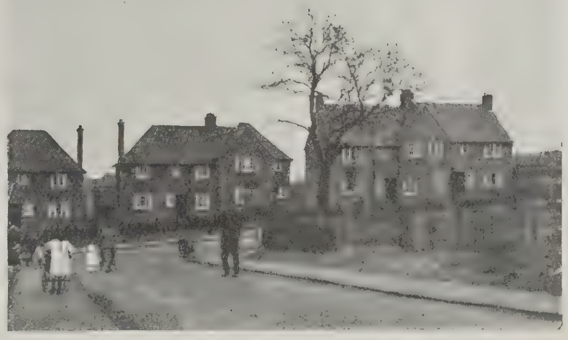
WILCOCKSON & CUTTS, ARCHITECTS.



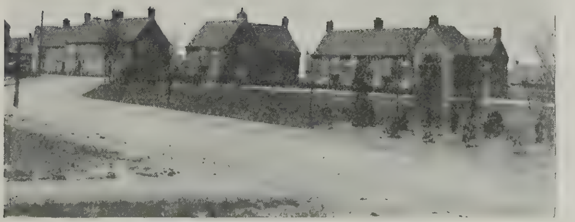
W. CECIL JACKSON, ARCHITECT.



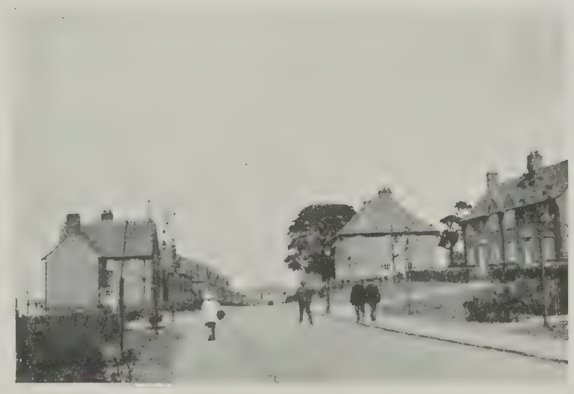
W. A. DERBYSHIRE, ARCHITECT.



BAILEY DEEPING, ARCHITECT.



ROLLINSON & SONS, ARCHITECTS.



W. H. WAGSTAFF & SONS, ARCHITECTS.

BOYTHORPE HOUSING SCHEME, CHESTERFIELD: SOME GENERAL VIEWS.

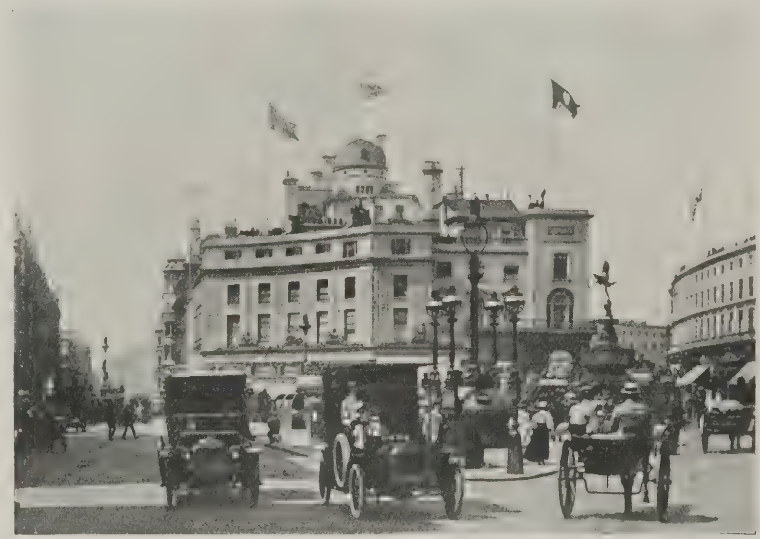
# The Rebuilding of Regent Street

THE rebuilding of Regent Street began tentatively about thirty years ago, since when it has been proceeding slowly and spasmodically. Within the past few months, however, the process of reconstruction has been considerably accelerated, and to-day a dozen or more large sections are in the hands of the housebreaker.

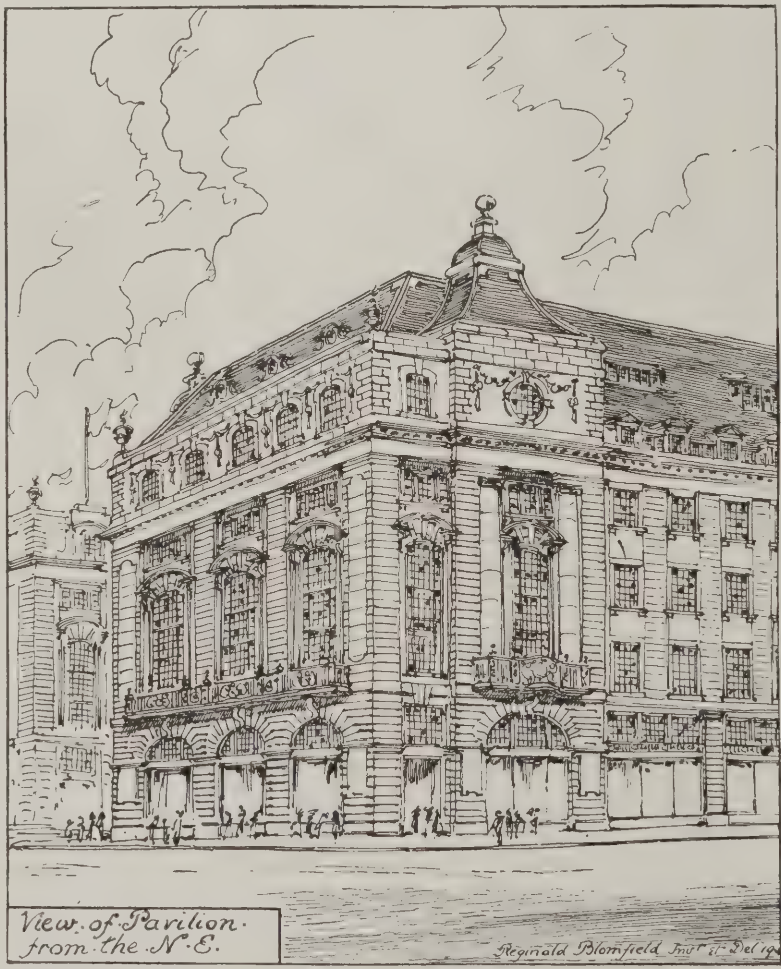
The whole street is doomed. Nothing is to be allowed to survive. To obtain any idea of the character of this most remarkable scheme of civic development—the finest thing of its kind that London has ever had—future generations will be entirely dependent upon photographs, measured drawings (where they exist), and old prints. The destruction is utterly deplorable; but it is difficult to see how it could possibly have been avoided.

Some there are who contend that there is no need to rebuild Regent Street; that Nash's small-scale buildings are well enough adapted to modern requirements. But those who think thus are surely a very small minority. Nash's Regent Street was built to suit the needs of the small shopkeeper of a century ago, a man who lived with his wife and family over the shop.

To-day conditions are entirely different. The small tradesman, where he still exists, no longer wishes to live over his shop, even if there were room; but mostly he has been displaced by the huge department store. Every floor of a building is now wanted for the storage and display of goods. Ground rents have gone up enormously, and to pay them it is necessary to get the utmost value out of a site. This can only be done by providing more floor space above or below, or in both directions. It will be generally admitted that Nash's buildings are incapable of being added to, either structurally or architecturally, so the only alternative is to rebuild. It is a regrettable necessity of the times that cannot be evaded. On this point we think there can be no two opinions.



AS IT IS.



View of Pavilion from the N.E.
Reginald Blomfield Invt et Del 19

AS IT WILL BE

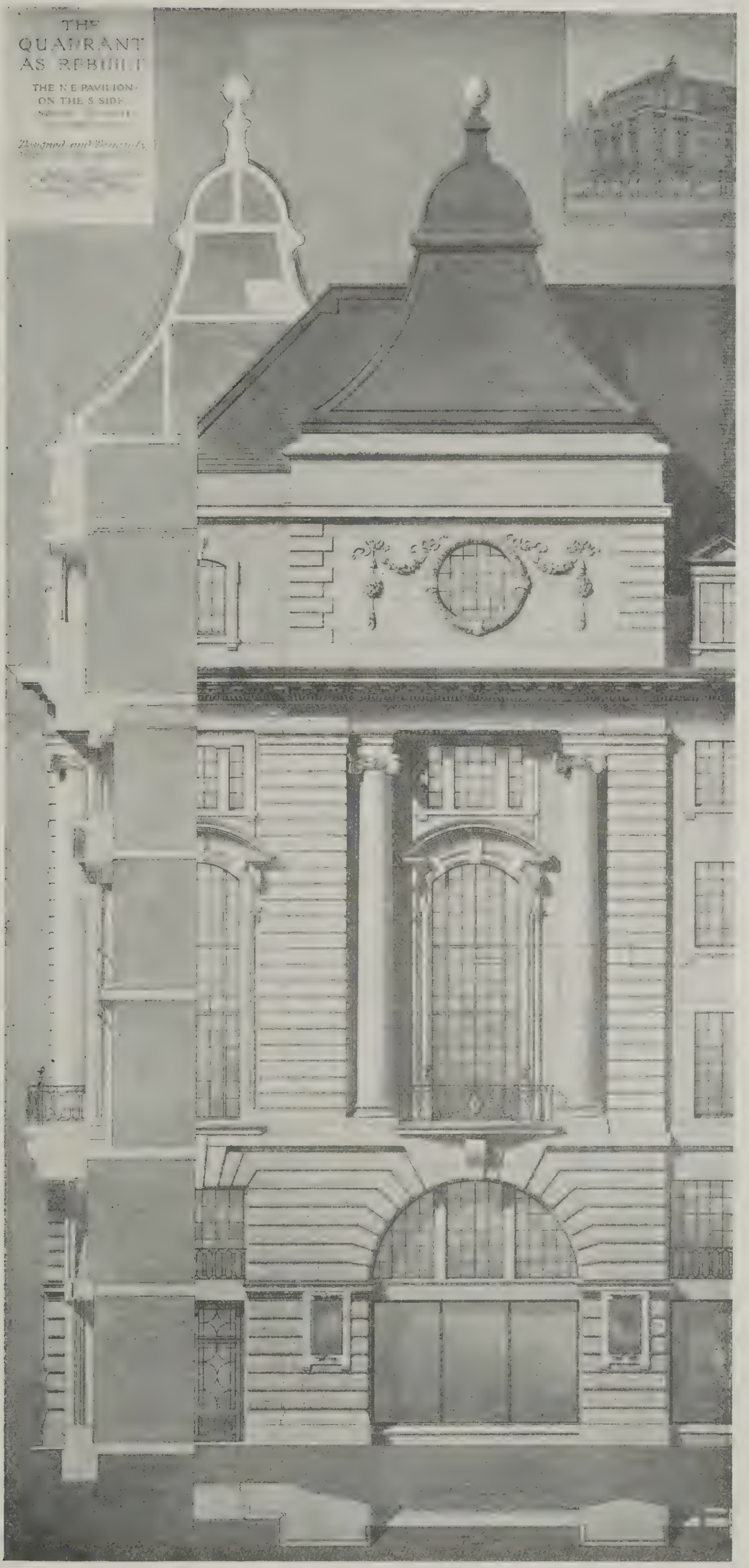
SWAN AND EDGAR'S CORNER, PICCADILLY CIRCUS.

The method of rebuilding is open to question. But first let us put in a good word for the Office of Woods and Forests, the ground landlords, who have been subjected to much adverse and sometimes unjust criticism.

The Crown has always been amenable to the representations of architects. Some years ago, when a big section of the Quadrant had to come down to make room for the Piccadilly Hotel, architects at once pointed out that it was necessary to preserve the unity of the Quadrant, and that an elevational design for the whole sweep should be prepared and made compulsory for all subsequent reconstructions. The result was Mr. Norman Shaw's scheme, which was adopted for the Piccadilly Hotel. Then followed the outcry of the shopkeepers against Mr. Shaw's huge piers and small window areas, which, they said (with some justification, let it be admitted), were a hindrance to trade. Unreasonable demands for vast expanses of plate glass were firmly resisted by the Office of Woods and Forests, who, however, took counsel with a distinguished trio of architects—Sir Aston Webb, Sir Reginald Blomfield, and the late Mr. Ernest Newton—with the result that Mr. Shaw's design was greatly modified. (The design now adopted for the rebuilding of the Quadrant and Piccadilly Circus is shown in the illustrations on this page and opposite.)

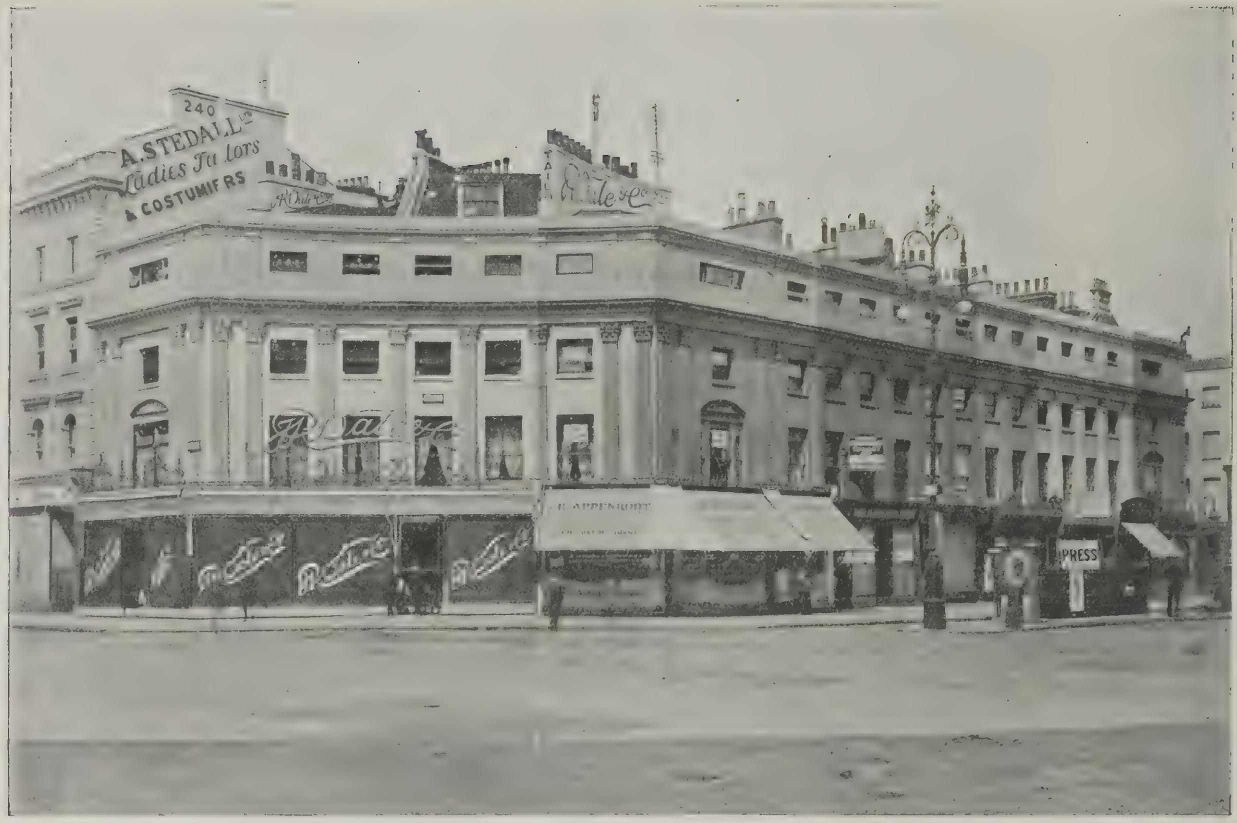
Then, for the treatment of Oxford Circus, a competition was held about ten years ago, the successful architects being Messrs. Henry Tanner, whose scheme has already been carried out with respect to three sections, the third (Messrs. Jay's building) now being in course of erection. Thus complete architectural uniformity has been secured at Oxford Circus.

At Piccadilly Circus there are difficulties in the way of a uniform

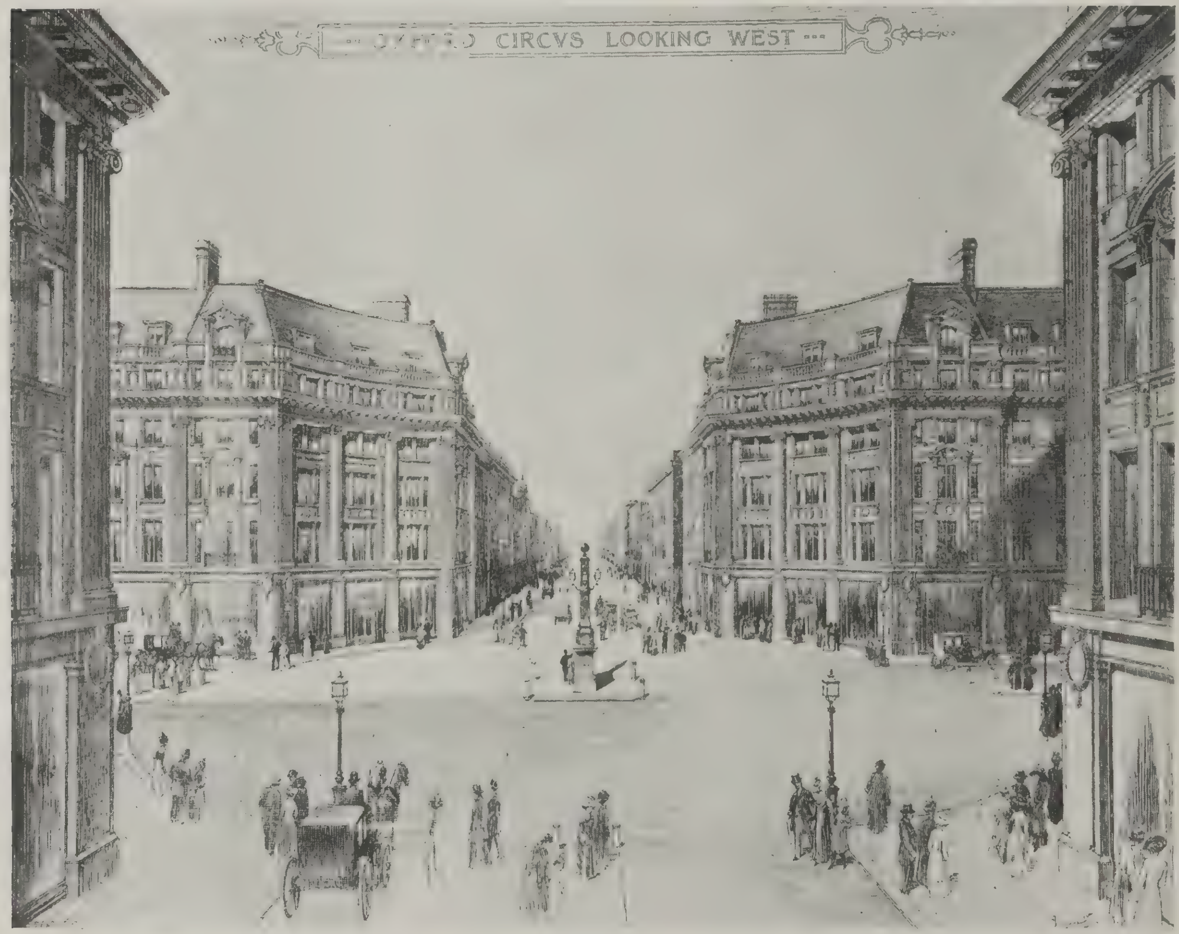


THE REBUILDING OF REGENT STREET: A DETAIL OF THE DESIGN FOR THE QUADRANT.

SIR REGINALD BLOMFIELD, R.A., SIR ASTON WEBB, P.R.A., AND THE LATE ERNEST NEWTON, R.A., ARCHITECTS.

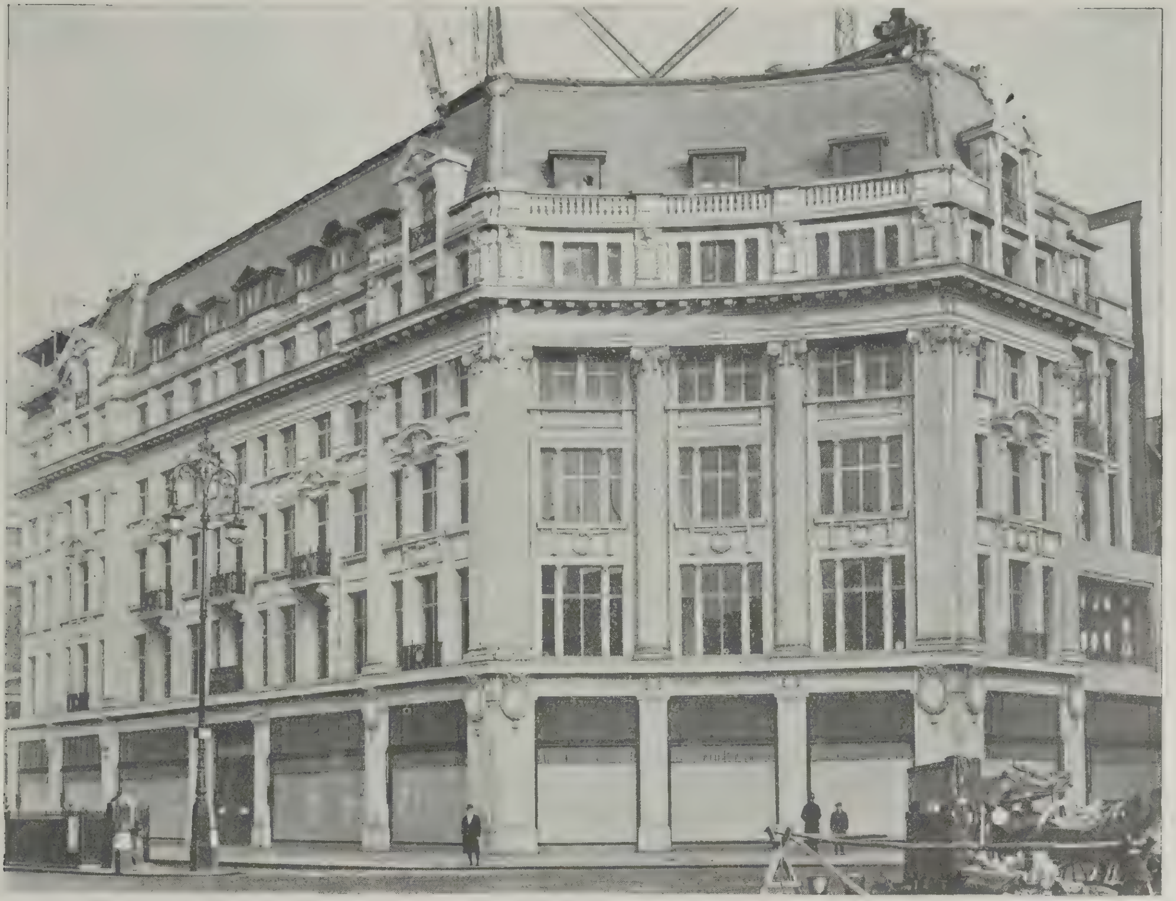


THE NORTH-WEST CORNER AS IT WAS

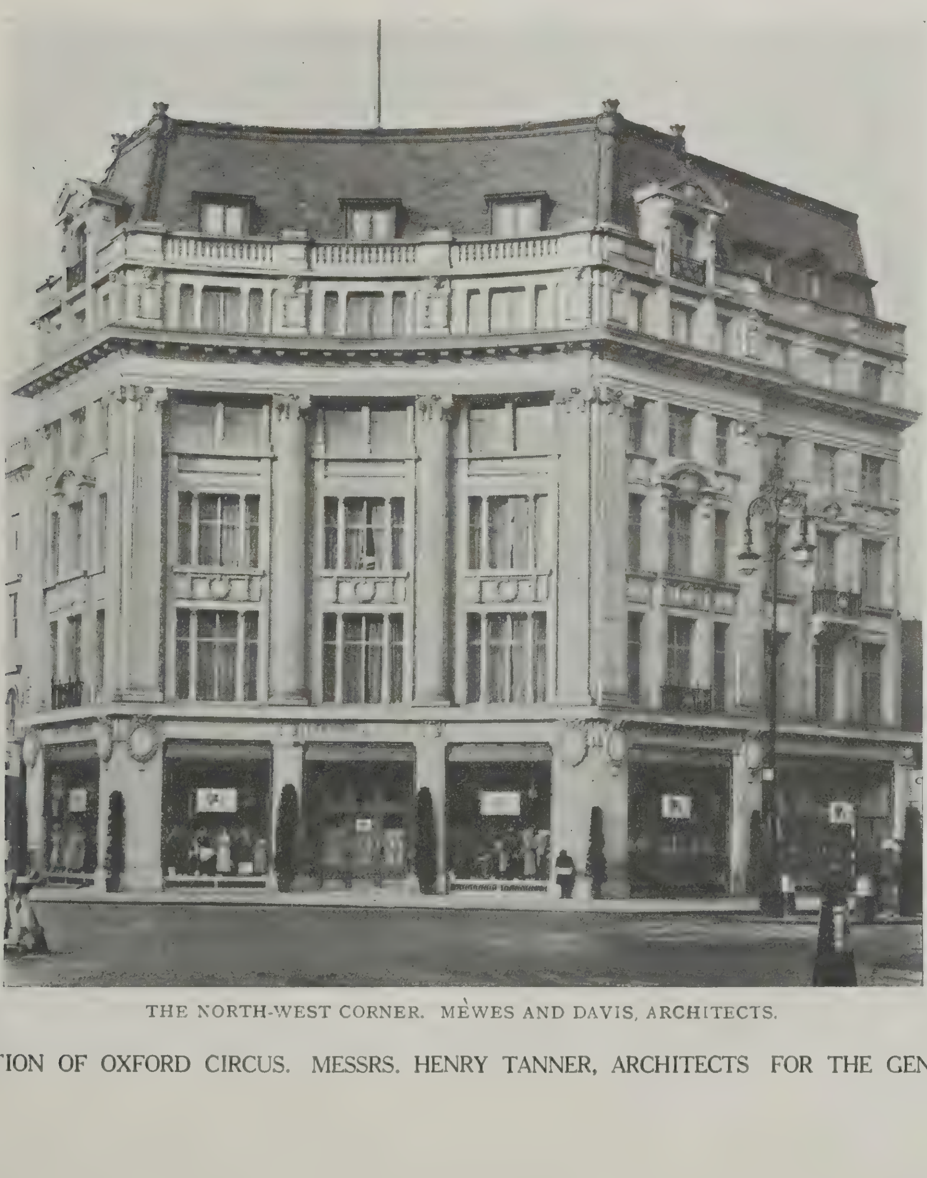


THE CIRCUS AS RE-DESIGNED BY MESSRS. HENRY TANNER.

THE RECONSTRUCTION OF OXFORD CIRCUS.

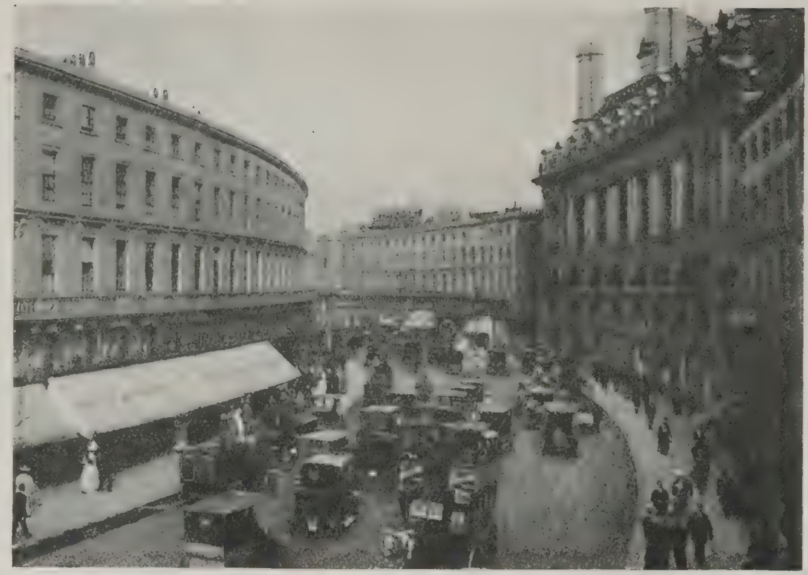


THE NORTH-EAST CORNER. T. P. AND E. S. CLARKSON, AND H. AUSTEN HALL, ARCHITECTS.



THE NORTH-WEST CORNER. MÈWES AND DAVIS, ARCHITECTS.

RECONSTRUCTION OF OXFORD CIRCUS. MESSRS. HENRY TANNER, ARCHITECTS FOR THE GENERAL SCHEME.



THE QUADRANT, SHOWING NORMAN SHAW'S PICCADILLY HOTEL.

treatment, the ground landlords for the north side being the London County Council, who, it is hoped, will see the wisdom of conforming to the scheme prepared by the Office of Woods and Forests.

Then for the rebuilding of Waterloo Place, a design by Sir William Emerson was adopted many years ago. This is now nearing completion by the erection of a building for Cox's Bank, the architect being Mr. E. Keynes Purchase.

It will be seen, therefore, that the need for uniformity has been entirely realized by the Crown, and that architectural opinion has not been ignored or flouted as many people seem to imagine. Whether or not it would have been better to hold a great national competition for the rebuilding of the whole street is another question. Supervision and control are, however, being exercised throughout the entire reconstruction, and building owners speedily find that they cannot do as they like in the new Regent Street.

Good as may be the practical and economic reasons for the destruction of the work of the Regency, one cannot but lament its passing: for Nash contributed a valuable and extremely interesting quota to the development of monumental architecture in this country. He was without his peer in the composition of façades of great length in infinite variety—façades, moreover, which, when placed in juxtaposition, produced a complete unity of effect. He brought the art of street-designing up to a pitch of excellence that it had never reached before, and from which it has since sadly fallen, as nearly all our modern thoroughfares make us only too painfully aware.

Regent Street, it may be recalled, was designed and carried out between the years 1813–16; thus its term of useful service only just exceeds the century. The total cost of the entire scheme was, approximately, a million and a half sterling, which shows how economically building work could be carried out in the days of George IV. To-day it would probably cost almost as much to build, in permanent materials, only one of Nash's monumental blocks!

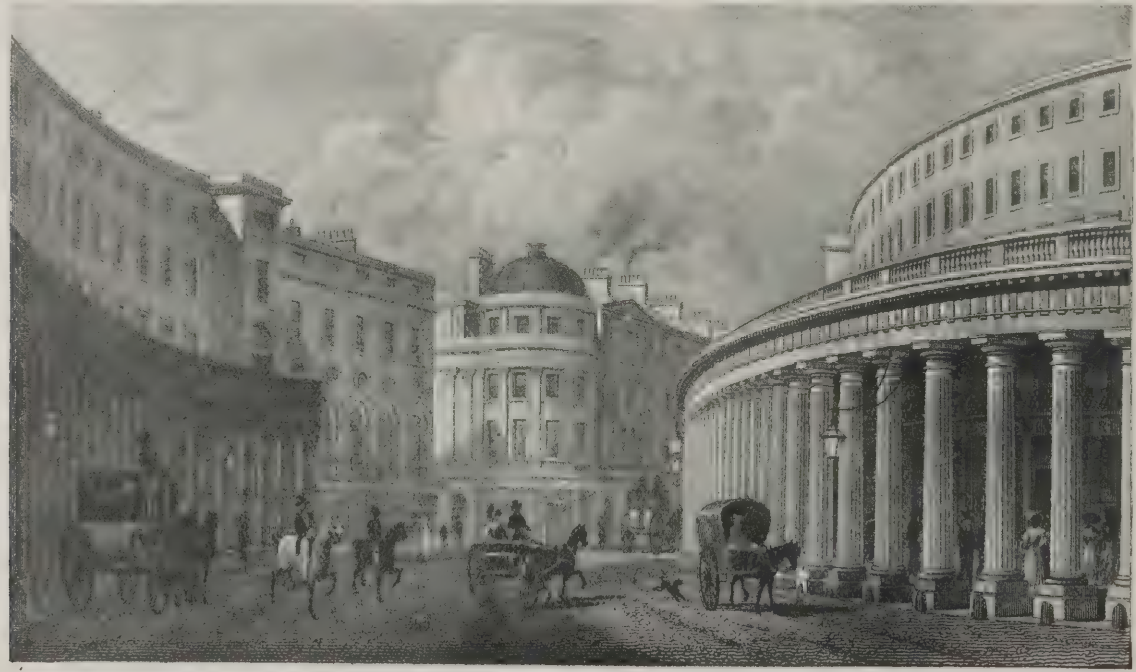
In the rebuilding of Regent Street, in order to maintain as much as possible a uniformity in the façades, each block of premises is to form one unit, irrespective of the number of leases contained therein, and designs have been prepared in many cases so that the positions of the existing party walls are not altered, thus allowing the several premises to be rebuilt at such times as the old leases run out.

In this issue we illustrate some of the more recently completed buildings, as well as others either in course of erection or immediately projected.

### 189–191 *Regent Street.*

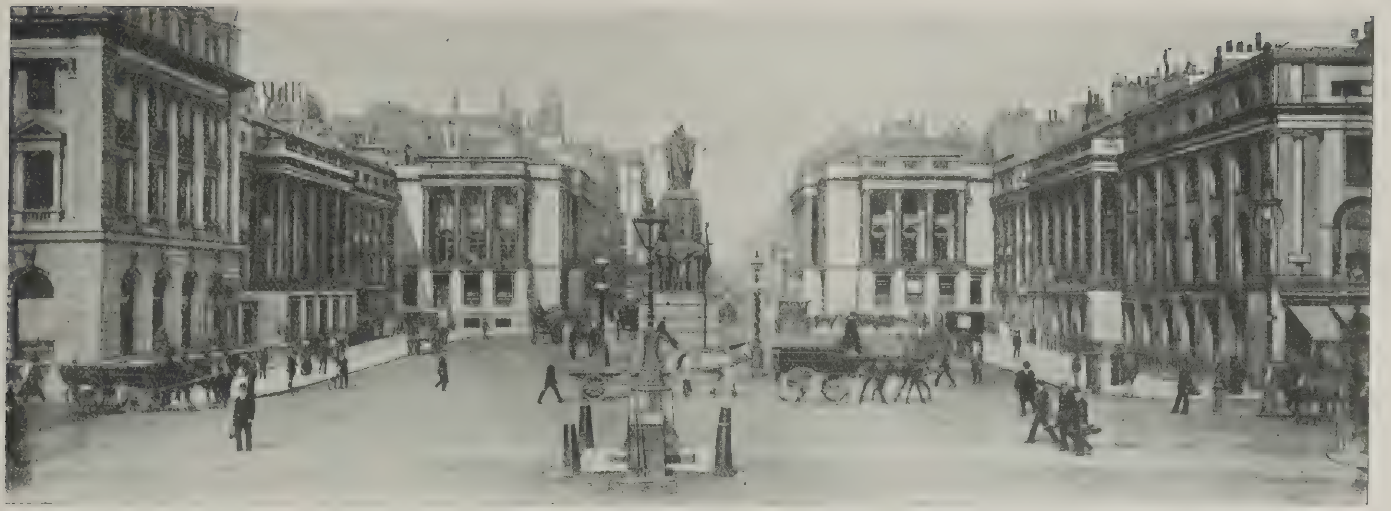
These premises, at present under reconstruction, form part of the block Nos. 169 to 201 Regent Street. St. George's House, which was erected and designed by Mr. Frank Verity some years ago, forms an important feature of the frontage, and an attempt has been made in designing the remainder of the block to harmonize with Mr. Verity's buildings.

The prevailing conditions dictated a simple architectural treatment, and a restrained design by Messrs. Yates, Cook, and Darbyshire, of Great Marlborough Street, W.1, for these premises and the remainder of the block has been approved by the Crown authorities. The builders are Messrs. W. F. Blay, Ltd. (See page 76.)



THE QUADRANT WITH ITS COLONNADES, AS ORIGINALLY DESIGNED BY JOHN NASH.

(*From an early-nineteenth-century print.*)



WATERLOO PLACE, AS IT WAS.

*223 Regent Street.*

These premises form one corner of the block comprising Nos. 223 to 227 Regent Street. This is one of the smallest blocks in the street, and there will be but three tenants in the whole of the premises when rebuilt.

Messrs. Yates, Cook, and Darbyshire are the architects, and Messrs. D. G. Somerville & Co., Ltd., the contractors.

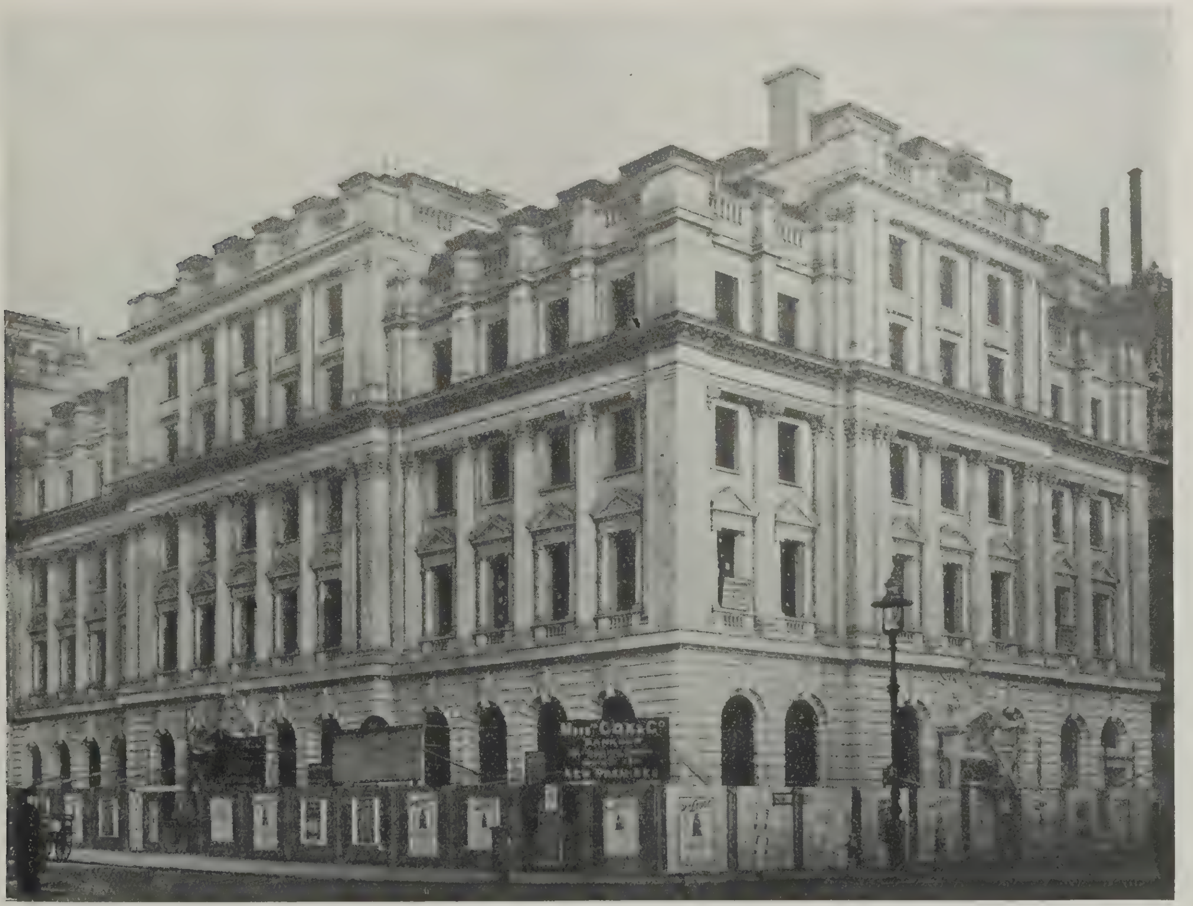
No. 225 forms the centre feature of the new design. The architect for this portion is Mr. Gordon Jeeves, M.S.A., of George Street, Hanover Square, the elevational drawings being supplied by Messrs. Yates, Cook, and Darbyshire, whose design for the whole façade was accepted by the Commissioner of H.M. Office of Woods and Forests.

*Messrs. Jay's New Building.*

The reconstruction of Messrs. Jay's premises will complete the new buildings of Oxford Circus (Messrs. Henry Tanner, architects). The new premises, together with a branch of the London County Westminster and Parr's Bank, Ltd., absorbs the whole block down to Princes Street, Messrs. Jay's occupying the whole of the building over the bank.

There will be eight floors, including basement and ground floor, and as the height from the street to the ridge is some 85 ft., dividing walls are introduced to keep within the cubical limit of the Building Act, part of the top story to the extent of 5 ft. being above the height now permitted for shop and store buildings of this character.

There will be five different cubes divided by walls, and fire-resisting steel doors and lobbies, rolling shutters, or ordinary fire folding-doors. Sprinklers and automatic fire-alarms will be provided, together with the usual hydrant and



THE NEW BUILDING FOR MESSRS. COX'S BANK, ON THE LOWER RIGHT-HAND CORNER OF WATERLOO PLACE
E. KEYNES PURCHASE, F.R.I.B.A., ARCHITECT. SIR WILLIAM EMERSON, ARCHITECT FOR THE GENERAL SCHEME.

hand apparatus. The construction will be steel framed, the facing of Portland stone and the floors fire-resisting, and either of hollow tiles or of concrete where the latter is required by the Fire Office Committee. The window frames will be of steel.

There will be four electric lifts, one running the whole height of the building, a service lift, and a goods lift (hydraulic); warming will generally be by radiators with accelerated flow; a vacuum cleaning apparatus will be installed, and lighting will be by electricity.

The ground, first, and part of the second floors will be used for show purposes. The shop windows will be of mahogany on a granite base.

It is intended to use the basement for counting-house, stock, and other purposes, the top (sixth) floor for a canteen, and the remainder for workrooms. There are two isolated staircases of artificial stone to insure the safe escape of the occupants in case of fire, while the back of the main portion will be protected by fire-resisting glazing.

The bank will occupy the ground floor and basement of the southern part next Princes Street. The banking room will be plastered in "Stuc" with fibrous ceiling and marble skirtings. The finishings will be of mahogany, and the window-frames of gunmetal.

The builders for Messrs. Jay's are Messrs. Hall, Beddall & Co., Ltd., and for the bank Messrs. Holliday and Greenwood, Ltd. Messrs. Moreland, Hayne & Co. are erecting the steel framing for both buildings.

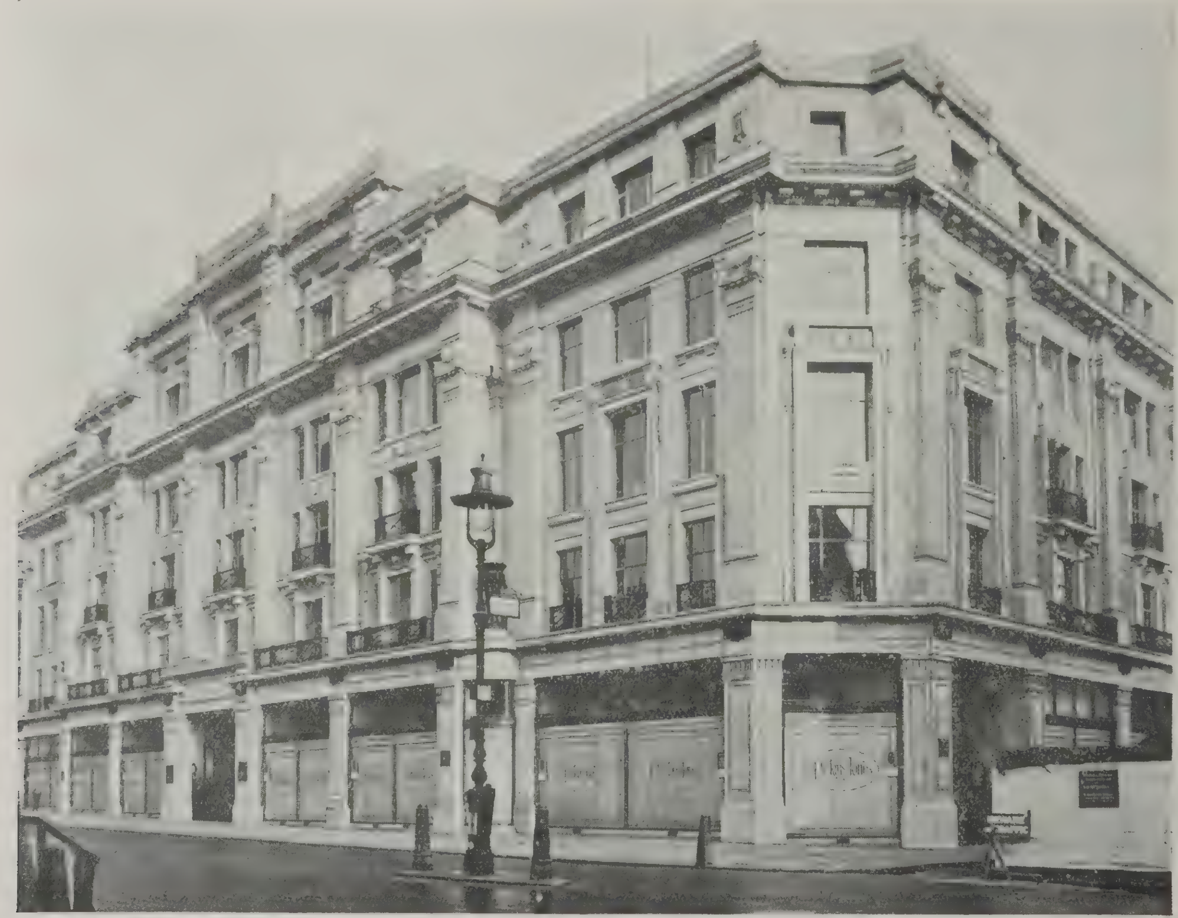
DICKINS AND JONES'S OLD BUILDING.

*Messrs. Dickins and Jones's.*

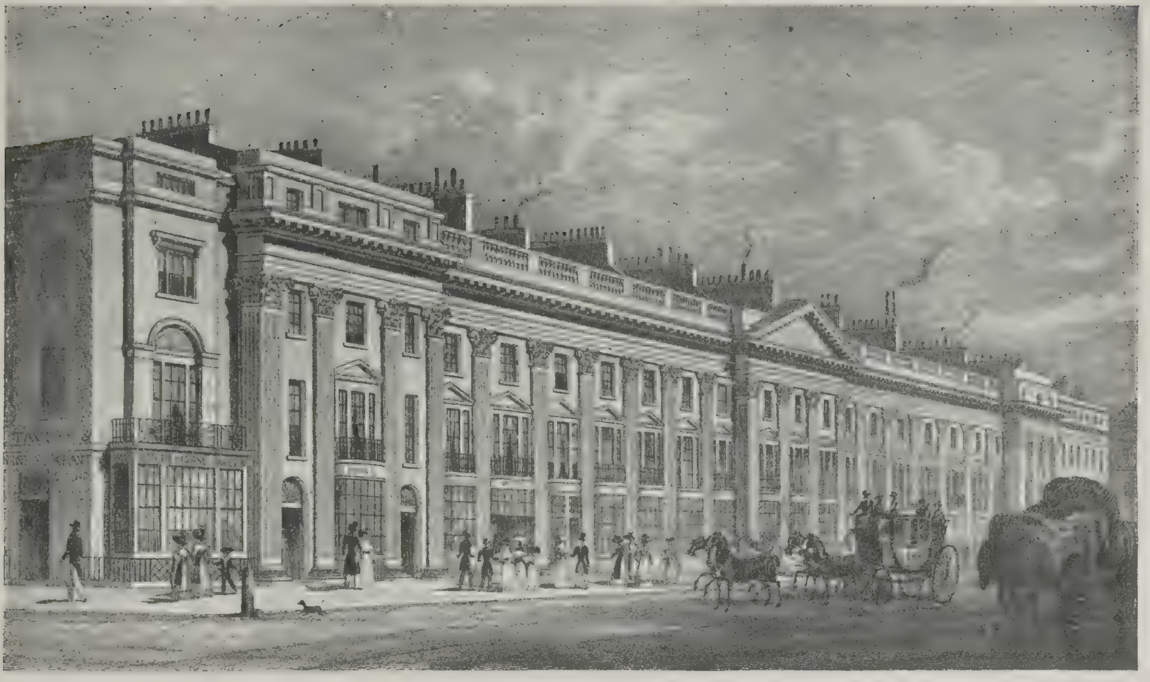
The new building for Messrs. Dickins and Jones is situated on the east side of Regent Street between Argyll Place and Little Argyll Street, and occupies an area of approximately one acre. It constitutes one of the most important sections so far rebuilt, and is from the designs of Messrs. Henry Tanner. The construction is of steel framing, with brick or concrete filling, and is generally of a fire-resisting nature, as required under the Building Act Regulations for buildings having excess cubic capacity. The main stairs are of reinforced concrete, others of Victoria stone.

Messrs. Higgs and Hill, Ltd., were the general contractors, and sub-contracts were carried out by the following firms :—

Thomas Faldo & Co., Ltd. (asphalting); Moreland, Hayne & Co., Ltd. (steelwork); Kleine Flooring Syndicate, Ltd. (part of fireproofing); Luxfer Prism Syndicate, Ltd., and Crittall & Co. (casements and fittings); Wotton and Sons, Croydon (patent glazing); Dent and Hellyer, Ltd. (sanitary ware and fittings); Diespeker and Art Pavements Co., Ltd. (mosaic flooring); Drake and Gorham, Ltd. (electric wiring); General Electric Co., Ltd., and Strode & Co., Ltd. (electric lighting and fittings); A. W. Elwood (art metal work); Waygood-Otis, Ltd. (lifts); J. Jeffreys & Co., Ltd. (heating and ventilating);



DICKINS AND JONES'S NEW BUILDING IN REGENT STREET. MESSRS. HENRY TANNER, ARCHITECTS.



ONE OF THE MONUMENTAL BLOCKS ON THE WEST SIDE OF REGENT STREET
*(From an early-nineteenth-century print.)*

Stirling Telephone Co., Ltd. (telephones); Sage & Co., Ltd. (shop fittings); Milner & Co., Ltd. (safes); Benham and Sons, Ltd. (cooking and laundry machines).

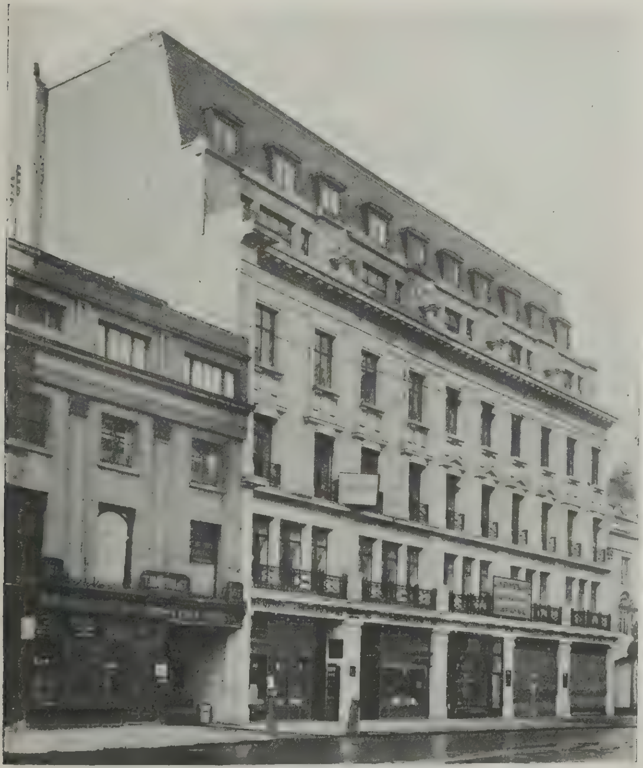
### *Hedges and Butler's Building.*

The new building for Messrs. Hedges and Butler forms part of a new block which has been partly built from the designs of Messrs. Henry Tanner. The style is Renaissance in character, to harmonize with the general scheme for the rebuilding of Regent Street.

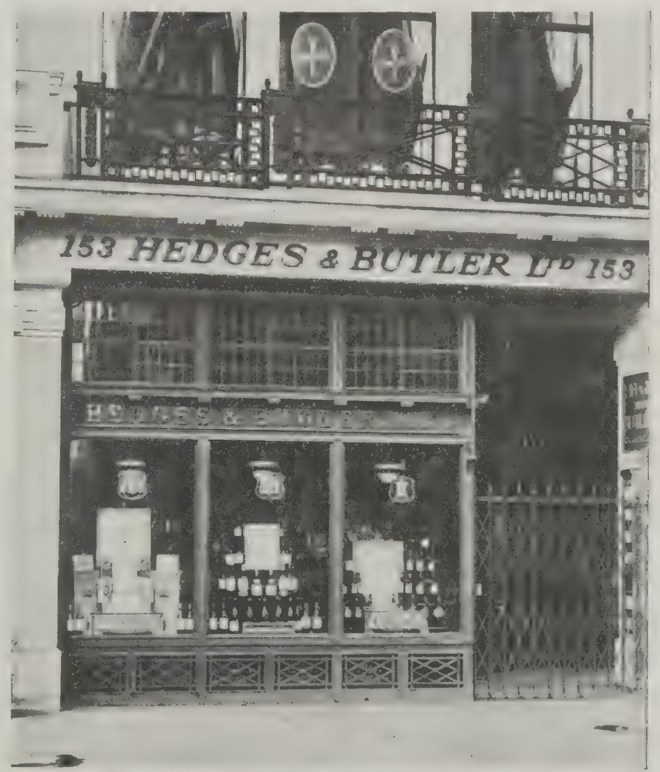
Messrs. Holland, Hannen and Cubitts were the general contractors, and the following firms carried out sub-contracts :—

The Stourbridge Glazed Brick Co., Ltd. (glazed bricks); F. J. Barnes, Ltd. (stone); Drew, Bear, Perks & Co., Ltd. (steelwork); The Kleine Flooring Syndicate, Ltd. (fireproof floors); Cranham Hollow Partition Blocks (walling, etc.); Robert Adlard & Co., Ltd. (slates); The Luxfer Co. (casements and fittings); Wotton and Sons, Croydon (patent glazing); Ames and Finnis, and Dent and Hellyer, Ltd. (sanitary ware and fittings); Hollis Bros. & Co., Ltd., and Turpins Parquet Flooring Co., Ltd. (wood block and parquet flooring); Higgins and Griffiths, Ltd. (electric wiring and fittings); Clark and Fenn (plaster work); Carter and Aynesley, Ltd. (door furniture); Chas. Smith, Sons & Co., Ltd., and Strode & Co., Ltd. (railings); Patent Victoria Stone Co., Ltd. (stair-treads); Waygood-Otis, Ltd., and George Johnson (lifts); Colley, Meikle & Co., Ltd. (heating apparatus); The Reliance Telephone Co., Ltd. (telephones); Ideal Radiator Co. (boilers); Strode & Co., Ltd. (shop fronts, blinds, and shutters); James Gray & Co. (lightning conductors); Arthur L. Gibson, Twickenham, and Haywards, Ltd. (fireproof shutters and doors).

[NOTE.—For the illustrations of old Regent Street we are indebted to "The Town-Planning Review."

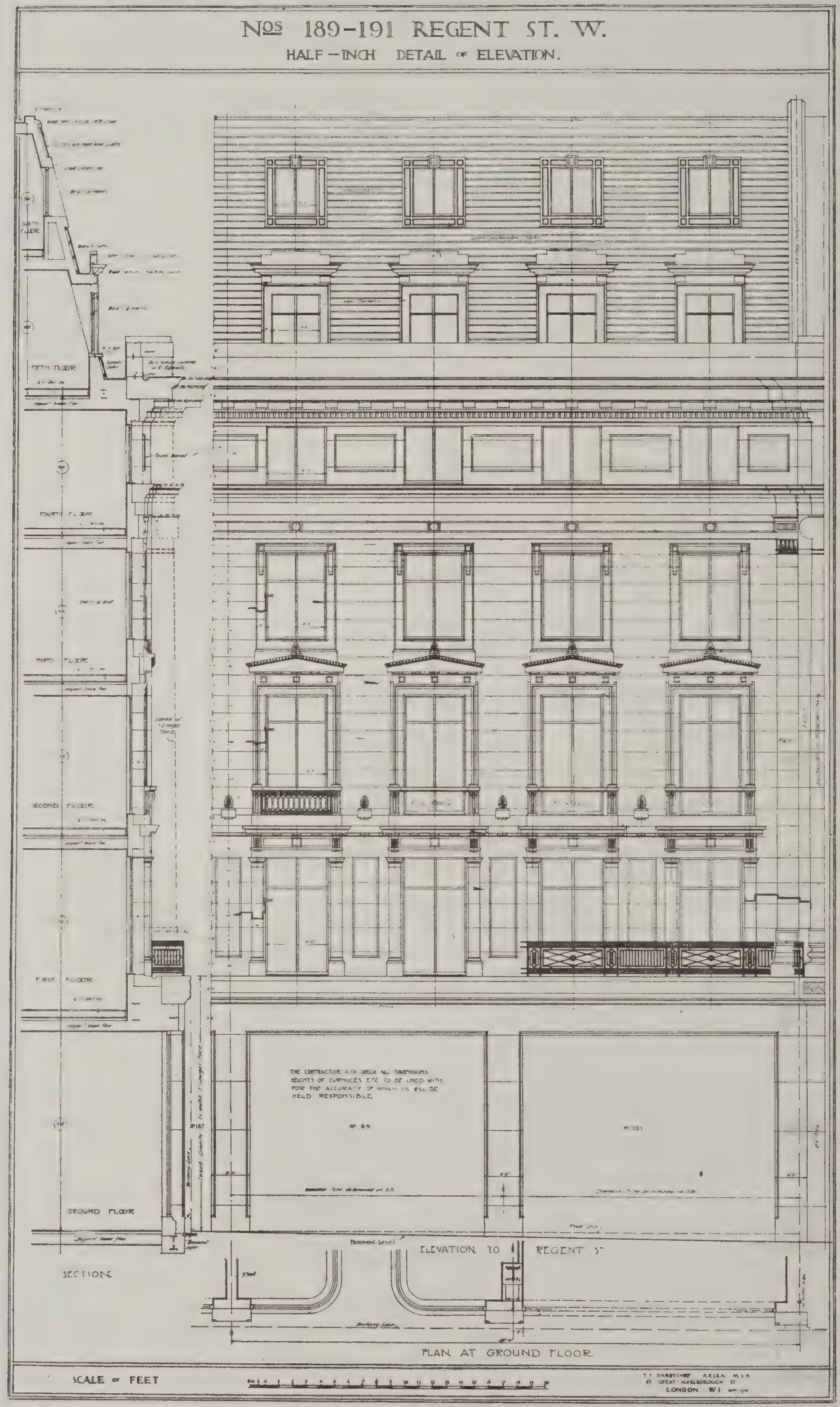


PART OF A NEW BLOCK OF BUILDINGS.

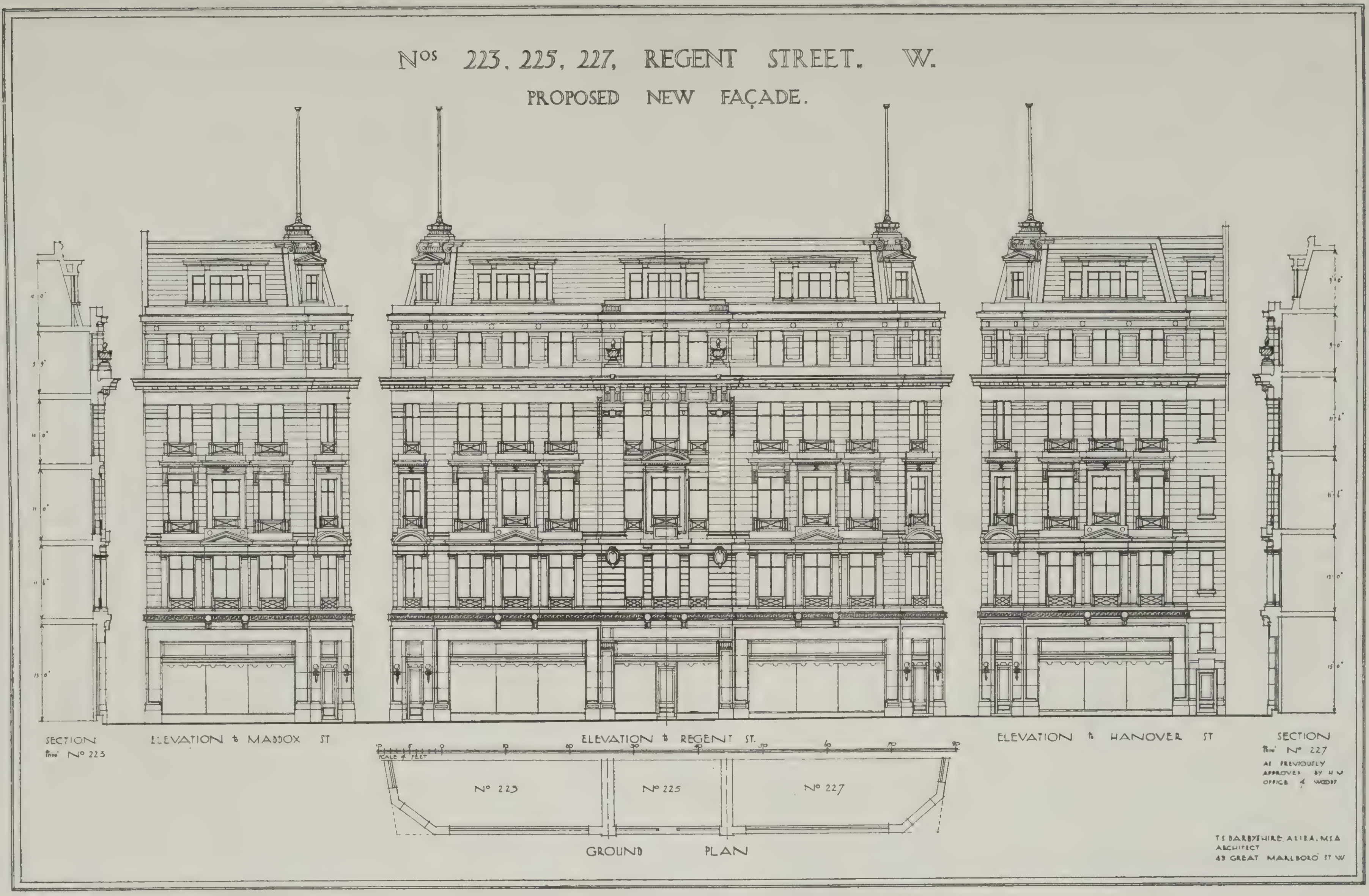


HEDGES AND BUTLER'S SHOP-FRONT.

MESSRS. HENRY TANNER, ARCHITECTS


Nos 189–191 REGENT ST. W.
HALF-INCH DETAIL OF ELEVATION.
SIXTH FLOOR
FIFTH FLOOR
FOURTH FLOOR
THIRD FLOOR
SECOND FLOOR
FIRST FLOOR
GROUND FLOOR
SECTION
No 187
No 189
No 191
THE CONTRACTOR IS TO CHECK ALL DIMENSIONS HEIGHTS OF CORNICES ETC TO BE LINED WITH FOR THE ACCURACY OF WHICH HE WILL BE HELD RESPONSIBLE
Pavement Level
ELEVATION TO REGENT ST
Building Line
PLAN AT GROUND FLOOR
SCALE OF FEET
T. S. DARBYSHIRE A.R.I.B.A. M.I.A
43 GREAT MARLBOROUGH ST
LONDON W 1

NOS. 189—191 REGENT STREET. YATES, COOK, AND DARBYSHIRE, ARCHITECTS.



NOS. 223, 225, 227 REGENT STREET

GORDON JEEVES, ARCHITECT FOR THE RECONSTRUCTION. YATES, COOK, AND DARBYSHIRE, ARCHITECTS FOR THE ELEVATION.

# Town-Planning: What it Means

By G. L. PEPLER, F.S.I., Past-President Town-Planning Institute

IN every profession the practitioner who means to keep pace with his subject is always eager to learn. More than this is, however, required of the town-planner, since the A B C of his subject has not yet been completely evolved, and therefore all sorts of initial research work remains to be done.

Town-planners, therefore, welcome the help of the technical Press, which by publishing articles on the subject facilitates exchange of experience, and by illustrating and giving particulars of existing plans and conditions or of work done or projected, provides material for study.

The practical application of town-planning to-day is, by the exercise of foresight, to provide that all land shall in future be put to the use to which it is best fitted in a scheme that provides for the most efficient and pleasant development of the whole plan. As all our life and work take place on land (even an aeroplane is of the earth and to earth must descend!) it is clear that the question of its use is fundamental and affects every living person, although it is extraordinary how in the past this simple fact has been forgotten. Because the entire population, particularly the part that lives in and around towns, is affected by town-planning, a clear duty is placed on the town-planner to take the public into his confidence, study its varying needs, and see that the public understands his aims and approves of them. He now need have no fear of exploitation, as, once land is in a town-planning area, that is impossible.

I rather dwell on this question of publicity because the fact has to be faced that town-planning, as we now understand it, is a comparatively new idea, and has, therefore, to be explained. One is glad to know of several prominent municipal engineers and others who are putting the matter before their constituents by lecture and talk, through such agencies as local Chambers of Commerce and various clubs and societies. Here again the technical Press can, and does, do a great deal to help.

As to the present position of town-planning under the Town-Planning Acts: by November 1, 1922, 291 schemes had been commenced by 178 local authorities, covering an area of 781,672 acres. Of these schemes twelve had been approved, and twenty-six preliminary statements had been prepared, of which eight had been approved.

The approved schemes deal with such matters as: Laying down the lines of main roads (including in some cases wide boulevards); providing for their ultimate construction and the allocation of their cost between the owner and the local authority; settling the predominant character of the building development that may take place in each part of the area, i.e., either for residence, factory or shop, etc.; providing that adjoining estates shall be developed in harmony, and that the estate development roads shall be on sites to be approved by the local authority; allowing certain residential roads to be of less than by-law width, so that through traffic shall be kept to main roads properly planned out and of adequate width, and that the residential roads shall be designed to keep free of this traffic and, therefore, be more pleasant to live in; controlling the number of houses allowed per acre; providing for the reservation of public and private open spaces; defining building lines and restricting the proportion of a building plot that may be covered by a house; etc.

The Ministry of Health are about to publish a set of model clauses so that the time and energy spent in the past in constructing the machine for each scheme will be released in future for concentration on perfecting the objects of the scheme.

By keeping schemes simple and on broad lines the well-worth-risking dangers of prophecy are greatly diminished, and the working out of the details later is not jeopardized, as the local authority will still be in control.

Local authority boundaries often bear little relation to surface utilization, and, therefore, to town-planning. Co-operation between authorities is therefore essential so that each region of common interest may be planned as a unit. This is being increasingly recognized, and already twelve joint Town-Planning Committees have been established, representing 176 local authorities, comprising some 1,175,000 acres and £32,127,000 rateable value.

It will be seen, therefore, that town-planning is forging ahead, which is hardly to be wondered at in these days when economy is so essential, for one of the principal objects of town-planning is the prevention of waste in all its forms.

# The City and County Borough of Bradford Town-Planning Scheme

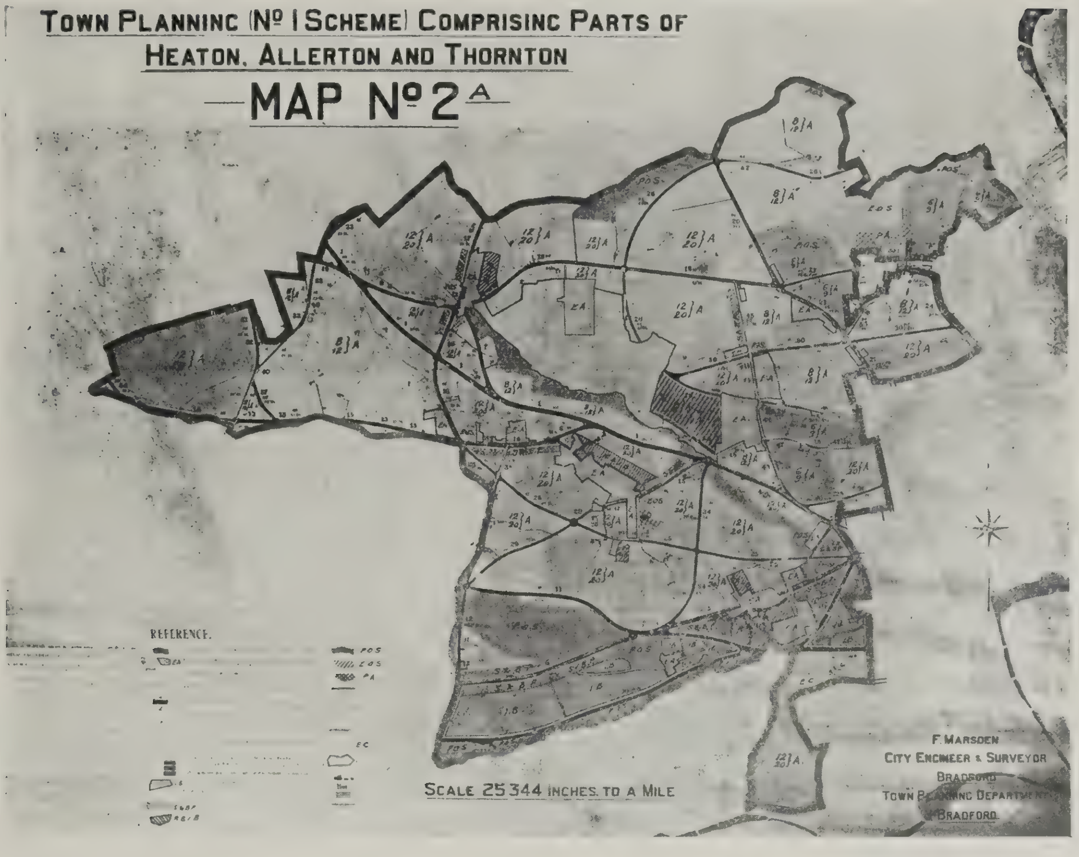
By F. MARSDEN, City Engineer and Surveyor

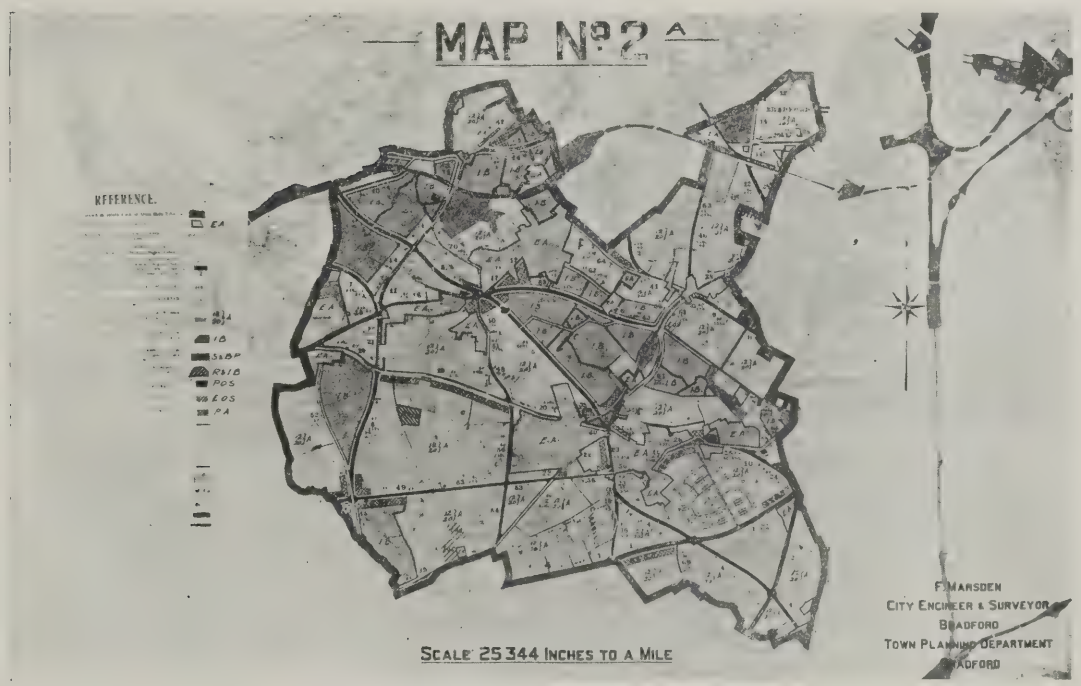
THE Bradford Corporation have been very active in regard to the town-planning of the city. The area of the city is 22,879 acres, and this area has been divided into nine schemes for departmental purposes, excluding the central built-up area. The Corporation have passed the first resolution defining the areas of, and deciding to prepare, the schemes. Their combined acreage is 21,120 acres, of which 108 acres (to be reserved as a public open space) are situated without the city. The densely built-up portion not included within the town-planning schemes has an area of 1,867 acres.

The Town-Planning (General Interim Development) Order, 1922, issued by the Minister of Health, is applicable to the whole of the area covered by seven of the schemes, and this Order enables the Corporation to permit the development of land and building operations to proceed pending the preparation and approval of the Preliminary Statement.

The City Council passed the necessary resolution authorizing the preparation of the draft maps for schemes Nos. 3 to 9 inclusive, in March 1920. These maps have been prepared and approved by the City Council. The work is proceeding apace, and it is intended within the next few months to submit Preliminary Statements relating to schemes Nos. 3 to 9 inclusive.

The advantages gained by urging this work forward and having the proposals so far advanced become more manifest every day when the question of development is being


TOWN PLANNING (No 1 SCHEME) COMPRISING PARTS OF
HEATON, ALLERTON AND THORNTON
MAP No 2A
REFERENCE.
SCALE 25 344 INCHES TO A MILE
F. MARSDEN
CITY ENGINEER & SURVEYOR
BRADFORD
TOWN PLANNING DEPARTMENT
BRADFORD



MAP OF PARTS OF HORTON AND WIBSEY.

*Reference.*

E.A. = Areas excluded.

$\left.\begin{matrix}12\\20\end{matrix}\right\}$ A = Areas on which the proposed restriction of the number of dwelling houses to be erected is on the average 12 to the acre and not more than 20 to the acre.

I.B. = Areas to be reserved for industrial buildings.

S.B.P. = Areas to be reserved for shops and business premises.

R.& I.B. = Residential areas in which both industrial buildings and others are allowed by special consent.

P.O.S. = Land reserved for public open spaces.

E.O.S. = Existing public open spaces.

P.A. = Existing public allotments.

BRADFORD TOWN-PLANNING SCHEMES.

F. MARSDEN, CITY ENGINEER AND SURVEYOR.

raised in several parts of the city, and the Corporation are now able to permit and require such development to be in conformity with the general lines of roads and building lines and other amenities which are governed by the Development Order.

As an illustration, the power which the Corporation have obtained in the relaxation of the building regulations governing the lay-out of new streets, enables the Corporation to obtain the land required for the widening of the main roads and the observance of deep building lines and the general development of the area, the landowner getting his advantage in modified requirements for the width of roads which are purely for the development of his own estate.

Under this Order the number of houses per acre is not to exceed twelve on the average, and not more than twenty in any one acre.

The illustrations on page 79 are reproductions of the maps relating particularly to Town-planning Schemes Nos. 1 and 2, and these are dealt with separately because they are the schemes for which the Preliminary Statement has been approved by the Ministry of Health. The reference has been adapted to a black and white reproduction.

The Preliminary Statement defines the meaning in the usual way of "The Corporation," "The Map," "The Building Regulations," "Various Classes of Buildings," etc.

1. Area of Scheme.—Is defined by reference to the map.

2. (*a*) New Streets.—The principal new streets to be made are numbered and shown upon the map. In respect of any of the said new streets to be constructed of a greater width than 60 ft. (the Corporation having power under their Building Regulations to require a street to be constructed of a width of 60 ft.), adjoining owners will not be required to bear any greater expense in the execution of street works than they would be required to bear if the street were constructed of the width of 60 ft.

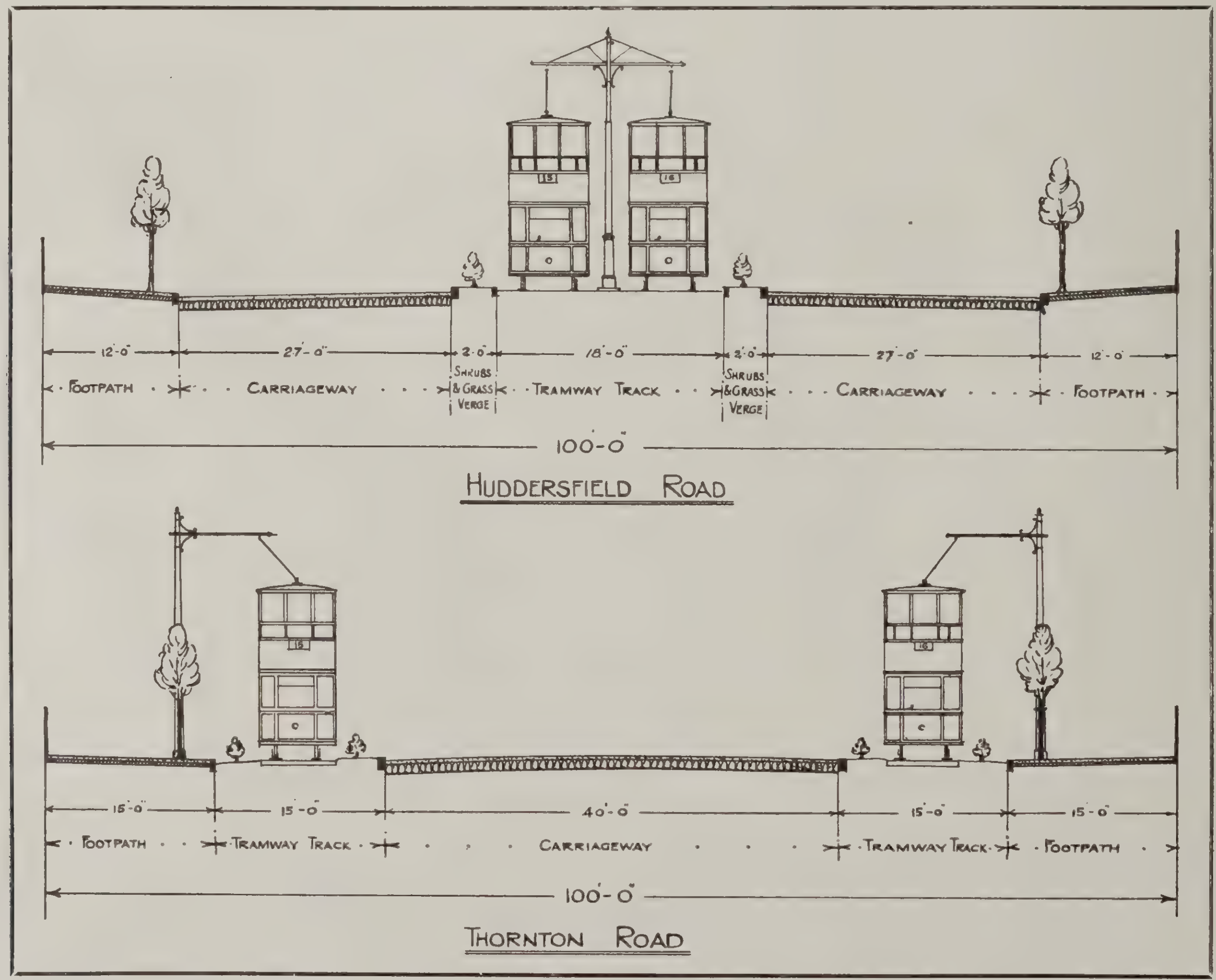
Widening of Existing Streets.—The existing streets to be widened are numbered and shown on the map, and the widenings are to take place at such time or times as the Corporation may determine.

(*b*) Space about Buildings.—No building or erection other than boundary walls or fences shall be permitted to be erected or set up on such space.

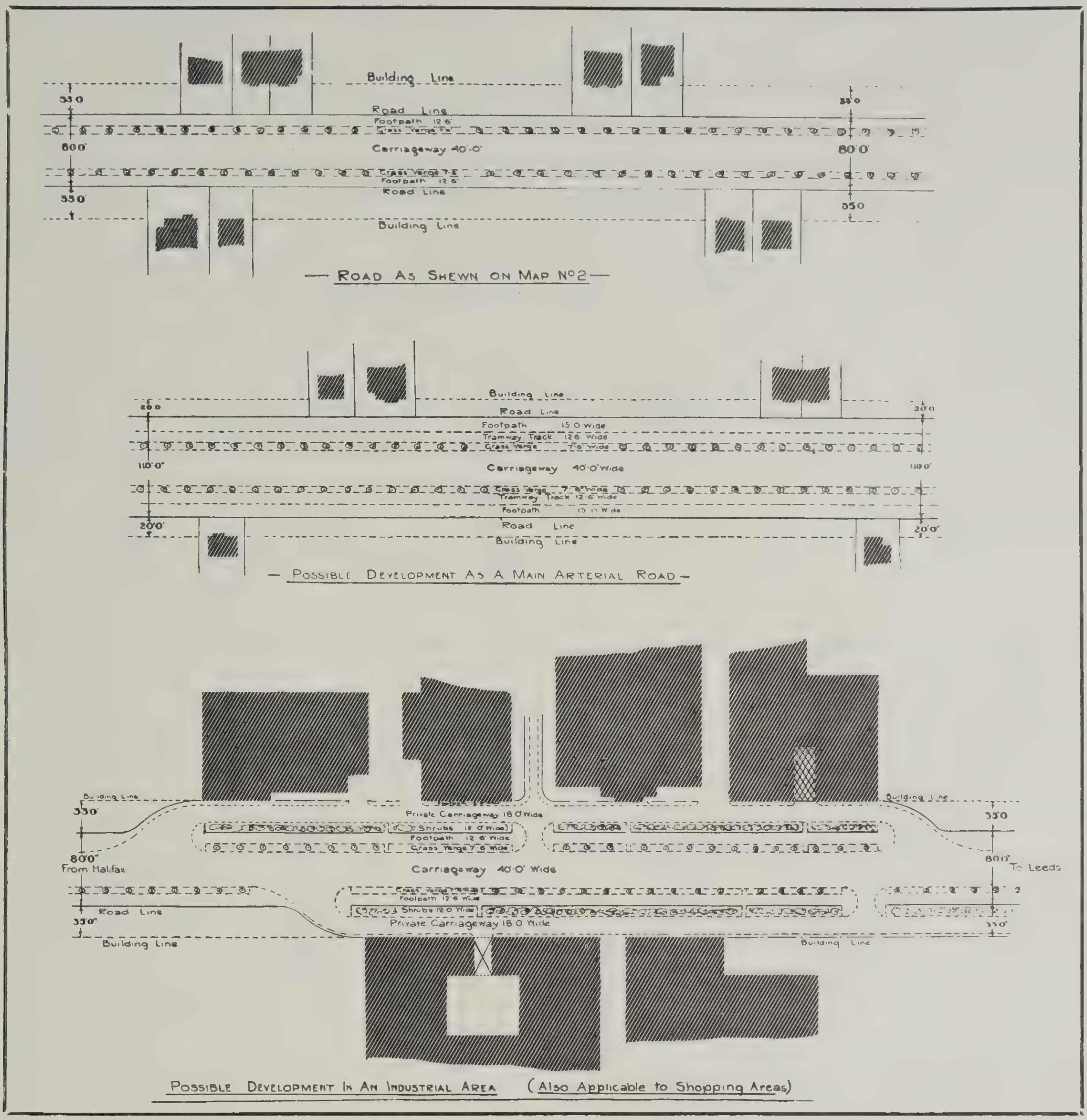
3. Roads, Streets or Ways which it is Proposed to Stop up or Divert.—These are numbered and shown on the map, and they shall as from, but not until, the respective dates on which the appropriate new streets or widenings shall have been constructed and opened for public traffic, be deemed to be stopped up, and all public rights thereover shall cease from such respective dates.

4. (*a*) Restrictions Proposed, and the Areas to which the several Restrictions are to Apply.—Under this heading are set out the various restrictions as to classes of buildings on certain areas shown by distinctive colours on the map, and these restrictions must be adhered to save with the consent of the Corporation and upon such conditions as they impose (subject to appeal to the Minister of Health against any withholding of consent or any conditions imposed).

(*b*) Density of Buildings.—This deals with the proposed restrictions on the number of houses to be erected in the various areas. In scheme No. 1 several restrictions are put on different areas so as to preserve the amenities of the districts, which have already been formed varying on the average from four houses to twelve to the acre. The Corporation, to prevent undue hardship, are permitted to exceed the maximum in certain places where land partially built on under old schemes of development are contiguous to the undeveloped land.



CITY OF BRADFORD TOWN-PLANNING: CROSS-SECTIONS OF ARTERIAL ROADS IN COURSE OF CONSTRUCTION.
F. MARSDEN, CITY ENGINEER AND SURVEYOR.



CITY OF BRADFORD TOWN-PLANNING SCHEME, SHOWING POSSIBILITIES OF ROADS WITH DEEP BUILDING LINES.

F. MARSDEN, CITY ENGINEER AND SURVEYOR.

In determining the "acre" it shall be taken to include, in addition to the plot of land to be used for building purposes, open spaces to be dedicated by the owner, and the half of any street which abuts.

The restriction of the proportion of land to be built upon within the curtilage of a building not being a dwelling-house shall not exceed three-fifths of the whole area of the curtilage, and in the case of a dwelling-house shall not exceed one-third of the whole area of the curtilage, with provision for exceptions in cases of extensions to buildings, existing prior to the dates of the resolutions of the Corporation applying for authority to prepare these two schemes.

(*c*) Heights of Buildings.—The height of buildings is restricted, the maximum in any case, not being a public building or a building of the warehouse class, being 60 ft.

5. Open Spaces.—The land proposed to be reserved for public open spaces is shown upon the map.

Generally speaking, the various proposals of the town-planning schemes have been favourably received. The lines adopted have been to inform the public as far as possible of the proposals, and with this object in view public advertisements and illustrated articles have appeared periodically in the local newspapers, and in addition, public posters have been shown on hoardings and in the tramcars, and an order has been given for the issuing of the advertisements at least once every three months, in which any prospective purchaser of land is advised to apply to the City Engineer and Surveyor as to the requirements relating to that piece of land. This has been largely taken advantage of, and over 900 people availed themselves of the opportunity of inspecting the maps during the last twelve months. In one district the City Engineer and Surveyor was present at a public meeting which was attended by some 300 people, the maps were displayed, and the whole scheme explained to the audience at considerable length, the time afterwards being devoted to questions from members of the audience.

Suggestions were received and carefully considered later. Landowners have received the proposals favourably, and in the development of estates by builders, modern ideas of development have been adopted. One pleasing feature, so far, has been the way in which deep building lines have been adopted for the improvement of main roads. In this connection, seeing that the proportion of the plot of land which can be covered by buildings is restricted to one-third or three-fifths as the case may be, the obtaining of a deep building line is facilitated at the front rather than having a very large area of land at the back. The advantage of this deep building line on heavy traffic roads is becoming more realized daily, and this is no small advantage to the property owner when one remembers the number of complaints received about the vibration caused by modern road traffic to buildings on the roadside. The illustration on page 81 is of an industrial and trading centre and shows the advantage of a building line and how the space in front of such premises can be utilized for loading and unloading goods without any loss of time to the proprietor and no inconvenience to the general public or the ordinary traffic along the road, also how a space in front of the buildings can be adapted to a future widening of the road when traffic warrants it.

One of the greatest advantages of having the schemes so well in advance is that building plans can be submitted and approved in accordance with the general requirements of the town-planning schemes as governed by the Development Order and Preliminary Statement. The Corporation are now in a much stronger position properly to regulate the development of the city than they would be if the owners were required to endorse their plans under Section 58 (2) of the Housing, Town-Planning, etc., Act, 1909, which clause is intended to protect the Corporation from having to pay compensation in cases of development of land not in accordance with the final approved town-planning scheme.

This section of the 1909 Act has undoubtedly the effect of retarding building operations. The Town-Planning (General Interim Development) Order, 1922, and the advanced state of the schemes has removed this difficulty in Bradford, and there are at the present time distinct signs of the revival of building operations.

For those who do not know the configuration of Bradford it may help to say that the altitudes vary from below 200 to 1,200 above ordnance datum, hence the great difficulty of obtaining roads of ordinary gradients not to exceed one in sixteen or eighteen, which is only secured on the hillsides by detours and very careful detailed planning.

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# Town Planning on a Great Scale

## The work of the Manchester and District Joint Town-Planning Advisory Committee

THE above-named Joint Committee has been set up under and by virtue of the powers contained in Section 54 of the Housing, Town-Planning, etc., Act, 1909, as amended and extended by Section 42 of the Housing, Town-Planning, etc., Act, 1919. The various local authorities represented on the Joint Committee have by resolution concurred in appointing out of their respective bodies the Joint Committee, the functions of which are as follows :—

(*a*) To advise in the promotion, co-ordination, and linking-up of town-planning schemes within the area.

(*b*) If considered necessary by the committee, to prepare on broad outline a regional plan for the area.

(*c*) To consider and make suggestions or recommendations on any matter relating to the effective town or regional planning or development of the area, or upon any other co-essential matter which may be referred to it.

(*d*) To make suggestions and recommendations to any Government department or local authority on any matter coming within the scope of the committee's activity.

The agreed representation on the Joint Committee is for each county borough and borough to appoint two representatives, and each urban district council and rural district council one representative on the Joint Committee. On the invitation of the committee non-voting representatives are also appointed from the county councils of Cheshire, Derbyshire, Lancashire, and Yorkshire (West Riding); the Garden Cities and Town Planning Association (North Western Branch); the Manchester Society of Architects; the Manchester Chamber of Commerce; the Ministry of Health and Ministry of Transport. In addition the chief officials of the local authorities constituting the Joint Committee may attend the meetings of the committee in an advisory capacity.

The committee, which meets at least quarterly, has delegated to sub-committees, which are composed of members and officials of the various bodies associated with the Joint Committee, various duties, and it is chiefly through the sub-committees that the Joint Committee functions. Matters requiring detailed consideration are referred to the appropriate sub-committee, whose proceedings are in turn submitted to the Joint Committee for approval or otherwise.

The activity of the Joint Committee is practically limited to the area within a line drawn at a radius of 15 miles from the centre of St. Anne's Square, Manchester. Within this area (about 707 square miles) there is, approximately, 108 separate local authorities (either totally or in part), including the four county councils of Lancashire, Cheshire, Derbyshire, and Yorkshire (West Riding).

Of these 108 local authorities, 77 are represented on the Joint Committee, the remainder of the authorities having refused to associate themselves with the Joint Committee.

Following is an analysis of the authorities :—

| Authority. | Represented on Joint Committee. | Not Represented on Joint Committee. | Totals. |
|---|---|---|---|
| County Boroughs | 8 | — | 8 |
| Boroughs .. | 14 | 3 | 17 |
| Urban District Councils. | 43 | 24 | 67 |
| Rural District Councils. | 8 | 4 | 12 |
| County Councils | 4 | — | 4 |
| Totals . | 77 | 31 | 108 |

Taken on acreage and/or rateable value, the local authorities not yet associated with the Joint Committee form a minor portion of the whole area.

The Joint Committee was formed by mutual consent nearly two years ago, its main functions being to advise and assist in the promotion and co-ordination of town-planning schemes within the area.

As indicating the position to date with regard to town planning in the area, forty-two separate local authorities are now preparing, or considering, the preparation of schemes, and as a result of the requirements of the Town-Planning Act of 1919, whereby all authorities with a population of 20,000 persons or more, according to the last census, are obliged to prepare town-planning schemes, another twelve authorities will in the near future be actively engaged in town-planning their respective districts. It will thus be seen how important it is to have some representative authority co-ordinating the various proposals of these fifty-four local authorities, especially so when consideration is given to the highly industrialized nature of the area of the committee's activity.

Owing to the geographical position of the areas for which the fifty-four town-planning schemes are being prepared, or are to be prepared, many other local authorities will be obliged to undertake the preparation of schemes, the probable result being that in the course of a few years practically the whole region of the committee will come under the provisions of the Town-Planning Acts.

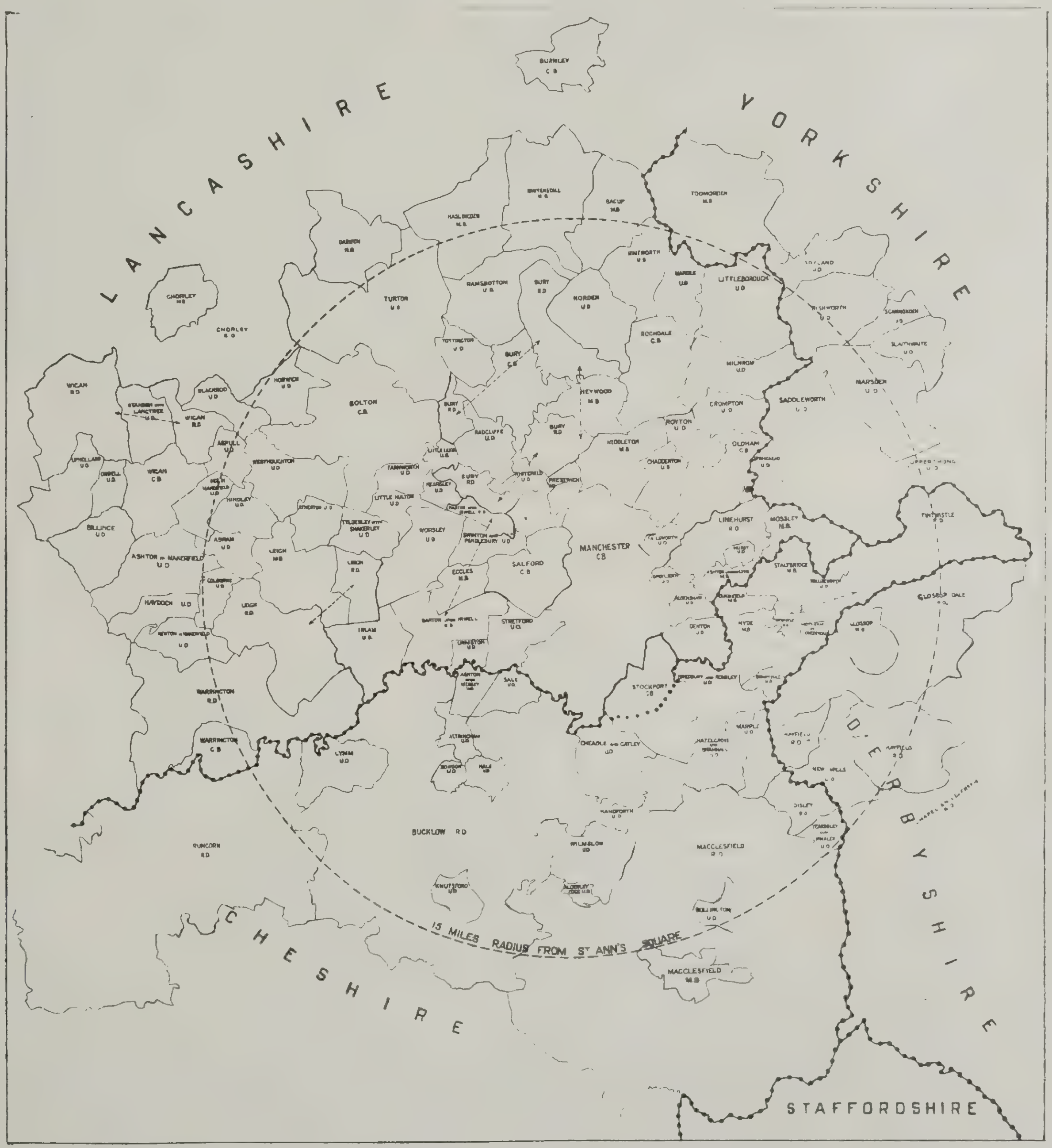
In order that guidance may be available for the various authorities in the preparation of their individual schemes, a sub-committee of the Joint Committee is endeavouring to set down the principles to be adopted in relation to building operations, such as density of houses per acre for urban and rural areas, proportion of site area to be built upon, provision of parks and open spaces, classes of commercial and industrial buildings, spaces between and about buildings, building lines, etc. Another sub-committee is engaged in considering the desirable minimum widths for both existing first-class and second-class roads and proposed roads, and from the answers received to a questionnaire recently addressed to the surveyors of all authorities represented on the Joint Committee, this sub-committee is about to consider in detail numerous proposals for the widening and improvement of existing roads, and the positions and widths of proposed new roads.

A sub-committee is also dealing with the preparation of a civic and regional survey of the area. Much information has already been obtained by this sub-committee, and a very fine series of maps are being prepared relative to the area.

In addition, the Joint Committee is being of some assistance, especially to the smaller local authorities, in giving advice on the various questions which arise in the promotion and preparation of schemes. It is considered that the Joint Committee is fulfilling a very useful purpose in the area, as without its assistance each local authority would have to co-ordinate its own proposals with adjoining authorities; and, further, many local authorities are being encouraged to promote schemes which, but for the existence of the Joint Committee, would not ordinarily be promoted for some time to come.

As a result of the recent town-planning exhibition and conferences held in the Manchester Town Hall under the auspices of the Joint Committee, a considerable amount of interest has been aroused throughout the area with regard to town planning, town development, and reconstruction, and it is safe to say that a more enlightened and intelligent view has been taken as to the meaning and possibilities of town planning.

The enormous advantages to be gained by the proper application of town planning, not only from the point of view of providing and improving facilities for movement



MAP SHOWING THE AREA OF THE MANCHESTER AND DISTRICT JOINT TOWN-PLANNING ADVISORY COMMITTEE.

of traffic, but also with regard to the protection of various classes of building user, whether residential, commercial, or industrial, together with the methods which can be employed for the provision for recreative facilities and the preservation of amenities, were well illustrated by the various maps and plans exhibited.

The Joint Committee, in order to be of still greater usefulness, is now considering the advisability of preparing a regional plan for the whole area. The preparation of such a plan would very materially assist the various local authorities in the preparation of individual schemes, as, instead of the various authorities having to initiate proposals, the Joint Committee's regional plan would form the skeleton upon which the various local authorities could build up detailed local schemes.

It is pleasing to record the smoothness with which the work of the Joint Committee is carried on, and the apparent desire on the part of all representatives to work for the good of the whole area, and, notwithstanding the variety of interest represented, to view the area as a unit—perhaps the most important unit in the whole country so far as the necessity for complete and judicious planning is concerned.

# Some Important Buildings of the Year

## Selfridge's New Extension

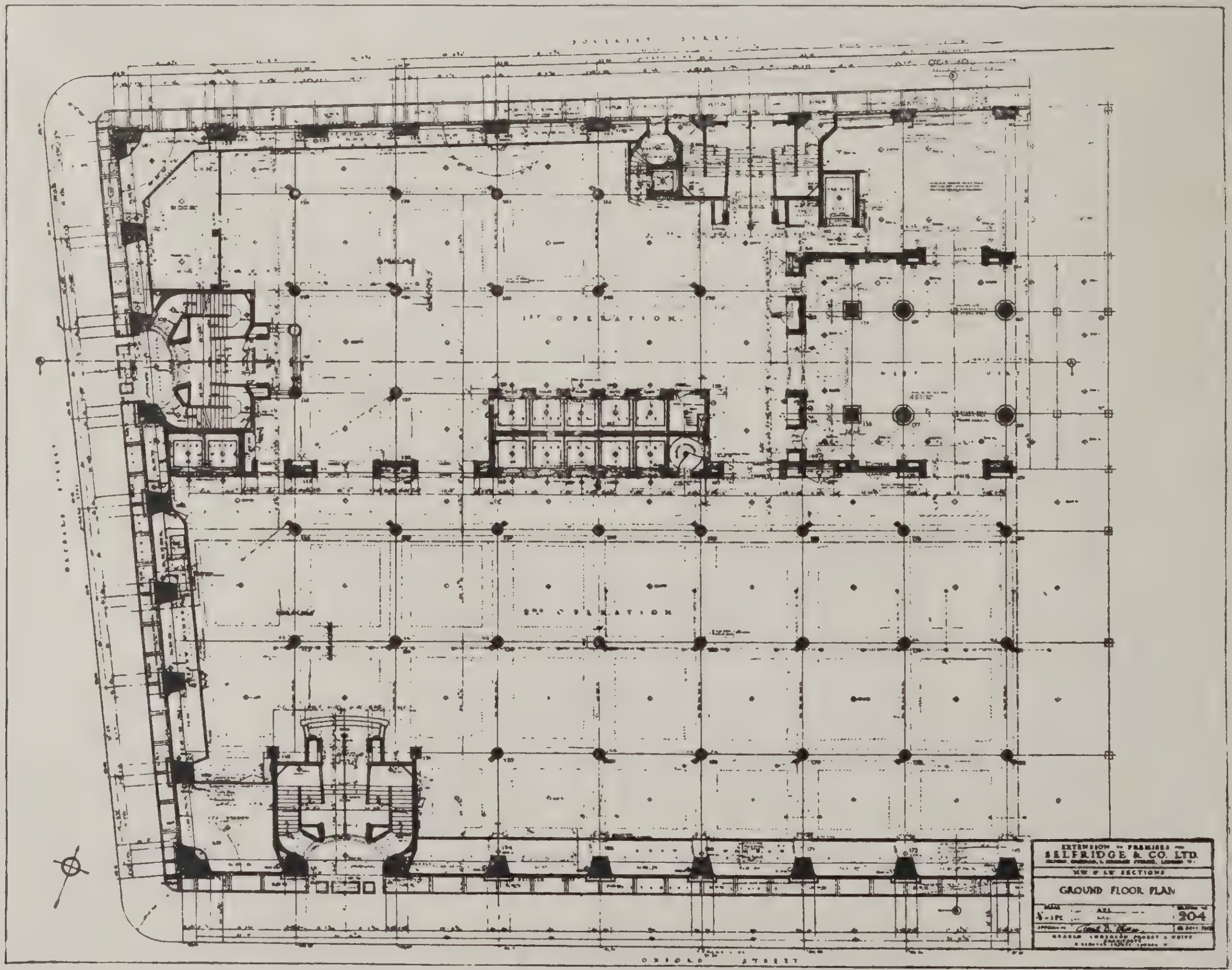
Graham, Anderson, Probst and White, and Sir John Burnet and Partners, Architects.

THE new building for Messrs. Selfridge & Co., Ltd., at the corner of Orchard and Somerset Streets represents the first section of the extension to the original premises. This very important island site will eventually have the colonnade motif on the three principal façades. Seven spacious stories constitute the building, with the mechanical plant three stories below the pavement level.

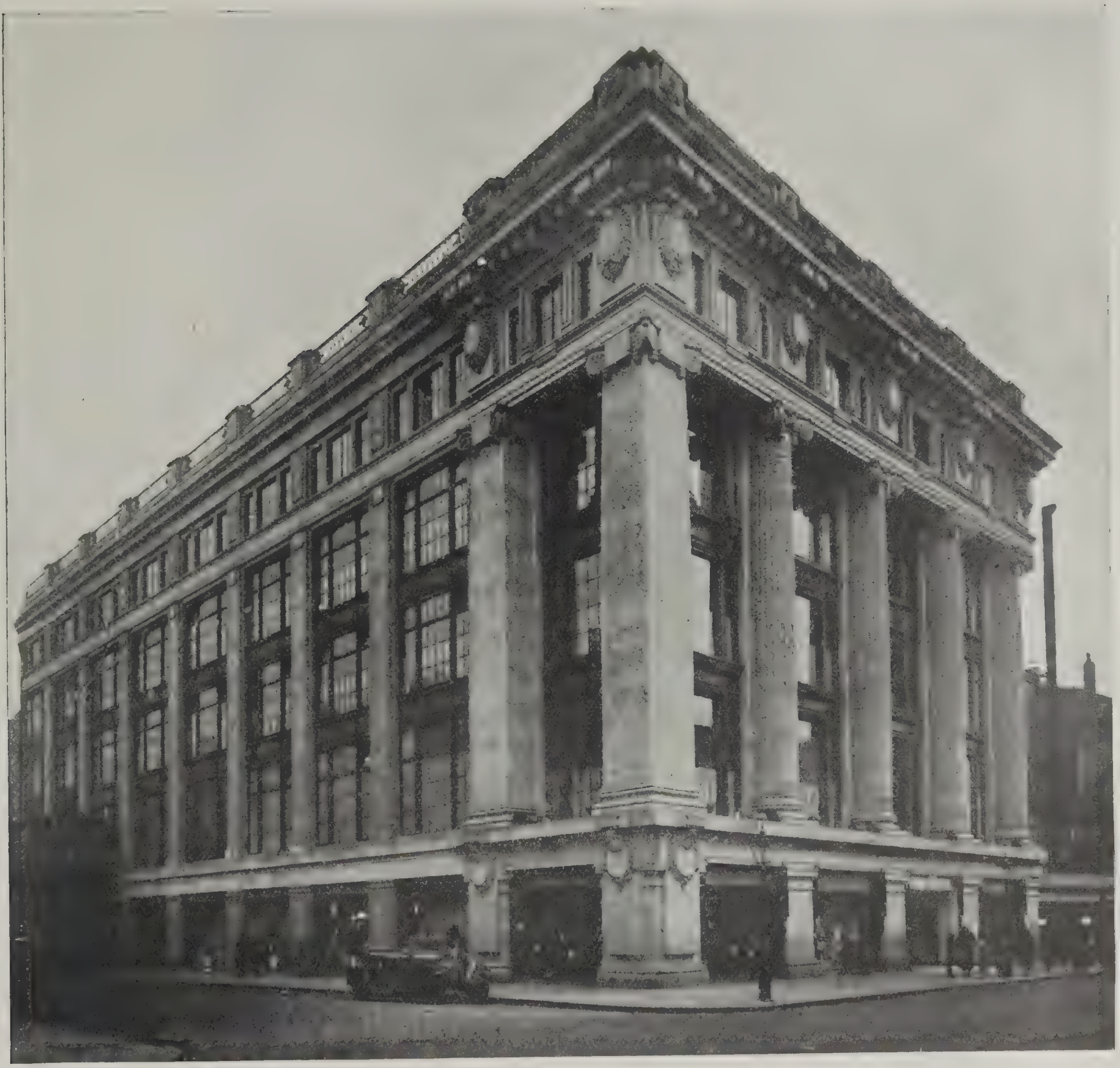
The exterior conception of the original building is recalled in the extension, and the metal infill between the columns with its bold and broad treatment suggests the light and air appropriate to a departmental store.

The carcase construction of the building is composed of reinforced concrete retaining walls and foundations, steel skeleton frame on cast iron bases and steel grillages, combination concrete and hollow tile fire-resisting constructional floors—all elements necessary to the stability of the modern fireproof building.

The two twin staircases are a novel feature, as they combine approaches to the ground floor, basements, and upper floors through one general entrance. Marble wall linings with contrasting inlays and terrazzo stairs and stringers with self-toned floor inserts are particularly designed for economy of maintenance. For public safety one stair is



GROUND-FLOOR PLAN



SELFRIDGE'S NEW EXTENSION: SOMERSET STREET AND ORCHARD STREET FRONTAGES.
GRAHAM, ANDERSON, PROBST AND WHITE, AND SIR JOHN BURNET AND PARTNERS, ARCHITECTS.

arranged as a fire tower, open to the street and protected from the weather by permanently open glass louvres.

Simplicity and efficiency have been the keynote in the design of the interior, and a careful distribution of materials has been made to form a pleasing background for the effective display of merchandise. The comfort and safety of the public have been given particular consideration.

Large spacious floor areas—so essential in the modern store—with the maximum size openings permitted in the divisional walls, render it possible to obtain as uninterrupted a view of the entire lay-out as practicable.

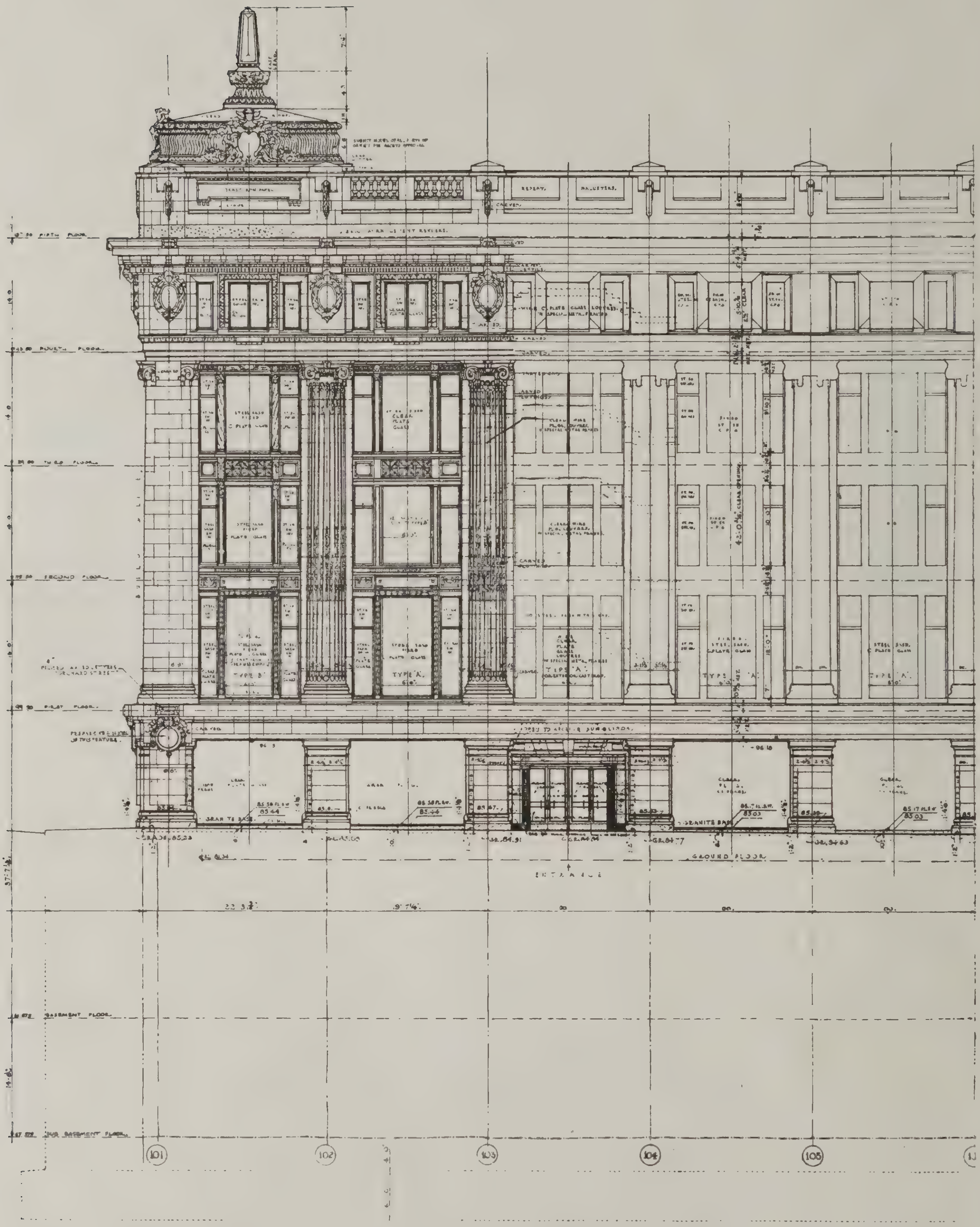
The passenger lifts with their cars in brilliant-hued lacquer have been arranged in groups of five, and their location is centralized in each compartment upon the main avenues of circulation, so that the public when arriving at any floor may conveniently approach the department desired.

The upper floors are covered with wood block of nutbrown colour with carpet runners, and white marble in large slabs is used on the ground floor.

Careful study of the lighting problems for the interior resulted in adopting the semi-indirect type of illumination through daylight glass bowls and hoods, together with special portable daylight standards on the counters. The exterior flood-lighting, lending itself appropriately to the exterior motif, is a new departure.

The mechanical installations, with all their modern appliances, have been scientifically studied, and pipe work is concealed from view, accessible for maintenance, and arranged in the most economical manner. Boilers in the sub-sub-basement with their oil fuel installation provide the heating and domestic hot-water service. Spiral gravity and band conveyors to distribute goods to departments for dispatch; a vacuum cleaning installation with appliances to clean all types of floor coverings and hangings; signal call systems; synchronizing clock systems; concealed sprinklers with outlets carefully distributed; electric light and power installations with centralized control cabinets and lighting points freely distributed so as to allow flexibility for the interchange of departments; all these are special branches of the work essential to the successful operation of the

A VIEW IN ONE OF THE NEW SHOWROOMS.



SELFRIDGE'S NEW EXTENSION: PART ELEVATION TO ORCHARD STREET.
GRAHAM, ANDERSON, PROBST AND WHITE, AND SIR JOHN BURNET AND PARTNERS, ARCHITECTS.

modern departmental store. Wherever practical, mechanical appliances have been permanently arranged for public view.

SELFRIDGE'S NEW EXTENSION: A VIEW INSIDE THE SOMERSET STREET ENTRANCE.

The show-windows, executed in American walnut in monotone with black inlays and illuminated by diffused and spot lighting, all reflect the simplicity and restrained character of the interior treatment.

In conjunction with the principal floors of this new section, which are devoted to men's departments, is the men's hairdressing saloon, a large and spacious room with special treatment rooms attached. It is finished with light tones and wall linings of white opaque glass, brilliantly illuminated and is equipped with all the modern services and conveniences.

The associated architects for the building were Messrs. Graham, Anderson, Probst, and White, and Sir John Burnet and Partners. Messrs. Graham, Anderson, Probst and White acted as structural and mechanical engineers and superintendents of construction, and F. D. Huntington, Ltd., were the general contractors.

[It is interesting to recall that the original Selfridge building was opened in 1909, having been completed from the designs of Mr. R. Frank Atkinson, F.R.I.B.A. It set a new architectural scale not only for Oxford Street, but for London, besides introducing to this country the characteristics of the modern American store. Mr. Selfridge has proved very conclusively that commerce, so far from being opposed to good art, can actually promote its best interests. He has also shown that fine architecture itself is an invaluable business asset, and for this service he deserves the best thanks of architects. The value of a building such as the Selfridge Store goes beyond the serving of its own immediate practical purpose. It fulfils a definite educational function, and thus helps to raise the general standard of architecture.

The Selfridge Store may be said to have introduced to modern commercial architecture in London the right use of the giant order, which is a very effective feature when skilfully handled, as it undoubtedly is in this instance. When the complete scheme of the store is finally realized, the building will rank as one of the most imposing things of its kind—certainly the equal of many of the finest stores in the United States.]

# The Port of London Authority Building

## T. EDWIN COOPER, F.R.I.B.A., Architect

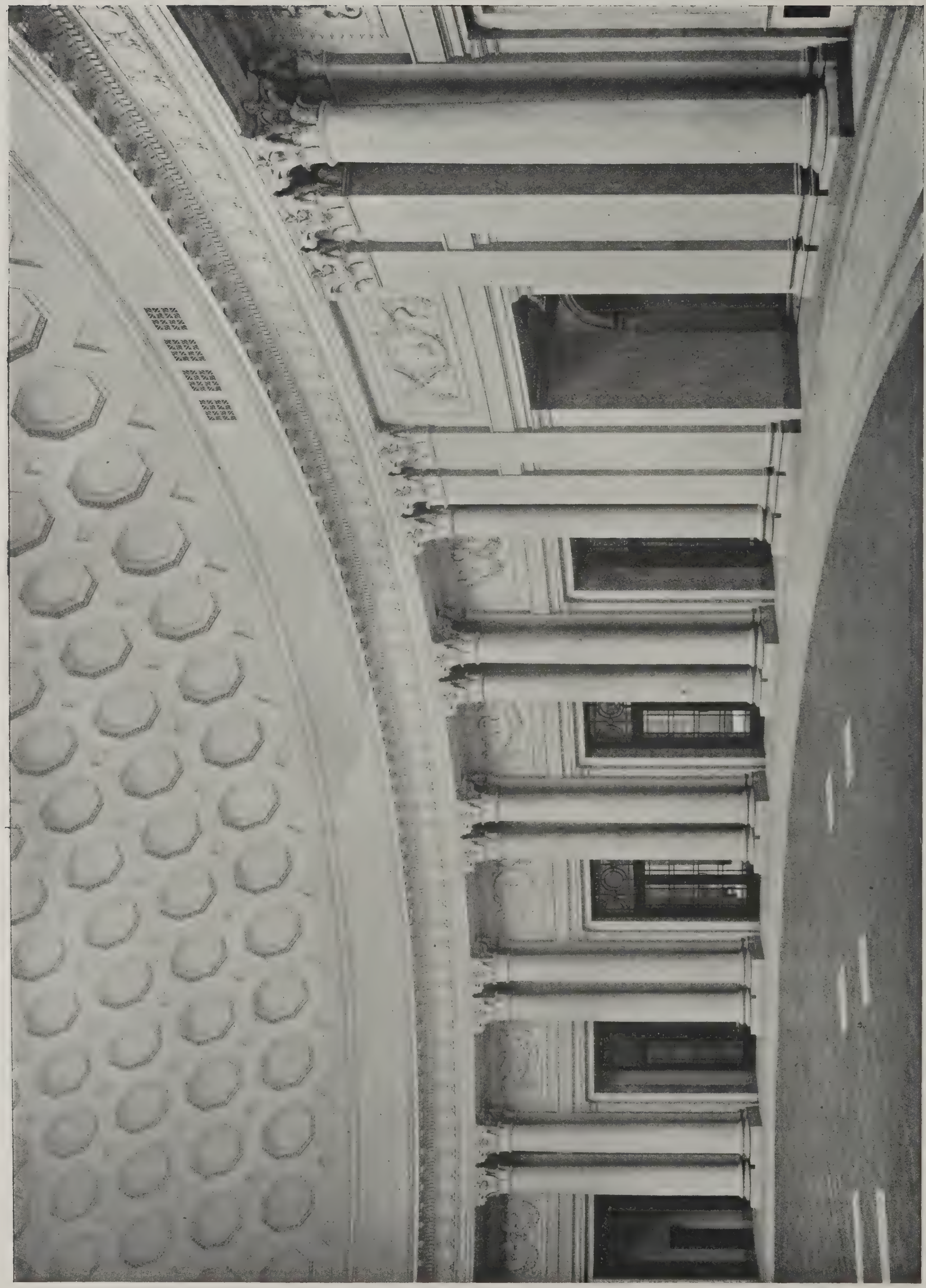
THE formal opening of this great building by Mr. Lloyd George last October aroused considerable public interest in an undertaking that has occupied more than eleven years in fulfilment. In our issue for October 18 we published a plan and external view of the building; we now give some views of the interior.

The ground plan reveals the simplicity and boldness of the general conception—a perfect square with its sides facing the cardinal points of the compass, and having the angle cut off towards Trinity Square on the south-east. A great portico, the whole width of this angular front, is the principal entrance, and the remaining sides of the square form a hollow cube with a large circular hall (the rotunda) in the centre. The portico is carried up through three stories, and the main entrance hall is crowned with the great tower. The blocks forming the sides of the square are five stories high, with square pavilions, in which are the secondary entrances, on the south-west, north-west, and north-east corners. On the ground floor diagonal corridors lead from these three entrances to the rotunda, while central corridors intersect the side blocks through their whole lengths, and short cross corridors connect the centres of these side blocks with the rotunda. The circular form within the square gives three spacious spandrel-shaped courts, divided by the diagonal corridors on the ground floor only, and thus provides ample light and air to the side blocks.

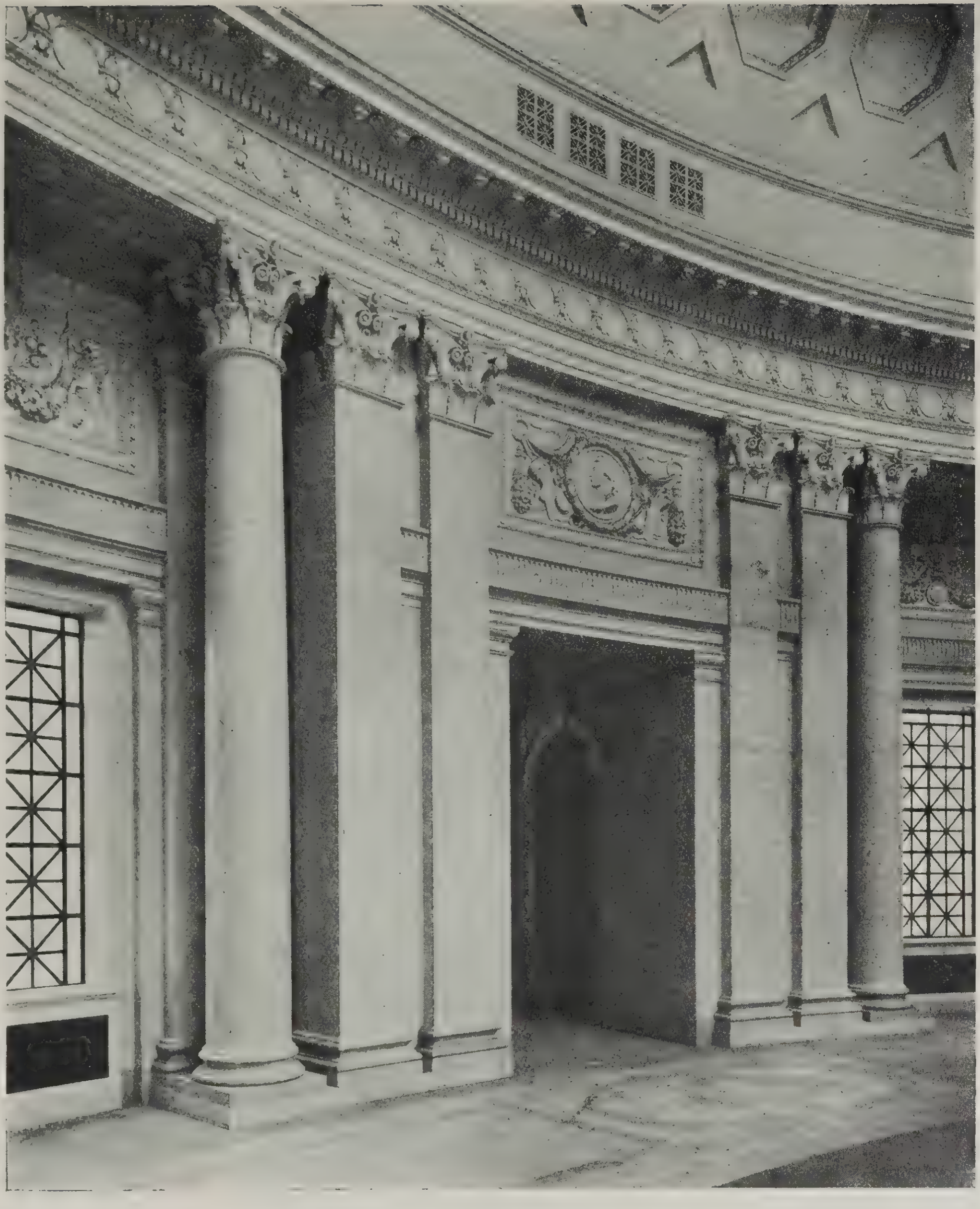
The architectural treatment throughout is based on a careful study of the best examples of the English Renaissance, while Italian and French influences can be traced in some of the ornament. Richness of detail is concentrated on the portico and tower; and, to a lesser degree, on the five pavilions which mark the terminations of the square sides. The four flanking walls between these pavilions have severely plain window openings, and effect is obtained by means of the great cornice and of the shadows cast by the balconies to the second-floor windows.

Five doorways from the entrance hall lead direct to the rotunda, a circular hall 110 ft. in diameter and 67 ft. in height from the floor to the top of the dome. This vast hall, approximately the same internal diameter as the dome of St. Paul's, is one of the most impressive parts of the whole interior. Direct access to this chamber, where so much of the business of the port will be daily carried on, is provided from every part of the ground floor.

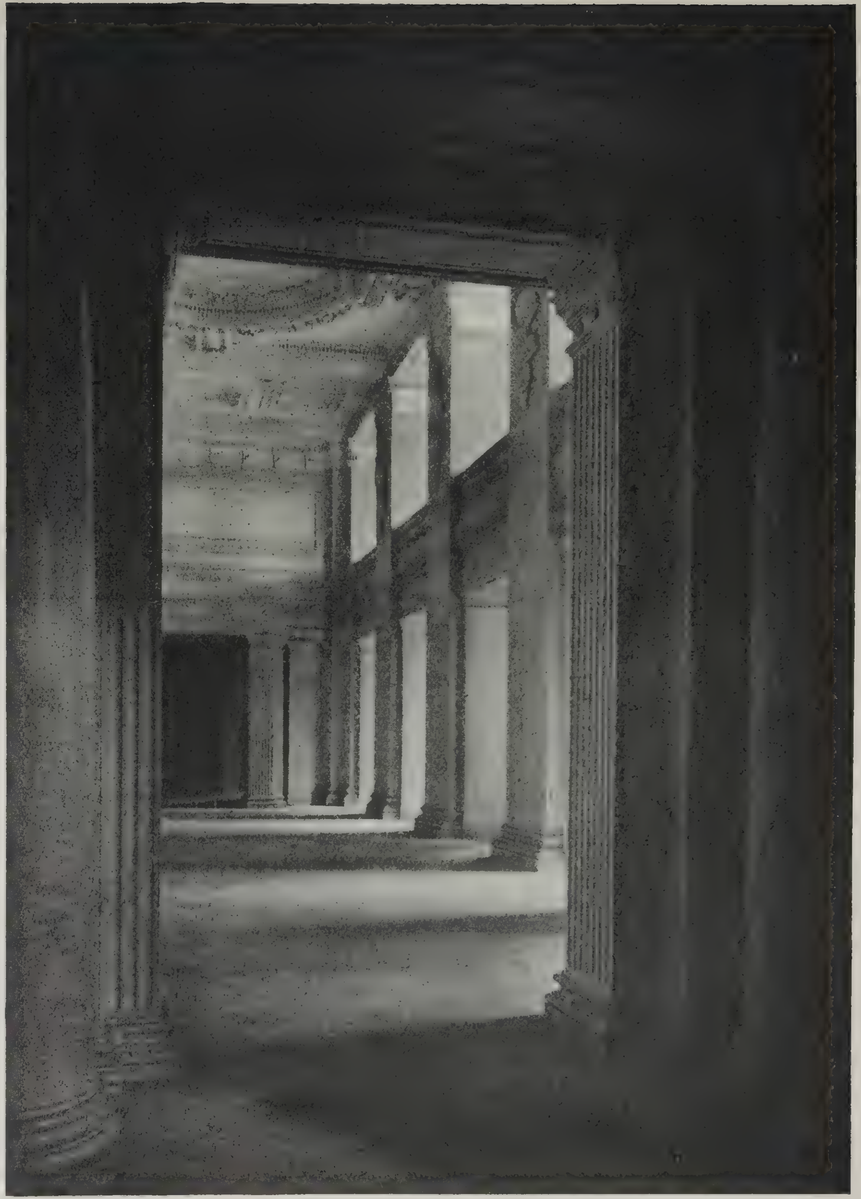
The four committee rooms on the south of the centre are interesting architecturally, each being treated in one



THE PORT OF LONDON AUTHORITY BUILDING: THE ROTUNDA. T. EDWIN COOPER, F.R.I.B.A., ARCHITECT

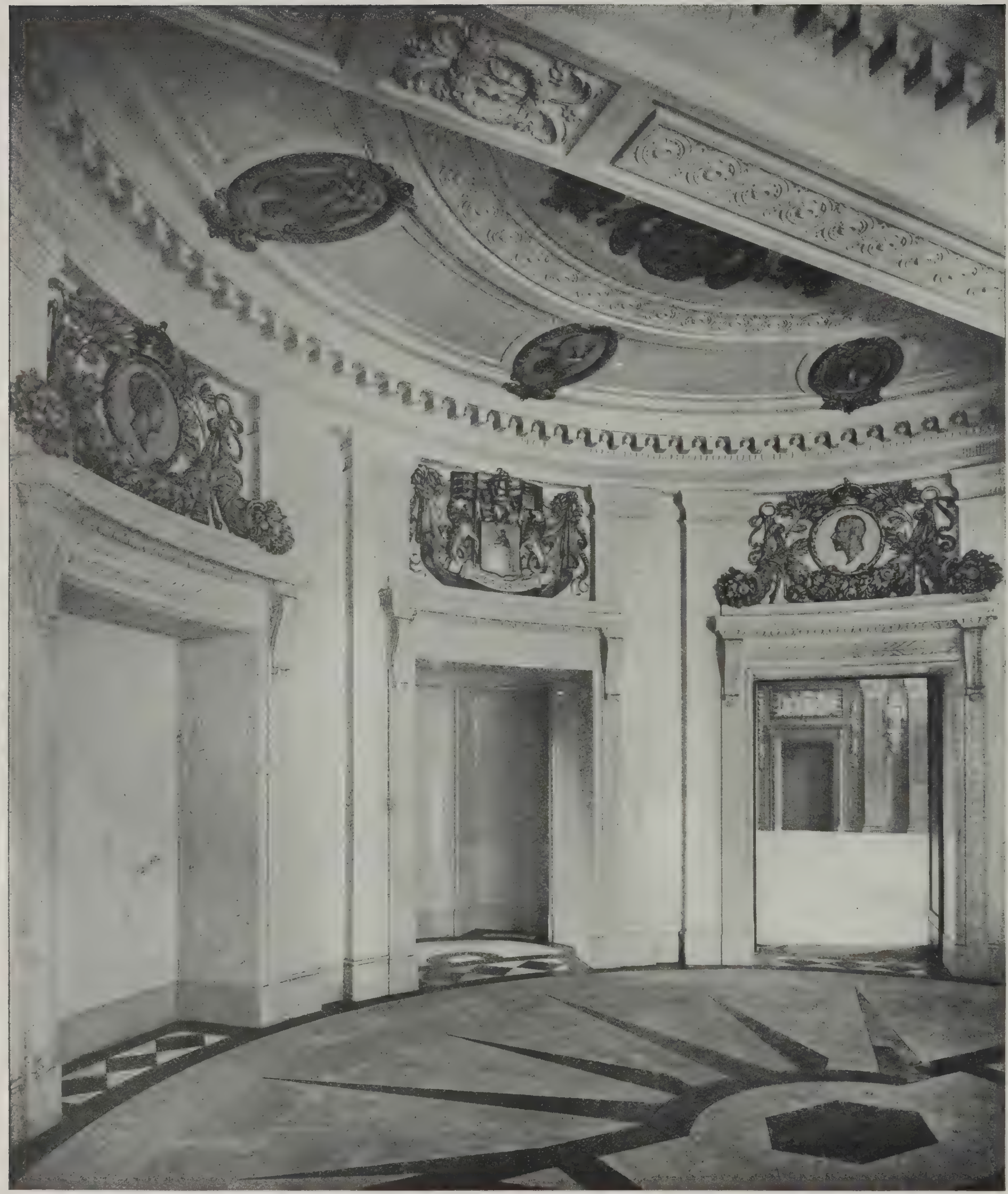


A DETAIL OF THE ROTUNDA.



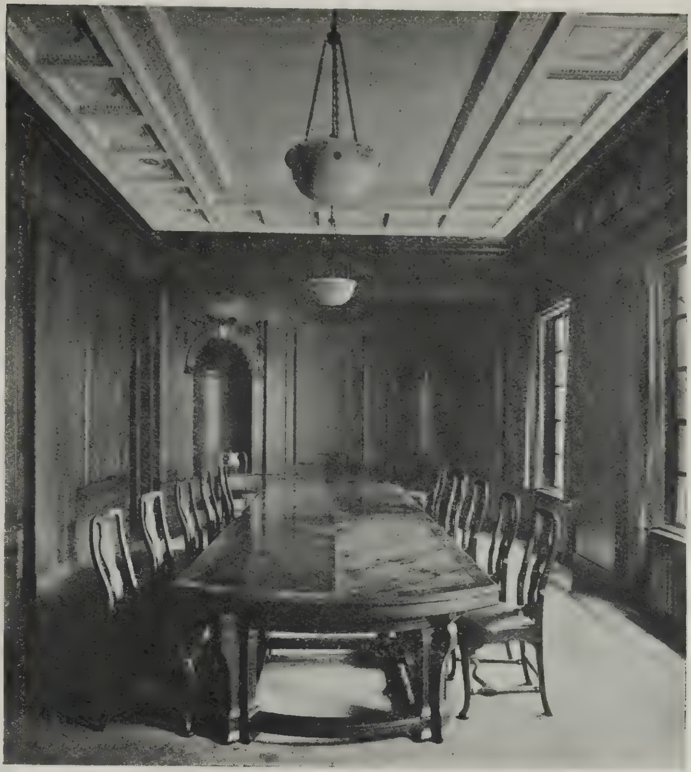
A VISTA OF THE ENTRANCE HALL.

THE PORT OF LONDON AUTHORITY BUILDING. T. EDWIN COOPER, F.R.I.B.A., ARCHITECT.



THE PORT OF LONDON AUTHORITY BUILDING. THE APSE ON THE SECOND-FLOOR LANDING.
T. EDWIN COOPER, F.R.I.B.A., ARCHITECT.

of the Orders; the first is early Doric, the next later Doric, the third Ionic, and the fourth Corinthian. All are in oak, with enriched plaster ceilings.



THE P.L.A. BUILDING: A COMMITTEE ROOM.

The contractors for the building were Messrs. John Mowlem & Co., Ltd. Mr. George A. Webster has acted as quantity surveyor for the Authority.

Wood carving.—The whole of the wood carving throughout the building was executed by Mr. George Maughton.

Among the sub-contractors were: Messrs. J. Whitehead and Sons, Ltd. (all internal stonework, pavings, and Subiaco marble); Messrs. G. Rome & Co. (plaster work); Messrs. F. de Jong & Co., Ltd. (fibrous plaster); Messrs. Mumford, Bailey and Preston (heating, ventilation, and kitchen equipment); Mr. William Smith (windows, special glazing, and all metal work, lamp, gates, grilles, etc.); Messrs. Smith, Major and Stevens, Ltd. (lifts); Messrs. James Gibbons, Ltd. (locks and door furniture); Messrs. John Mowlem & Co., Ltd. (screens, counters, and wall panelling); Messrs. J. P. White and Sons, Ltd. (furniture and fittings); Messrs. J. Whitehead (all architectural carving and internal plaster modelling); Messrs. Luxfer Prism Syndicate, Ltd. (fireproof glazing); Messrs. G. Matthews, Ltd. (grates); Messrs. J. A. Lawford & Co. (asphalt work); Messrs. Duke and Ockenden (well sinkers); Messrs. Hollis Bros. & Co. (oak wood-block floors); Mr. William Knight (painting); Messrs. Roberts, Adlard & Co. (slating); Messrs. Smeaton, Hanscomb & Co. (veneers to panelling in board room, etc.); Messrs. G. and T. Earle, Ltd., and the Wouldham Cement Co., Ltd. (cement work); the London Brick Co., Ltd. (Fletton bricks); Messrs. Joseph Brooke and Sons (stone steps and landings); Messrs. Haywards, Ltd. (iron circular staircases); Messrs. Matthew Hall & Co.(plumbing work); Messrs. A. and F. Manuelle (granite work); Messrs. F. J. Barnes, Ltd., and the Bath and Portland Stone Firms, Ltd. (Portland stone); Messrs. J. Gliksten and Son, Ltd.; Messrs. Wm. Oliver and Sons, Ltd.; and Messrs. Sidney Priday and Sons (hardwood); The Art Metal Equipment Co. (travelling ladder for dome); Messrs. Cope & Co. (tiling); Messrs. Dorman, Long & Co., Ltd. (steel erection); Messrs. Paripan, Ltd. (enamel work); Messrs. J. W. Gray and Son (lightning conductors); Messrs. W. H. Heywood & Co. (patent glazing); and Mr. W. J. Rasey (glazing).

# The London County Hall

## Designed by RALPH KNOTT, F.R.I.B.A.

## W. E. RILEY, R.B.A., F.R.I.B.A., Consulting Architect

THE County Hall is a building commissioned by a great municipality of comparatively recent creation whose business is to set precedents and not to rely upon them. In the first place they created a new precedent by placing their building on the south side of the river, and for its proper setting made a beginning with the southern embankment wall, thereby opening up a new era for Southern London and providing a magnificent opportunity for their chosen architect.

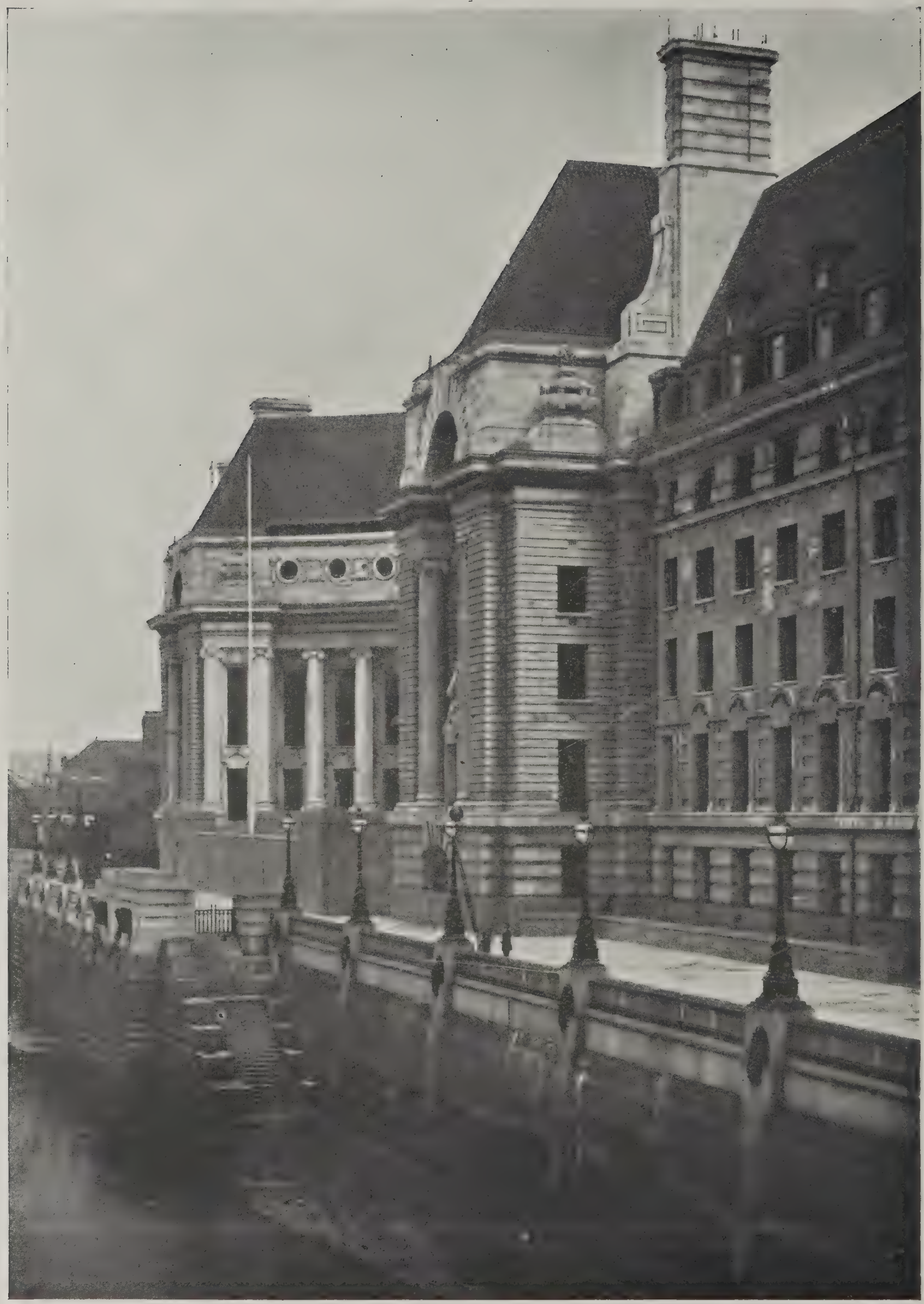
The plan of the building itself retains all the simplicity of the original competition design, but departs from it in the arrangement of offices on one instead of both sides of the corridors, in the provision of an additional entrance from Westminster Bridge Road, and in the semi-circular treatment of the centre portion of the river front. The bold differentiation of treatment between the centre or administrative part of the building and wings containing the offices is retained both in plan, elevations, and internal treatment, as also is the treatment of the roofs.

The Council Chamber is placed in the centre of the building, approached directly from all sides and cleverly arranged as regards levels to be reached without stairs except from the lower level of Belvedere Road. There is abundance of light everywhere; no dark corners or dark rooms, and no rooms looking out into narrow, ill-lit areas.

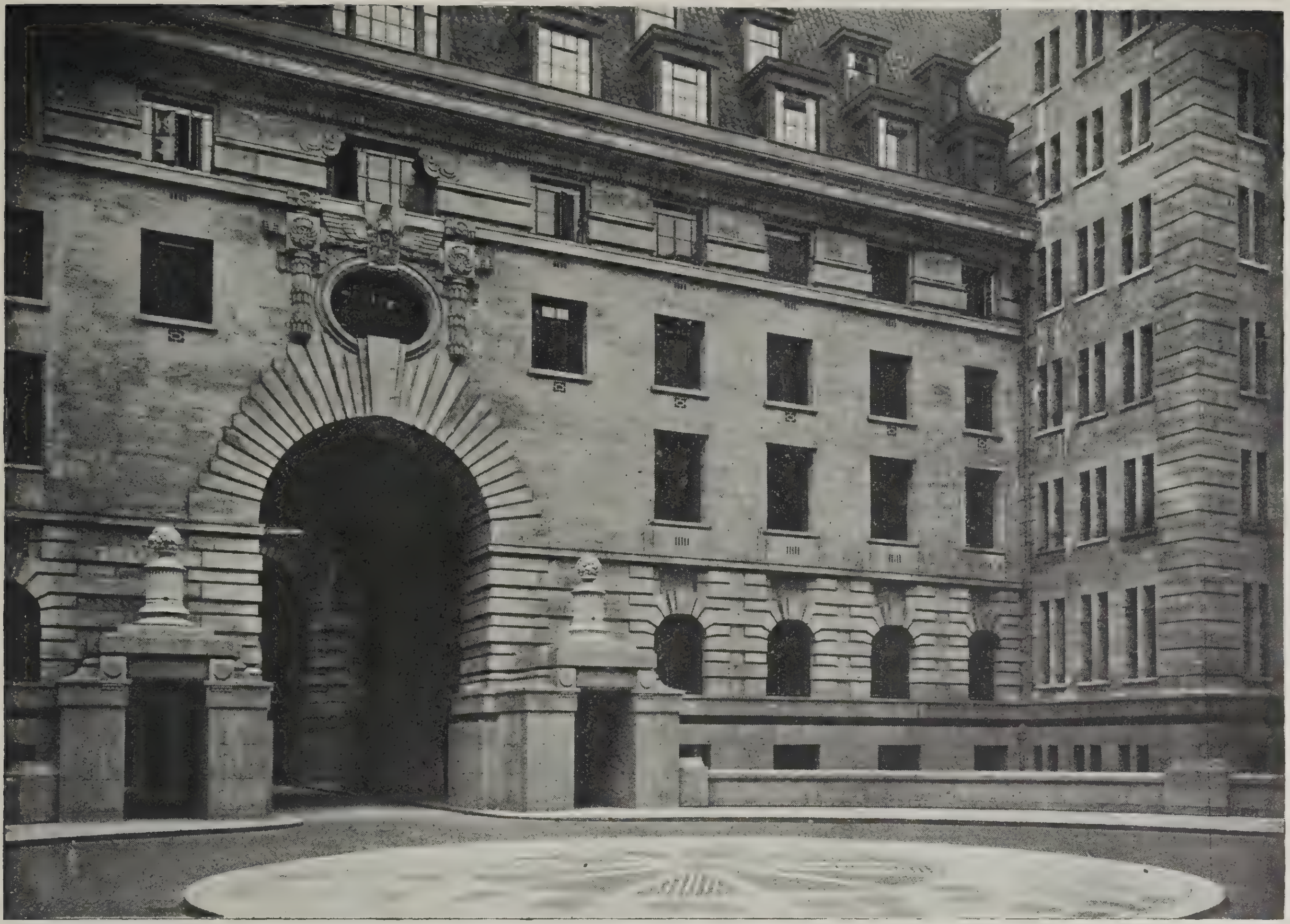
One of the most interesting features of the building is the arched and open stone-vaulted approach from Westminster Bridge Road.

On the Belvedere Road front the main entrance is marked by a colonnade of coupled instead of single Ionic columns as on the river front, surmounted with a high blocking course or parapet, behind which the tile roof is hidden.

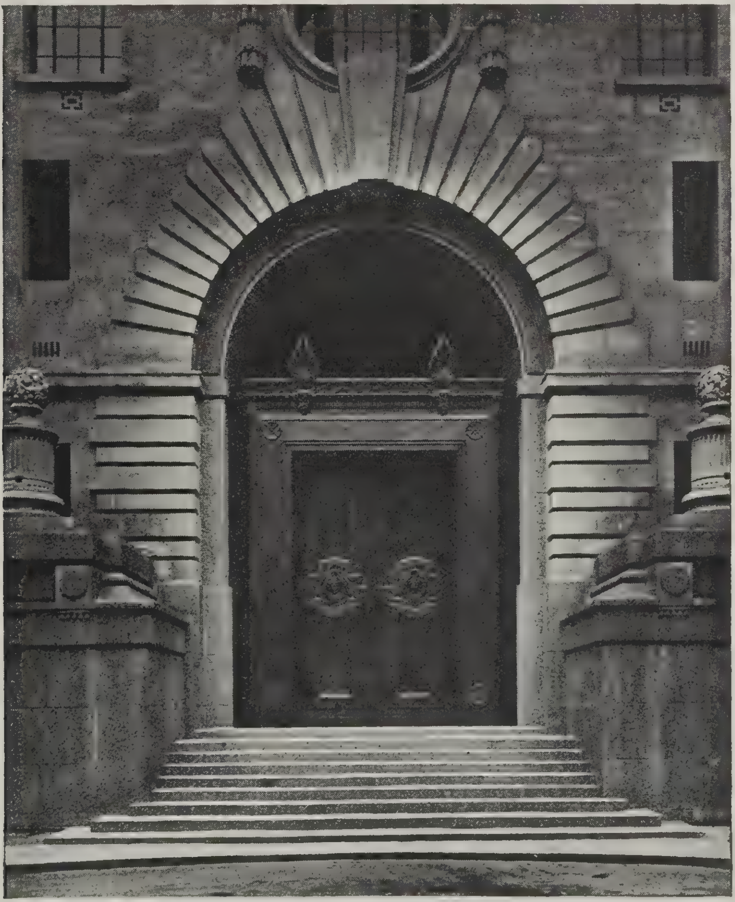
The contractors were: Messrs. Holland and Hannen and Cubitts, Ltd. (general contractors); Messrs. F. and H. F. Higgs, Ltd. (the foundation work); Messrs. E. C. and J. Keay, Ltd., and Messrs. J. Westwood & Co., Ltd. (structural steelwork); Messrs. Farmer and Brindley, Ltd. (whole of the decorative marble work); Messrs. J. Whitehead and Sons (constructional polished Roman marble work in the various entrance halls); Messrs. Henry Hope and Sons (steel casements, hardware, etc.); Messrs. Doulton & Co. (sanitary and plumbing work); Messrs. J. Jeffreys & Co., Messrs. Richard Crittall & Co., Ltd., Messrs. G. N. Haden and Sons, and Messrs. F. A. Norris and Dutton (general heating system); Messrs. Benham and Sons, Ltd. (cooking apparatus); The London Brick Co. ("Phorpres" Fletton bricks); Sneyd Collieries (glazed bricks); Waygood - Otis, Ltd. (lifts); Crittall Manufacturing Co. (all the bronze doors, exterior and interior); Messrs. Vertigan & Co. (hardwood parquet flooring); J. L. Emms (cast lead gutters and rainwater heads); Messrs. F. and C. Osler, Ltd. (electric-light fittings for main corridors, chairman's room, lobbies, and principal committee rooms); Messrs. Faraday and Son, Ltd. (electric-light fittings); General Electric Co., Ltd. (heavy cast bronze and ornamental glass electric-light fittings for entrance hall and several rooms); Messrs. Ames and Finnis (roof tiling); Messrs. F. Braby & Co., Ltd. (copperwork for flèche, dormers, etc.); La Brea Asphalte Co. (asphalt); The British Luxfer Prism Co. (lantern lights); Messrs. J. W. Singer and Sons (iron and bronze gate to ceremonial staircase); Expanded Metal Co., Ltd. (reinforcement for concrete work); Bromsgrove Guild (bronze lamp standards); Messrs. Strode & Co. (bronze and wrought ironwork); Messrs. Hobbs, Hart and Co. (whole of the locks); Messrs. Korkoid and Ruboleum Tile Co. (Ruboleum flooring—approximately 650 sq. yds.); Messrs. Dorman, Long & Co., Ltd. (steel constructional work); Messrs. Gillett and Johnston (electric clocks); Messrs. Davey, Paxman & Co., Ltd. (hot-water boilers); Express Lift Co. (electric lifts); Messrs. Heffer, Scott & Co., Ltd. (painting—"Keystona").



THE LONDON COUNTY HALL: A VIEW OF THE RIVER FRONT.
RALPH KNOTT, F.R.I.B.A., ARCHITECT. W. E. RILEY, R.B.A., F.R.I.B.A., CONSULTING ARCHITECT



THE LONDON COUNTY HALL: A GENERAL VIEW OF THE COURTYARD.



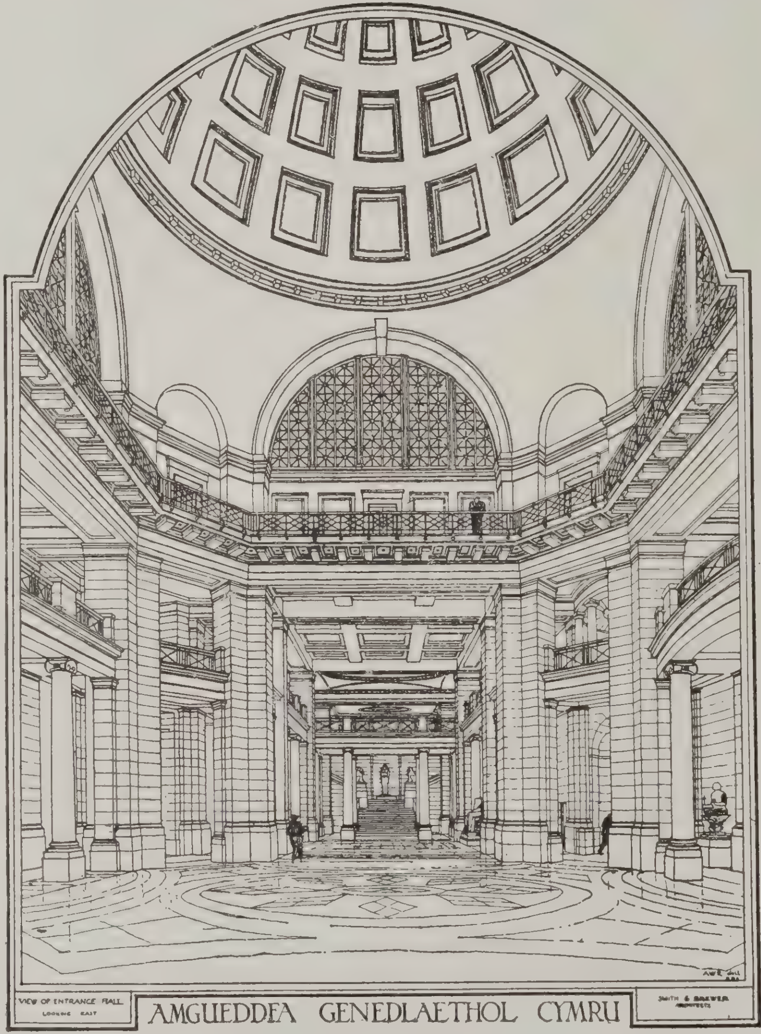
DETAIL OF ENTRANCE DOORWAY IN COURTYARD.

# The National Museum of Wales, Cardiff

## SMITH and BREWER, Architects

THE Welsh National Museum, opened on October 28, 1922, was begun in 1910, and work continued until 1915, but then, owing to the war, building operations ceased, and were not resumed again until 1920. A comparison of the model for the complete design with the actual building shows that the foundations for about half the building have been put in, that nearly a quarter of the superstructure, in an incomplete state, including the whole of the southern front, has been erected, while the portion now completed and opened to the public is about one-tenth of the complete scheme, and is situated in the south-west corner of the block. The building will ultimately use very completely a site about 4¼ acres in extent.

The leading motive of the plan is a large interior court 307 ft. long by 134 ft. wide, surrounded by the public galleries on two floors, while outside the public galleries is the space for the reserve collections with a mezzanine floor between the ground and first floors. This arrangement of the public galleries allows of the freest possible circulation on the ground floor, enables the maximum use to be made of the central garden, and permits of two floors of ample height without carrying up the external walls higher than those of the adjoining building.


VIEW OF ENTRANCE HALL LOOKING EAST
AMGUEDDFA GENEDLAETHOL CYMRU
SMITH & BREWER ARCHITECTS

THE ENTRANCE HALL

The magnificent entrance hall under the dome and two fine rooms to the west and east, intended for a children's museum and refreshment room respectively, occupy the south front, while immediately opposite the entrance is to be the Welsh Natural History Pavilion, designed for the display of the habitat groups in specially lighted alcoves. At the north end of the central court there is to be a similar pavilion for history and antiquities, while between them, in the centre of the basement, will be the aquarium. The lecture theatre, with its separate entrances, exits, and cloakrooms, is arranged on the east side, while in the north-east corner of the site it is proposed to erect an open-air theatre, constructed entirely of stone, and intended primarily for Welsh national folk-songs and dances. In the completed scheme the total superficial area in the public galleries and in the reserve galleries will be 81,000 ft. and 50,000 ft. respectively.

The administrative block, with library, committee-rooms, and offices, is arranged around the dome on the second floor; the basement is occupied by workshops, stores, and cloakrooms; and the sub-basement is used only for engineering plant, pipes, and the great ventilating trunks which carry the air to and from the vertical ducts in the walls.

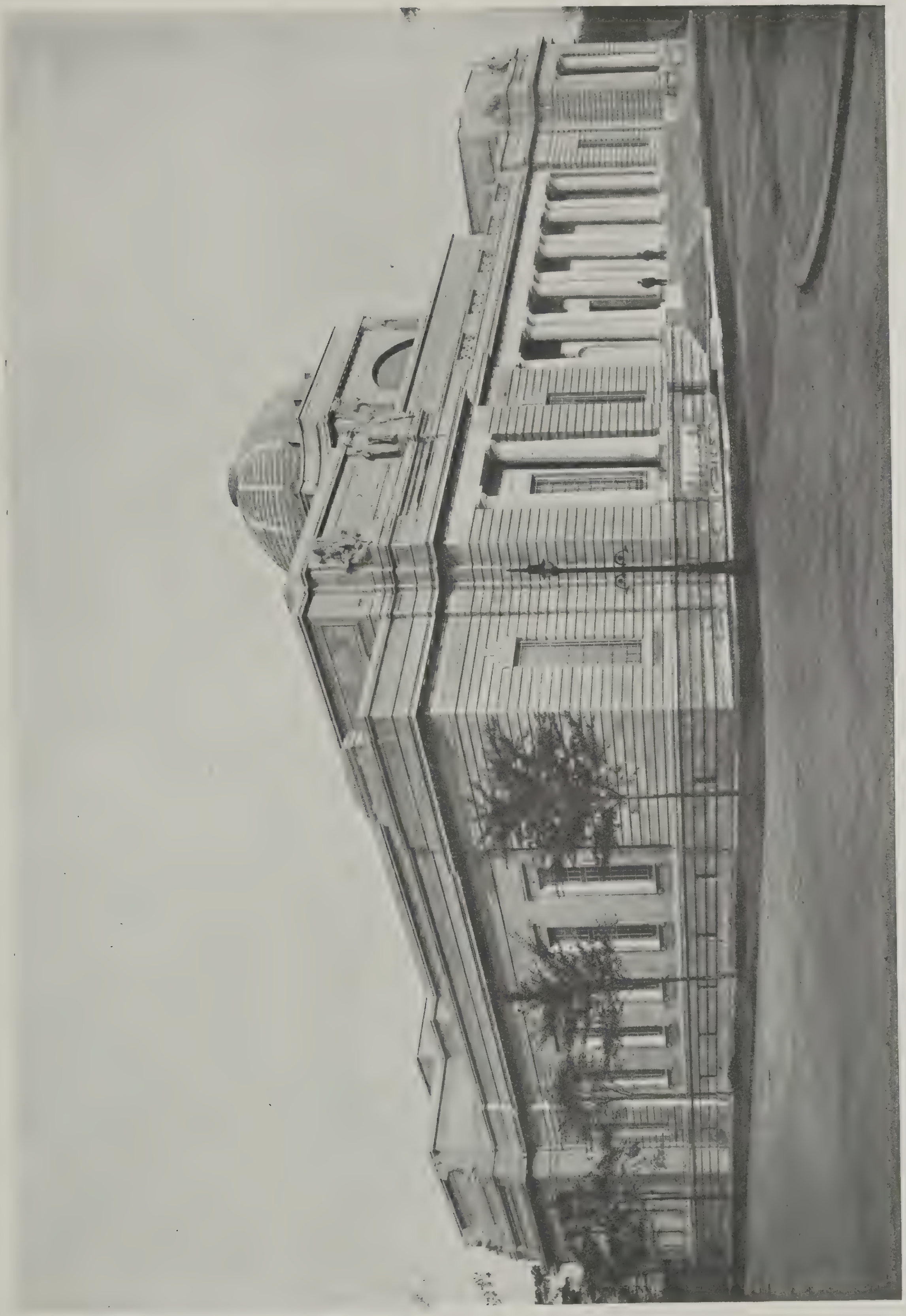
In the early perspective the dome was less lofty, and single columns were used in the entrance portico in the centre of the south front. This is now ably treated with a coupled Doric order, and is flanked by pavilions crowned by four groups of sculpture, the western pair, representing the Prehistoric and Classic periods respectively, being by Gilbert Bayes, while the eastern groups, executed by Richard Garbe, represent the mediæval and modern periods. The two groups on the western façade (facing the City Hall), representing mining and shipping, are the work of Thomas J. Clapperton, and are remarkable for their extraordinarily high architectural quality. The lions and dragons buttressing the dome are by A. Bertram Pegram.

Messrs. Joseph Armitage, George Alexander, and Harold Stabler were responsible for the general modelling work.

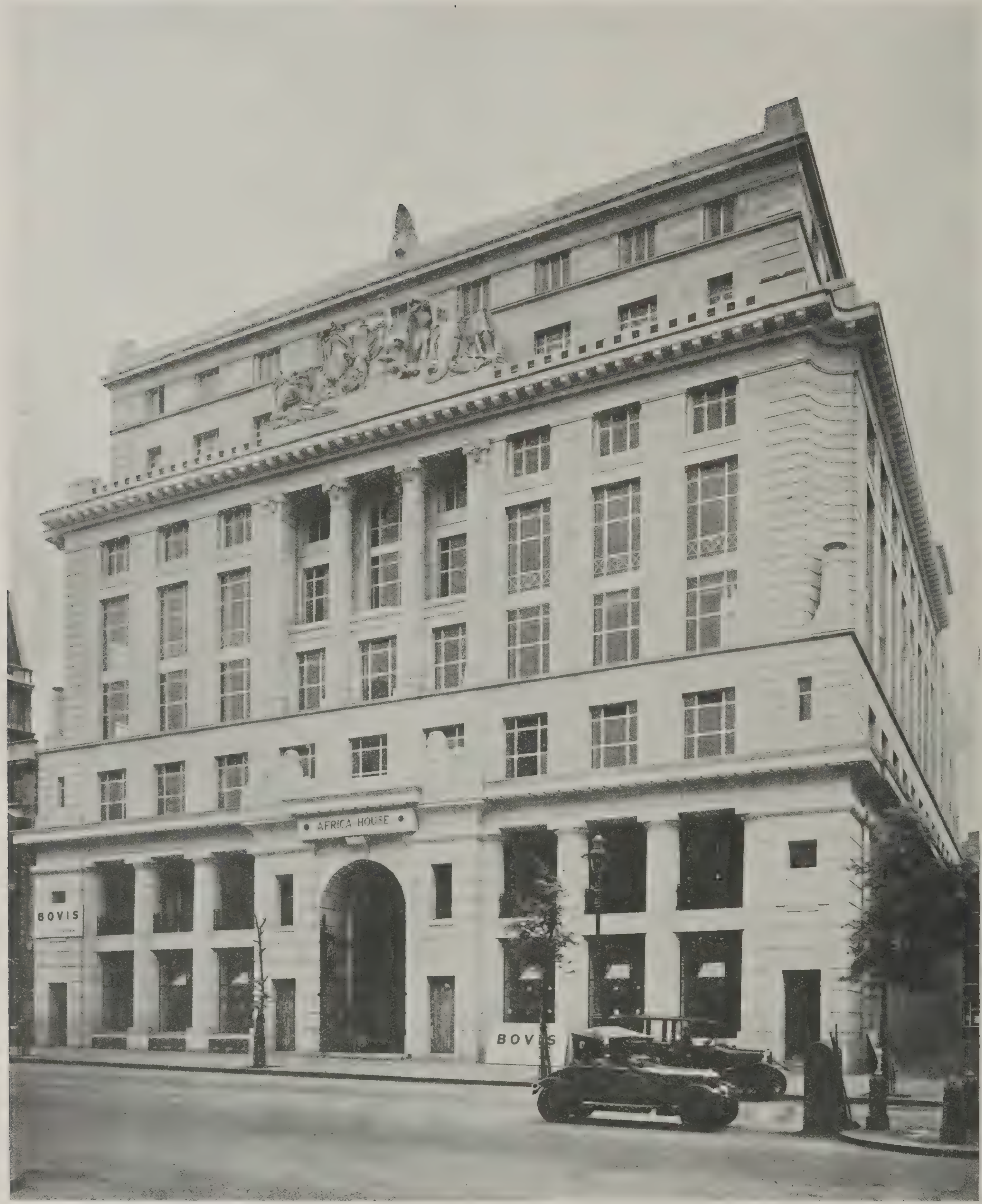
The contractors for the foundations up to 6 ft. above the ground level were Messrs. E. Turner and Sons, of Cardiff, while the superstructure has been erected by Messrs. H. Willcock & Co., of Wolverhampton. The consulting engineers for the steelwork were Messrs. Reade, Jackson, and Parry.

Among the sub-contractors were: Portland Stone Firms (stone); John Freeman and Sons & Co., Ltd. (granite); Glengarnock Iron and Steel Co., Ltd., A. D. Dawnay and Sons, Ltd. (steelwork); Art Pavements and Decorations, Ltd. (wall and floor tiles); Henry Hope and Sons, Ltd., Crittall Manufacturing Co., Ltd., John Williams and Sons (Cardiff), Ltd. (casements and casement fittings); Mellowes & Co., Ltd. (patent glazing and fittings); H. Willcock & Co., H. J. Cash & Co. (plumbing and sanitary work); A. Emanuel and Sons, Ltd. (sanitary ware); Bassant Bros., Ltd. (wood flooring); Fenning & Co., Ltd. (monolithic column piers, with carved capitals throughout the ground floor and decorative work to staircase, paving, steps, and skirtings, etc., throughout the various galleries); Korkoid and Ruboleum Tile Co. (rubber flooring); Crittall Freeman Bronze, Ltd. (bronze entrance doors); F. Geere Howard, Ltd., H. W. Cashmore & Co., Ltd. (electric light fixtures); Charles Smith, Sons & Co., Ltd. (door furniture); J. W. Singer and Sons, Ltd., Gardner, Sons & Co., Ltd. (handrails, balusters, etc.); Kingsmill Art Metal and Electrical Co. (gates); Arthur Sanderson and Sons, Ltd. (wall hangings); J. W. Gray & Co. (lightning conductors); Davey, Paxman & Co., Ltd., Colchester (boiler installation).

Mr. R. Howard Fletcher, B.A., was consulting electrical engineer, and Mr. T. J. R. Kiernan, B.Sc., consulting engineer for the heating and ventilating.



THE NATIONAL MUSEUM OF WALES, CARDIFF. SMITH AND BREWER, ARCHITECTS.



AFRICA HOUSE, KINGSWAY, LONDON. TREHEARNE AND NORMAN, ARCHITECTS.

## Africa House, Kingsway

MESSRS. TREHEARNE AND NORMAN, who have designed many of the new buildings of Kingsway, are also responsible for Africa House. This building is undoubtedly the most striking of their designs; it sounds quite a new note in commercial architecture, not only for Kingsway but for London.

In general conception it has a good deal in common with modern American work; there is the same sense of scale and proportion, the same reticence in elevational treatment. The use of a huge Order embracing the two lowest stories, and the setback of the two topmost floors, are also reminiscent of current Transatlantic practice.

Due emphasis has been given to the principal entrance which, occupying the height of two floors, is fitted with some well-designed wrought-iron gates.

The general contractors were Messrs. Bovis, Ltd., and among the sub-contractors were: Edw. Wood & Co., Ltd., of Manchester (steelwork); Medways Safety Lift Co. (main passenger lifts and electric goods hoist); Waygood-Otis, Ltd. (staff lifts); Nine Elms Stone Co. (stonework); Luxfer Co., and C. E. Welstead, Ltd., of Croydon (metal casements); British Reinforced Concrete Co. (reinforced concrete floors); Farmer and Brindley (marble work); Leyland and Birmingham Rubber Co. (rubber floors); H. Pontifex and Sons, and Shanks and Co. (sanitary fittings); Strode & Co., Ltd. (electrical work, iron doors, side entrances, and fire-hydrant main); J. W. Singer & Co. (iron entrance gates and doors); Benham and Sons, Ltd. (heating); Empire Stone Co. (staircases); Lion Foundry Co., Ltd. (escape staircases); Siemens Bros. & Co., Ltd. (telephones); Pyrene Co., Ltd. (fire extinguishers); F. B. Francis (carving); G. Jackson and Sons (fibrous plaster); James Gibbons, Ltd. (locks and furniture); Milner's Safe Co., Ltd. (strong rooms); Thos. Faldo & Co., Ltd. (asphalt).

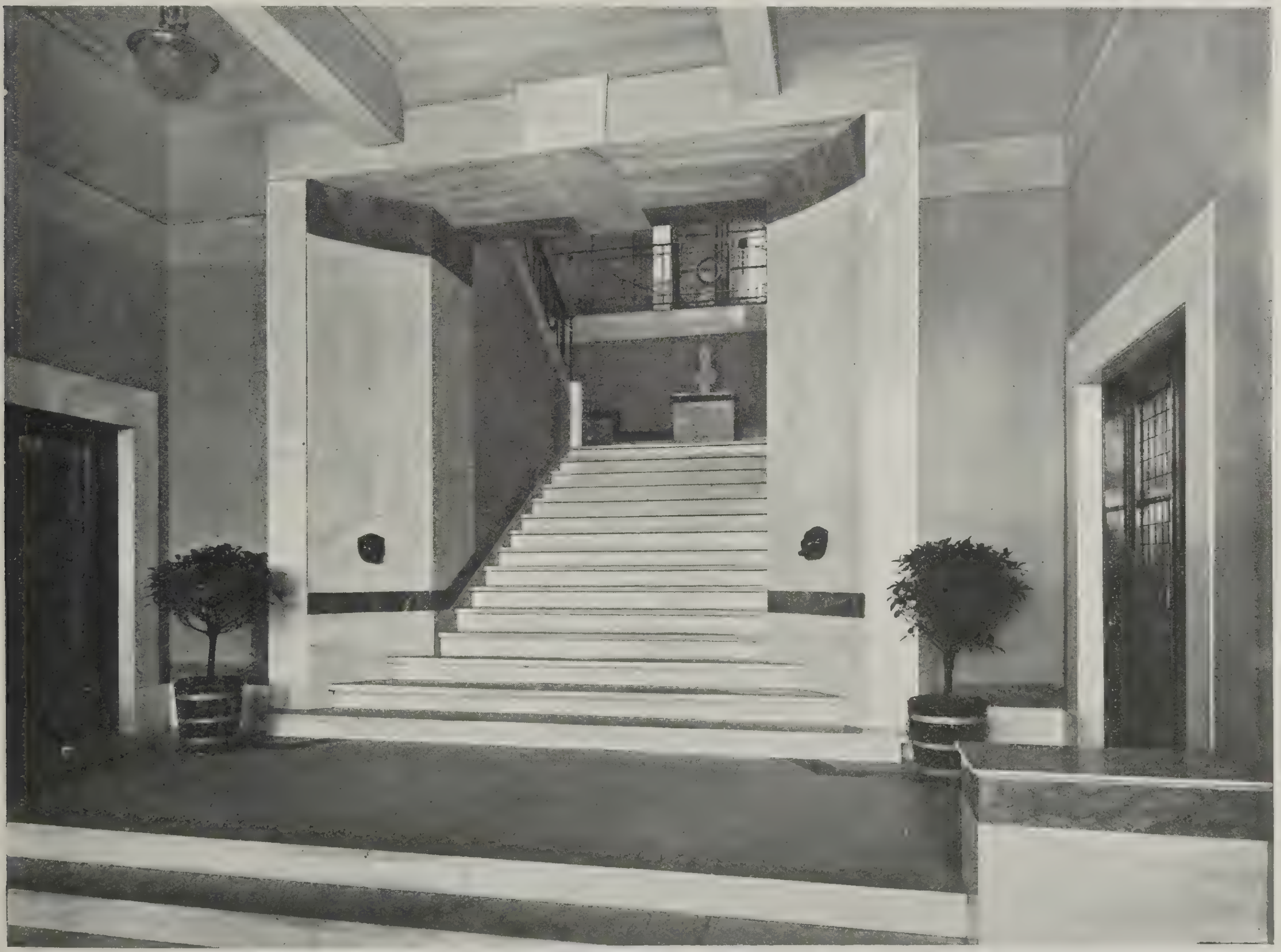
The whole of the internal solid plastering was carried out by The Grano-Metallic Paving and Plastering Co., Ltd. The 'Metalcrete" flooring of the Grano-Paving and Plastering Co., Ltd., was put down in the basement.

## The Wallace-Scott Tailoring Institute

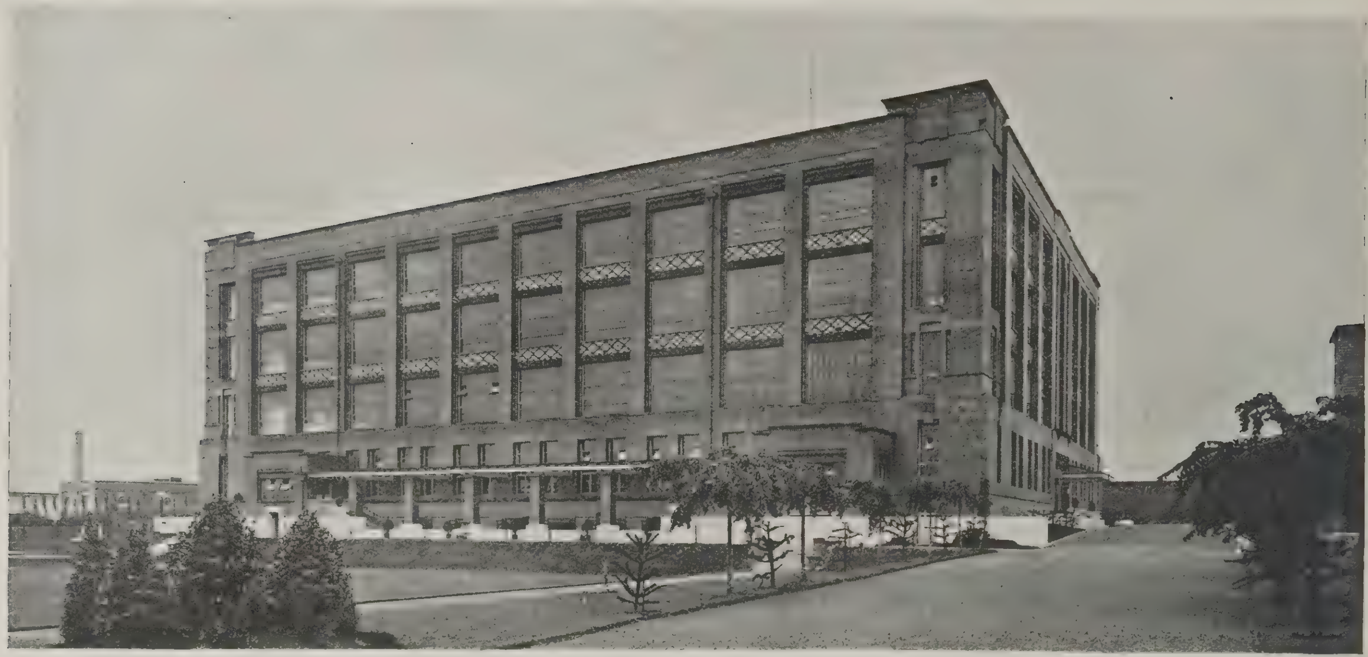
THE Wallace-Scott Tailoring Institute is the largest and finest structure of its kind, and enables Glasgow to challenge comparison with anything else in the country. The general plan is that of a right-angled U; this provides for the maximum of light and air reaching all parts. The main frontage has a total width of 170 ft. Here are placed the executive offices, approached by a handsome main entrance with massive marble stairway and oak-panelled walls. The four floors of each of the two wings are devoted to carrying on the various processes involved in the production of the company's specialities. The entire structure is practically fireproof, and, as an additional precaution, all stairways are outside the main walls.

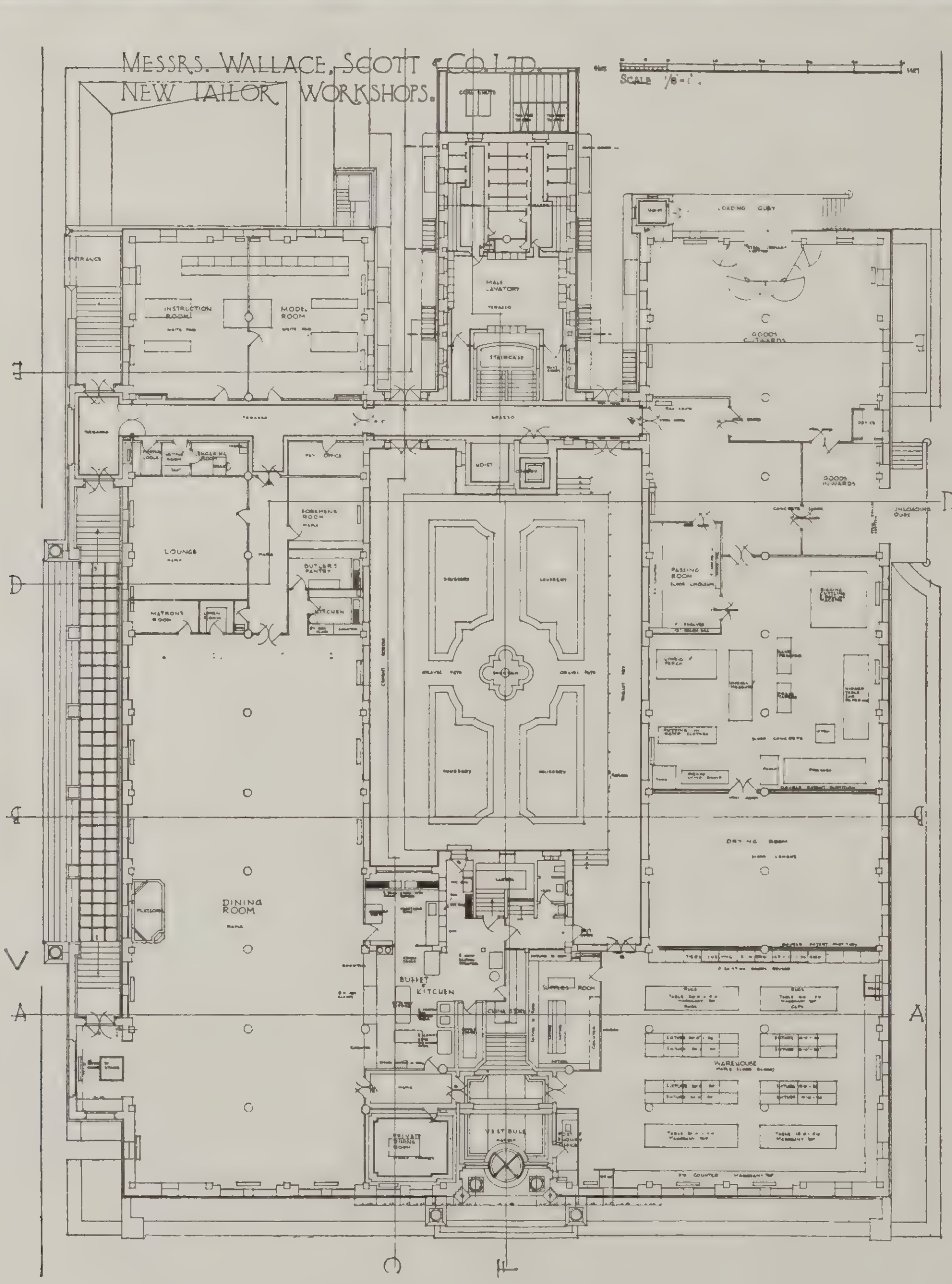
Separately housed are extensive plants for cloth-shrinking and for the firm's own "weatherproofing" processes.

Among the contractors were: Considère Construction Company, Ltd. (structural engineers); Melville, Dundas, and Whitson (reinforced concrete structure); Geo. Rome & Co. (Glasgow), Ltd. (plaster work); Henry Hope and Sons, Ltd. (metal casements); J. and W. Guthrie and Andrew Wells, Ltd. (painter work); Waygood-Otis, Ltd. (electric hoist); Mather and Platt, Ltd. (water tanks); Wm. McGeoch & Co., Ltd. (door, window, and cloak-room fittings); Chubb and Son's Lock and Safe Company (safes); Jas. Slater & Co., Engineers, Ltd. (cooking apparatus); Wylie and Lochhead, Ltd. (carpets); Scott Morton & Tynecastle Company, Ltd. (special furnishings); J. W. Singer & Son, Ltd (stair railings); Jas. Allan, Senr., and Son, Ltd. (railings).



THE WALLACE-SCOTT TAILORING INSTITUTE, CATHCART, NEAR GLASGOW: THE ENTRANCE VESTIBULE.
JOHN BURNET, SON, AND DICK, ARCHITECTS.





THE WALLACE-SCOTT TAILORING INSTITUTE: GENERAL VIEW AND GROUND-FLOOR PLAN.

JOHN BURNET, SON, AND DICK, ARCHITECTS.

# The Chief Architectural Events of 1922

## GENERAL

SIR CHARLES RUTHEN addressed the Society of Architects at the beginning of the year on Housing, and by the expression of his views upon the subject raised a storm of indignation. He eventually resigned his office as President of the society, and Mr. E. J. Sadgrove was elected as President for the remainder of the term of office.

The question of Higher Buildings for London was a subject for controversy throughout the year. The R.I.B.A. showed themselves unfavourable to the project, wherefore the Incorporated Association of Retail Distributors pressed for an extension of the L.C.C.'s by-laws. In February the L.C.C. decided to allow the erection to a height of 80 ft. of buildings whose content exceeded 250,000 cub. ft.

Mr. John Greaves was the successful architect in the Bengal Legislative Building Competition.

The R.I.B.A. Garden Party, which on two previous occasions had been held at the Royal Zoological Gardens, did not take place, the financial committee not considering themselves justified in recommending it, on the ground of expense.

An Exhibition of Art in the Theatre was opened in Amsterdam on January 14 by Mr. Gordon Craig, and was later held in London at the Victoria and Albert Museum, and then in Manchester.

In January work was begun on the British Empire Exhibition Buildings at Wembley Park.

The condition of Lincoln Cathedral was reported upon by Sir Charles Nicholson, F.R.I.B.A., and restoration and reinforcement work took place.

An exhibition of Present-day Industrial Art was opened in the Victoria and Albert Museum in January.

The annual provincial conference of the R.I.B.A. was held at Cardiff in June.

The internal decoration of ocean liners has become a subject of interest to architects. In February Mr. Arthur J. Davis, F.R.I.B.A., read a paper on the subject before the R.I.B.A., and Mr. Dodd read a paper in Liverpool upon the same subject. A special issue of THE JOURNAL was also devoted to it.

The Société des Architectes Diplômés par le Gouvernement decided to place at the disposition of the Council of the Architectural Association a grand medal, to be presented to the best student who received the Diploma of the A.A. School.

The well-known buildings in Charing Cross Road occupied by Messrs. Crosse and Blackwell changed hands, and a new super-kinema is to be constructed on their site.

The International Building Trades Exhibition was opened at Olympia in April by Mr. Paul Waterhouse, P.R.I.B.A.

A competition for "a business building, facing on an ordinary London street, in which colour would be the dominant feature," was opened by the R.I.B.A. Sir Edwin Lutyens was one of the assessors, and Mr. Arthur E. Pierce submitted the winning design.

With a view to encouraging good design in street architecture, the R.I.B.A. offered to award a premium annually for the most meritorious external design.

The Franco-British Union of Architects held their second annual general meeting in Paris in the first half of the year.

During the warfare in Ireland the Four Courts, begun in 1776 from designs made by Thomas Cooley, and completed by Gandon, were destroyed.

The Rome Scholarship in Architecture was awarded to Mr. Stephen Welsh, A.R.I.B.A., and the Henry Jarvis Studentship, offered by the R.I.B.A., to Mr. George Checkley, A.R.I.B.A.

The Dean and Chapter of St. Paul's appealed for a hundred thousand pounds with which to pay for absolutely necessary repairs.

The new Council of the R.I.B.A. dissolved the Unification and Registration Committee, but formed a new Committee "to obtain expert advice to draft a Registration Bill."

The site for the new London University remained undecided upon.

Mr. Stanley Hamp, F.R.I.B.A., was elected President of the Architectural Association, succeeding Mr. W. G. Newton, M.A., A.R.I.B.A., retiring President.

The Tenth International Congress of Architects was held under the auspices of the Société Centrale d'Architecture de Belgique at Brussels in September.

The first A.A. Annual Excursion held since 1914 took place in September, the party journeying to Holland.

Mr. H. St. John Harrison was the winner of the Society of Architects' Victory Scholarship.

Mr. Arnold Mitchell made an important archæological discovery in Dorset in the unearthing of a Greek statue of a woman of great beauty and antiquity. This was given to the Ashmolean Museum.

An Exhibition of Contemporary British Architecture was held at the R.I.B.A. in December. The exhibition aroused unusual notice by the lay Press.

The Whitgift Hospital, Croydon, was menaced with destruction by the Croydon Council during the last three months of the year.

An important town-planning conference and exhibition, convened by the Manchester and District Joint Town Planning Advisory Committee was held in Manchester in October.

Mr. P. B. Haswell, B.Arch., Liverpool University, was awarded the R.I.B.A. Medal for designs.

Mr. E. J. Partridge, F.R.I.B.A., was elected President of the Society of Architects, in succession to Mr. E. J. Sadgrove, retired.

The Adelphi, the well-known quarter of London built by the Brothers Adam, was offered for sale.

The Institution of Structural Engineers adopted that title for their body in place of the Concrete Institute.

The R.I.B.A. War Memorial Tablet, designed by Mr. Trenwith Wills, A.R.I.B.A., was unveiled by the Earl of Crawford and Balcarres on November 20.

A Grand Committee for the Wren Bicentenary celebrations was formed, Mr. Paul Waterhouse being President.

The National Building Guild became financially embarrassed and was obliged to hand over control for the term of three years.

Mr. Percy Thomas, O.B.E., F.R.I.B.A., was elected President of the South Wales Institute of Architects.

A new club was formed called "The Architecture Club," composed chiefly of architects and writers. Its activities were to consist in managing exhibitions of architecture, and in fostering interest in and criticism of architecture in the Press. Mr. J. C. Squire, the editor of "The London Mercury," was the President.

## NEW BUILDINGS

Among the new buildings which were completed during the year were the Public Hall and Library at Cwmllynfell, South Wales, from the designs of Sir Charles Ruthen, F.R.I.B.A.

Great strides were made with the development of Aldwych and Kingsway. Work on the Bush Building went rapidly forward, and several other buildings in Kingsway were brought to completion.

A new "Victory Arch Memorial Entrance" to Waterloo Station, London, was opened by the Queen. Mr. J. R. Scott was the architect concerned.

The reconstruction of Drury Lane Theatre, London, was completed, and the building opened in April.

New premises in Argyll Place, London, for Messrs. Liberty & Co., were started upon from the designs of Messrs. Edwin T. Hall and E. Stanley Hall, M.A., F.R.I.B.A.

The British Pavilion at Rio de Janeiro Centenary Exhibition was erected from the designs of Messrs. John W. Simpson and Maxwell Ayrton, FF.R.I.B.A.

The new London County Hall, designed by Mr. Ralph Knott, F.R.I.B.A., in association with Mr. W. E. Riley, R.B.A., F.R.I.B.A., late architect to the L.C.C., was opened by His Majesty the King in July. The building had been for fifteen years in course of erection.

The Governors of the Bank of England announced that the Bank was to be reconstructed from designs by Messrs. Herbert Baker and F. W. Troup, FF.R.I.B.A.

The erection of a new Coptic General Hospital was begun at Sharia Abbas, Cairo. Ch. Bougatsos, Lic.R.I.B.A., was the architect.

Nineteen-Twenty-Two saw almost the last of Nash's Regent Street, the stucco architecture of which was pulled down to make way for bigger and more modern shopping premises. Towards the end of the year Nash's own house in Lower Regent Street was demolished.

The new Southwark Bridge, for the architectural treatment of which Sir Ernest George, R.A., was responsible, was opened in the first half of the year.

The Port of London Authority's New Building, designed by Mr. T. Edwin Cooper, F.R.I.B.A., was opened in October by Mr. Lloyd George.

The Welsh National Museum, designed by Messrs. Smith and Brewer, was opened to the public in October.

## PERSONAL

Mr. Thomas Hastings was the Royal Gold Medallist for 1922.

A portrait of Mr. John Simpson, PP.R.I.B.A., by Sir Arthur Cope, R.A., was unveiled at the R.I.B.A. by Mr. Paul Waterhouse, P.R.I.B.A.

Major H. Barnes, M.P., F.R.I.B.A., lost his seat for Newcastle-upon-Tyne East, but another architect, Mr. G. W. S. Jarrett, won a seat at Dartford.

Mr. W. C. Fenton, F.R.I.B.A., was installed Lord Mayor of Sheffield—the first architect who had ever filled that position in Sheffield.

Mr. G. Gilbert Scott was elected R.A. in March.

Sir Bertram Mackennal was made an R.A. in November.

Mr. Herbert Baker, F.R.I.B.A., was made an A.R.A. in December.

Mr. A. Pollard, chief architect of the North-Eastern Railway, retired at the beginning of the year, Mr. S. Wilkinson, F.R.I.B.A., of London, being appointed as his successor.

Professor W. R. Lethaby, F.R.I.B.A., retired in January, after eighteen years' service, from the position of Professor of Design at the Royal College of Art, South Kensington.

### OBITUARY

The year's obituary includes the following names: Mr. J. H. La Trobe, F.R.I.B.A., of the firm of La Trobe and Weston, Bristol; Mr. George C. Ashlin, one of the best-known Irish architects; Mr. W. T. Oldrieve, principal architect in Scotland to the Board of Works; Mr. William S. Weatherley, F.R.I.B.A.; Mr. H. T. Sandy, of Stafford; Mr. Ernest Newton, R.A., F.R.I.B.A., "whose like will never be seen again"; Mr. John Black Hector, M.S.A., who was vice-chairman of the Executive Council of the A. and S.A.P.U.; Mr. George Eley Halliday, F.S.A., F.R.I.B.A., of Cardiff; Mr. James Black Fulton, F.R.I.B.A.; Mr. Alfred Williams, F.R.I.B.A.; Mr. A. Mackenzie, a well-known Highland architect; Sir Thomas Brock, R.A., at the age of seventy-five; Mr. S. C. Searle, A.R.I.B.A.; Mr. J. Barlow Fraser; Mr. Arthur Harrison, F.R.I.B.A., of Birmingham; Mr. J. Crocker, of Exeter; Mr. Howard Henry Thomson, F.R.I.B.A., of Leicester; and, lastly, Sir Ernest George, R.A.

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## Medals and Studentship for Business Buildings

Mr. Alfred C. Bossom, a distinguished English architect, who has for years been practising with signal success in the United States, recently revisited England, and was much impressed by the fact that the commercial architecture in England was not carried by the younger architects to the highest degree of economic advantage to the owner of the property.

He has decided to award annually in every large architectural training school in England and Scotland a silver medal for the best design for a commercial building based upon a programme prepared by some body of recognized standing like the Royal Institute of British Architects. With their drawings the students will have to submit their statement of cost and yield of the building, treating the matter as a real business proposition.

The designs by all the winners of the silver medal should then, he proposes, be judged by a jury consisting, if possible, of the president of the R.I.B.A., aided by a builder of wide reputation, who could check the estimates, and a property owner qualified to form an opinion as to possible revenue of such a building. To the winner of this second competition Mr. Bossom proposes to award a gold medal and travelling studentship to the United States, enabling him to study the very large industrial buildings and commercial undertakings in the United States.

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## Competition News

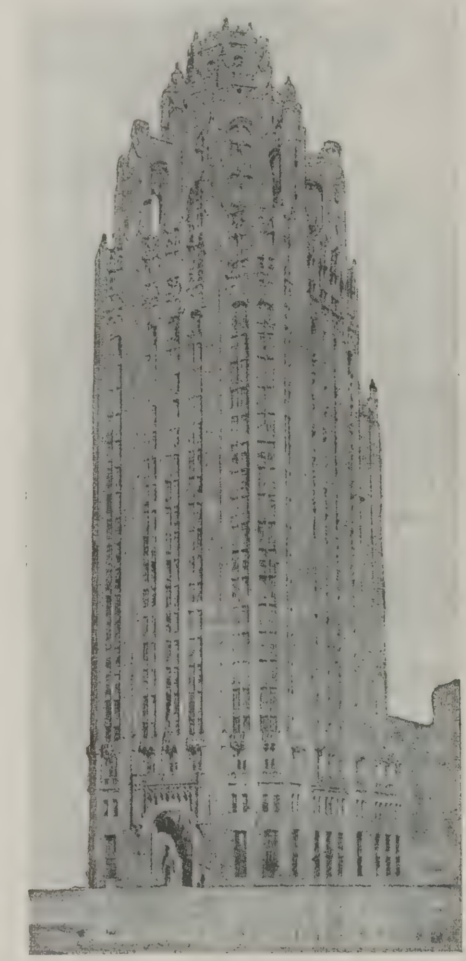
### *"The Chicago Tribune" Competition.*

In a competition organized by "The Chicago Tribune," for a design for office buildings for that newspaper, Mr. J. M. Howells, son of the well-known American novelist, won the prize, and with him was associated Mr. Raymond M. Hood.

Eliel Saarinen, Helsingfors, with whom were associated Messrs. Wallace and Grenman, was placed second.

The ten representative American architects whose response to the invitation to participate in the competition wins them an honorarium of $2,000 each, are: Bliss and Favile, San Francisco; Holabird and Roche, Chicago; Jarvis Hunt, Chicago; Schmidt, Garden and Martin, Chicago; D. H. Burnham & Co., Chicago; Andrew Rebori, Chicago; John Mead Howells and Raymond M. Hood, New York; Bertram G. Goodhue, New York; Benjamin W. Morris, New York; James Gamble Rogers, New York.

Designs which receive honourable mention were submitted by: Ernesto Fuchs, Guadalajara, Mexico; Thomas J. George, New York City; Guy Lowell, Boston; Hewitt and Brown, Minneapolis; Schmidt, Garden and Martin, Chicago; Edmund S. Campbell, Chicago; George F. Schreiber, Chicago; Richard Yoshijiro Mine, Urbana, Ill.; A. N. Rebori, Chicago; Louis Bourgeois, Francis E. Dunlap, and Chas. L. Morgan, Chicago, Ill.; Benjamin Wistar Morris, New York City; Alfred Morton Githens, New York City; F. Lilpop and K. Jankowski, Warsaw, Poland; Hugh G. Jones, Montreal, Canada; Charles H. Bebb and Carl F. Gould, Seattle, Washington; Felix Cabarrocas, Havana, Cuba; Jos. Schartz, Grand Duchy of Luxembourg; Otto Hoffmann, Vienna, Austria; Friedr. Stühmke, Berlin, Germany; Nicholas Wassilieff, Belgrade, Serbia; W. Th. Gregory and B. R. Saunders, London, England; Hutton and Taylor, Glasgow, Scotland; Jules Vanden Hende, Ghent, Belgium; Barry Hammond Dierks, Paris, France; Meischke and Schmidt, Rotterdam, Holland; Pierre Le Bourgeois, Nancy, France; Giuseppe Boni, Rome, Italy; Olaf Boye, Crawfurd Jensen, and L. W. Wilhelmsen, Christiania, Norway; L. Bode, Amsterdam, Holland; Hermann Herter, Zurich, Switzerland; A. Hamilton Scott and John A. W. Grant, Edinburgh, Scotland; Lechner Jeno, Budapest, Hungary; Lechner Lorand and Kantzky Tivadar, Budapest; Lippincott and Billson, Melbourne, Australia.



"THE CHICAGO TRIBUNE" COMPETITION: WINNING DESIGN.
HOWELLS AND HOOD, ARCHITECTS.

### *"The Daily Mail" Labour-saving Bungalow Competition.*

The number of designs entered by architects for the competition for labour-saving bungalows organized by "The Daily Mail" in connection with its Ideal Home Exhibition in March next totalled 768. The assessors, Mr. E. Guy Dawber, F.S.A., F.R.I.B.A., and Professor A. E. Richardson, F.R.I.B.A., have now made their report and the following awards:—

First Prize, £300—Mr. Jas. M. D. Henderson, A.R.I.B.A., M.S.A., Ayr, N.B. Second Prize, £125—Mr. C. Murray Hennell, F.S.I., in collaboration with Mr. C. H. James, A.R.I.B.A., Bloomsbury, W.C. Third Prize, £75—Mr. J. S. Hodges, A.R.I.B.A., Harlesden, N.W.

Messrs. Harold Williams, Tooting; E. Frank Ferry, Lic.R.I.B.A., Forest Gate; R. Collyer Clark, Wanstead; J. B. F. Cowper, A.R.I.B.A., Wildwood Road, N.W.; R. J. H. Minty, A.R.I.B.A., Charing Cross, W.C.; and Forbes and Tate, are highly commended.

Messrs. P. D. Hepworth, A.R.I.B.A., E.D.B.A., Gray's Inn Place, W.C.; B. de C. Jackson, A.R.I.B.A., Orpington, Kent; E. B. Musman, A.R.I.B.A., Bedford Row, W.C.; and V. F. Knowles, Oxhey, are commended.

### *Town Hall, Colwyn Bay.*

A premium of 50 guineas has been awarded to Messrs. J. M. Porter & Co., architects, of Colwyn Bay, for their design submitted in the above competition.

We shall illustrate the winning design in an early issue.

### *Town Hall, Colombo.*

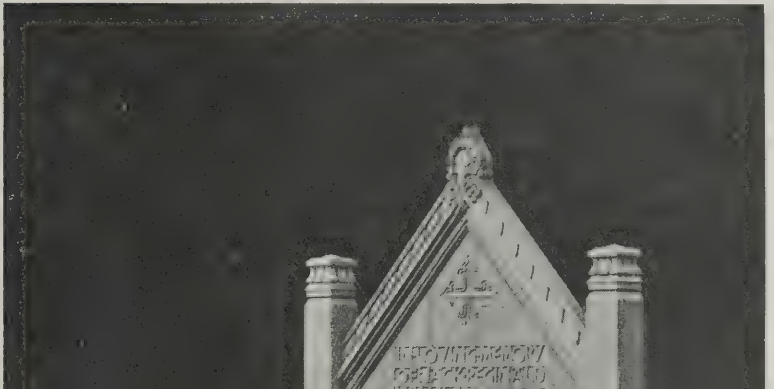
The prizes in this competition have been awarded as follows:—

1st S. J. Edwards, M.A., A.R.I.B.A., of Singapore.
2nd W. H. Bourne, F.R.I.B.A., of Allahabad.
3rd R. R. Sharmer.

Wednesday, January 10, 1923 Vol. LVII. No. 1462

# THE ARCHITECTS' JOURNAL & Architectural Engineer

*With which is incorporated "The Builders' Journal."*

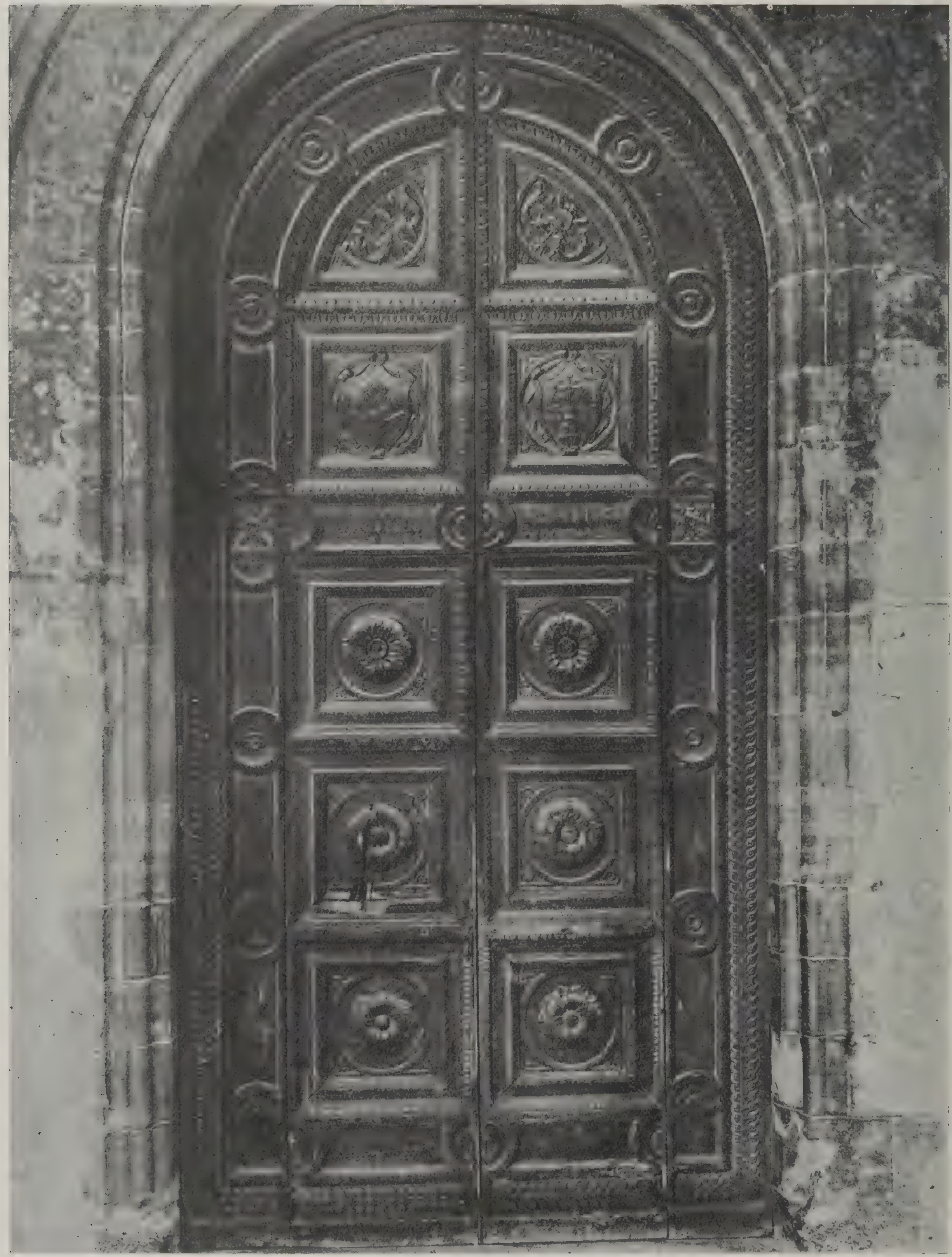


MEMORIAL CHAIR IN ST. JOHN'S CHURCH, STOURBRIDGE.
J. C. STYLES, ARCHITECT

27-29 Tothill Street, Westminster, S.W. 1.

# Architectural Details. 41.—Doorway in the Church of Saint Francesco, Montone

A. Bencivenne, Architect



This doorway—a fine example of Italian craftsmanship—was constructed in the sixteenth century. The mouldings and rosettes in each pair of panels differ in design, as also does each pair of rosettes on the architrave. Above the leaves of the door are two panels containing armorial bearings. The doorway is surrounded by a charming moulding.

THE

ARCHITECTS' JOURNAL

27-29 Tothill Street, Westminster, S.W.1.

Wednesday, January 10, 1923

Volume LVII. No. 1462

# Architectural Prospects

THE year is not so far advanced but that a speculation as to the prospects which it holds for architects is a fitting pursuit. Generally speaking it may be said that as the war period recedes so confidence and stability are increasing, and these are as essential for building activity as for any other enterprise requiring co-operation and capital: stability as to the prices of the labour and material markets, and confidence that this stability is likely to endure. This confidence ultimately rests on a human relationship; labour must have confidence in itself, in its leaders, and in its masters, and they in their turn must have confidence in their rulers and in their men. For successful architecture, furthermore, in contradistinction to mere building, yet another confidence is essential, and that is a general confidence of the public in architects; a particular confidence of the client in his architect.

On all sides there are signs that these things are happening, and the fall of building prices is not likely to be succeeded by any considerable rise. It is doubtful, however, if the fall will continue for long, and unless there is a general realization that this spring will be an unusually propitious time to put in hand long-deferred building schemes, artificial methods may be employed to convince a pusillanimous public of this fact. This method will probably take the form of a slight increase in prices to demonstrate that the bottom has been reached; if, therefore, as we hope, the public has confidence in architects it will listen to their exhortations to build now and defer no longer.

The work this year will mostly fall under three headings: large commercial buildings, small houses, and town planning. In this respect there is a marked change since the time before the war in the almost complete passing away of the medium-sized six-to-twelve-bedroomed house, which constituted the country's most typical contribution to modern architecture and provided the bulk of the architectural profession with its means of livelihood. Large commercial and municipal buildings can at the best provide employment for only a few members of the architectural profession. This would be so however the work were distributed, but the benefits are particularly restricted owing to the not surprising fact that much of this work is in the hands of a few particularly successful men. While, therefore, being of the utmost benefit to the building trade by employing much labour and a diversity of trades who find no place in works of humbler character, such work benefits directly only a small number of architects. We say "directly" because one kind of building influences another, and so it is impossible to estimate the amount of work which may indirectly arise out of one big job.

The building of smaller houses has hitherto proceeded, for the most part, without the co-operation of architects. One result of this procedure is that with a reviving interest in houses there has come an awakening to this astounding fact, that the buildings which house the bulk of the nation are clumsily, uglily, and uneconomically planned, and architects are being blamed on all sides for work which is bad just because they had nothing to do with it. This blame, ironical as it may seem, however, is not without some justification. Architects should, in some way, have been associated with the speculative builder in the past, and so have guided his useful activities along healthy, beautiful, and economical lines. One of the prospects that the near future holds out is that this association may come about. This changed attitude towards the building of small houses is largely the outcome of the Government's activities in the matter. The services of architects were enlisted, and the vast difference which arose from their co-operation was at once appreciated. The Government also realized, however, that some special adjustment of fees was necessary to meet this new situation, and now the profession itself is alive to the fact that the old percentage scale of charges is an unsuitable method for the assessment of fees for small houses where there is much repetition. Moreover, co-operation with the speculative builder implies a different relationship from that which occurs in the triple co-operation of client, architect, and builder, where one of the architect's most important duties is to safeguard his client's interests. What the speculative builder requires from the architect is the exercise of his special knowledge and training in planning and design, and the proper use of materials, but not supervision as to the quality of material and workmanship. Suggestions have been made that all the speculative builder requires is a book of plans. This, however, is quite inadequate. Houses are not things that can be bought over the counter, and each house must be considered as a special case in relation to its surroundings and other influencing circumstances. We sincerely hope, therefore, that the year will witness a growth of this desire on the part of the profession to co-operate with speculative builders in the provision of small houses, which may develop to the mutual benefit of architects and of the community.

The other category, that of town planning, is already engaging the attention of many architects, but the work is only beginning and will increase steadily during this year and the next, unless some unforeseen changes in policy occur. Directly and indirectly much work must arise out of the numerous schemes that will be prepared, but the full tide of activity will not occur in the present year. The preparation of a scheme of comprehensive magnitude is not the work of days or weeks, but of months—perhaps years. Almost every branch of human activity must be considered. The complexity of a modern town is the epitome of the complexity of modern organization and civilization. To design a new town on ordered lines is a synthesis of all the diverse elements which go to make this organization and civilization. This is surely the most important work, not only upon which architects will be engaged in this and the succeeding years, but also upon which they ever have been engaged. To design a noble building is one of the greatest feats of mankind, but to design an ordered town is surely a work than which there is nothing of more supreme importance. It is constructive in every way, for upon it depend the physical, the mental, and the spiritual welfare of the people.

With so much in view, therefore, it may surely be said with some justification that the architectural prospects are good. But however ripe the fruit may be it requires plucking. Architects must prepare themselves for, and adjust themselves to, the new conditions; they must realize, once and for all, that the day of the rich patron has passed, and that they must seek their work in other ways. A few big works there will always be, that will come privately or be won in open competition, but the real prospects lie in co-operation in the production of small houses and in town-planning and all its manifold subsidiary developments.

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## The London Guildhall Art Gallery

Why the City of London should be so ill able to bear comparison with provincial cities in the matter of art galleries is not so hard to understand as some critics protest. Liverpool, Manchester, Birmingham, and a few other cities whose art galleries are of high renown, are not augmented by the National and other galleries in which London is rich, and compared with which the Guildhall Gallery is a mere trifle. Nevertheless, that is no sufficient excuse for keeping the Guildhall Gallery so poorly supplied, and the City of London authorities have long chafed under the reproach of possessing what was probably the worst-equipped city art gallery in the kingdom, and they have made several attempts to deserve a better reputation. They have extended the Guildhall Gallery, sundry more or less important gifts and bequests of works of art having made necessary the addition of two large rooms, one for pictures and the other for sculpture. This "extension" has been opened without formal ceremony. About a hundred thousand persons visit the gallery in the course of a year, a fact which encourages the hope that ere long it will be perceived that so educative an institution, so potential an instrument of refinement, ought to be housed in a special building.

## A Travelling Studentship for the U.S.A.

We published in our last issue particulars of a new travelling studentship which is to be made available to students through the munificence of Mr. Alfred C. Bossom, the distinguished Anglo-American architect, who was recently on a visit to this country. During his stay here Mr. Bossom became "much impressed by the fact that commercial architecture in England was not carried by the younger architects to the highest degree of economic advantage to the owner of the property." To help to remedy this state of affairs Mr. Bossom proposes to award annually in every large architectural school in England and Scotland a silver medal for the best design for a commercial building based upon a programme prepared by a body of recognized standing, such as the R.I.B.A. These designs, it is suggested, shall then be further judged, and the winner awarded a gold medal and a travelling studentship to the United States for the purpose of studying commercial architecture. It would be churlish to resent the implied aspersion upon British architects. That commercial architecture in this country has not yet reached the high standard of the same class of work in the United States is generally admitted. But the fault is not so much due to a deficiency on the part of British architects as to a lamentable lack of acumen among our so-called business men. At the present moment, however, the point need not be further discussed. Let us be grateful to Mr. Bossom for his very generous suggestion, which we hope will be immediately taken up. That it will be seized upon with much enthusiasm by students we have no doubt. Mr. Bossom's studentship is likely to become a serious rival to the Prix de Rome.

## The New Architectural Knight

The knighthood conferred upon Sir Edwin Cooper, F.R.I.B.A., to whom we offer our hearty congratulations, is an honour well earned, and one that is calculated to enhance the profession of architecture in public estimation. The immediate *raison d'être* of the honour is, of course, the great Port of London building, opened but a few weeks ago. But Sir Edwin Cooper's distinguished record of work accomplished would justify the knightly distinction apart from the notable achievement of the P.L.A. building. Sir Edwin began his architectural career at Scarborough. He then went to the well-known firm of Goldie, Child, and Goldie, London. Returning to Scarborough, he joined in partnership with the late Mr. Herbert Davis and the late Mr. John Hall, practising under the title of Hall, Cooper and Davis, and winning the open competition for the Scarborough Municipal Schools. He shortly afterwards returned to London and collaborated with Mr. S. B. Russell, F.R.I.B.A. During this period much success was achieved in competition work. Mr. Cooper, in 1910, began practice on his own account, winning, in 1911, the competition for the Marylebone Town Hall. The Port of London success followed in 1912. Important buildings now in course of erection from the designs of Sir Edwin are the military hostel (which will be the British Red Cross War Memorial) on the site of the old "Star and Garter" on Richmond Hill, the Banque Belge pour l'Etranger, in Bishopsgate; new premises for Messrs. Spillers Milling and Associated Industries, Ltd., St. Mary Axe; University Buildings, Cambridge; and the College of Nursing, London.

SIR EDWIN COOPER, F.R.I.B.A.

## The Newcastle Election

Major Barnes will have the united good wishes of architects in his fight for the Parliamentary representation of East Newcastle, the seat which he held in the last Parliament and lost to Labour at the General Election. Considering their importance to the well-being of the community, architecture and building are very inadequately represented, numerically, in Parliament. Major Barnes, who made a considerable reputation as a parliamentarian in the last House, is too valuable a man to be allowed to remain outside its walls, and we hope that Newcastle architects will rally to his support. His opponents are Mr. Arthur Henderson (Labour) and Captain Gee, V.C. (Conservative). Polling is expected to take place on January 17 or 20.

# Modern Craftsmanship

## By BASIL OLIVER, F.R.I.B.A.

CRAFTSMANSHIP is defined in Murray's "New English Dictionary" as "The performance or occupation of a craftsman; skill in clever or artistic work; skilled workmanship. . . ." Craftsman, therefore, in its true sense, can be applied to anyone who has mastered his craft such as—to instance only the building trade—a first-rate bricklayer, mason, carpenter, joiner, plasterer, plumber, and, indeed, to all the best tradesmen on whom architects depend for the successful realization of their ideas.

The term should be an honourable distinction conferred by his fellow-workers in a particular trade on a man who has passed a certain standard of excellence, quite irrespective of extra remuneration, now made impossible by trade union rules. If it were otherwise the suggestion would not work, because it would become a matter of influencing the judging committee to secure an increase in wages for an unworthy candidate.

For a workman to be able to call himself a craftsman should be the laudable ambition of all those who really take a pride in their work, but the word is used nowadays as meaninglessly as "lady" and "gentleman." Perhaps the ideal will be realized when no man can call himself an architect until he has earned the right to do so. It is only fit and proper that he—for he is, in fact, the master-builder—should set the example.

If it is no longer possible for an employer to pay a good worker more than a bad one, the master can still get rid of the latter, and give preference to the former by the mere act of employing him. In the old days of craft guilds bad workmanship and slackness were dealt with by fines and other penalties, but we have to take things as they are now and make the best of them. What we have got to do to bring about craftsmanship in its true sense is to arouse and sustain the interest of building trade employees. Something in this direction might be done at the commencement of every job by the architect treating the workmen as allies, showing them the plans, and explaining his intentions. It would surely stimulate the enthusiasm of even the labourers if they knew beforehand what it was all about, and it might conceivably reduce the monotony of perpetually mixing mortar and handling bricks, and so forth.

It is always an advantage, too, when the contractor is more than that, and it makes for more harmonious working when the client is not obsessed with the idea that the builder is a rogue. If the employer expects the best out of his architect, his builder, and the builder's workmen, he is more likely to get it. As in all things it is the human touch that is wanted.

The time has now arrived when it may be a matter of interest also to take stock of the post-war position of the artistic branch of craftsmanship usually known as Arts and Crafts, as distinct from the less fashionable, but more necessary, skilled craftsmanship of the building trades.

The main points for consideration are supply, demand, and quality.

With regard to the first there is no question. As recently as May 13 last, in "The Morning Post," that distinguished French artist and writer, M. Jacques-Emile Blanche, made the amazing statement that "Living in Paris to-day are at least fifty thousand professional artists, who show their work, think they have genius, and hope to earn a livelihood by means of the brush." This stupendous figure, be it noted, only relates to painters of canvas, or, in other words, to what is generally known to the lay mind as Art, and even High Art. What would be the number in London one wonders? Well, if the same state of things exists here—and probably it does—it must be obvious to the would-be successful painter that the chances of earning a living wage are small indeed, with so many competitors to beat.

The supply of sculptors seems adequate, and it is notorious that the architectural profession is overcrowded, though there is always room for more in the ranks of those who may fitly be called artists.

One could enumerate some of the lesser arts and crafts all of which have their full quota of budding aspirants.

The inference, therefore, is that those about to embark upon an artistic career should divert their gifts into less familiar channels with a view to beautifying and improving articles of everyday use. Easel-pictures are often delightful, but they cannot be called essential.

There is still immense scope for originality in furniture designing, especially in that for household purposes, by which is not necessarily meant cabinet-making only, but everything that goes to the making of a home.

Under the heading of demand comes the question of educating the public. The Design and Industries Association constantly, the British Institute of Industrial Art periodically, and the Arts and Crafts Exhibition Society spasmodically, have all done invaluable work in this direction. Public taste in recent years undoubtedly has improved, as, for instance, in the ever-increasing appreciation of the best of our modern posters, constituting what has been called the "Poor Man's Art Gallery." These small influences must, however, be multiplied indefinitely before they can even approximate to the insistent power of modern advertising. The official figures given of those who visited the most recent exhibition of modern industrial art at the Victoria and Albert Museum afford a most gratifying proof of public interest. But for a still more representative exhibition, which is likely to be of more discriminating selection, of contemporary work we must await the next effort of the intermittent Arts and Crafts Exhibition Society.

It was a great step forward on the part of the Royal Academy when that body placed the Burlington House Galleries at the disposal of the Society for its last exhibition held during the war. Under the now more favourable conditions the omens are that the forthcoming exhibition of Arts and Crafts which opens on the 15th instant, in conjunction with the Royal Academy Exhibition of Decorative Art, may well be the most successful ever held, at least in quality if not in quantity.

If only society paragraphists in the newspapers would conspire to make the Private View Day of such exhibitions as important social functions as those of the Annual Summer Exhibition at Burlington House, the public would probably "keep the turnstiles busy"—as the saying is—with advantage to the cause of modern British craftsmanship. After all, this would be only a method of attracting the superficial, but none the less influential section of society. Of far greater importance is it to educate and interest the great "third class passenger" section of the community.

When Mr. Bernard Shaw made Mrs. Patrick Campbell express herself in "Pygmalion" more forcibly than had hitherto been usual on the stage (except, perhaps, at rehearsals) the success of the play was assured. So it is with art exhibitions. There should always be a predominant attraction, regrettably vulgar as this may seem, to make the show a financial success.

With regard to the all-round quality of modern British craftsmanship, it never ranked higher. Before the war we had good proof of the estimation the French and Belgians had for our work by the very successful exhibitions held in Paris and Ghent respectively. No artists in the world to-day are painting so well as the British, excepting, of course, the negligible few incompetents seeking a short cut to fame by shock tactics; our native sculptors and architects generally can more than hold their own, while our country-house architects are acknowledged pre-eminent by all foreign rivals. There are half a dozen or so stained-glass painters in England who are doing the finest work in the world.

At poster designing, woodcut engraving, and lithography we are just as good, in our own way, as the French, and there is little to choose between us and Americans and Germans at book production, which naturally includes both printing and binding. It is a fact, however, that the excellence of modern German printing can be traced to the revival of good lettering in England. The improvement is entirely due to what the Germans absorbed here before the war. As an instance of their customary thoroughness they sent representatives over to this country especially to study (? to copy) the furniture of the late Ernest Gimson, and it was quite characteristic of us that when the Germans visited High Wycombe and inquired where Gimson lived no one knew!

Our best metal-workers and jewellers exhibit character and individuality. Examples of their work are to be found in American and Continental art galleries and museums. Their merit has long since been recognized by discerning curators.

How we stand with foreign countries in regard to ceramics, textiles, and wood-carving it is hard to say. We have greatly improved, and are doing very fine work, but so are they.

Our war memorials are no worse than those in France. The best of ours are very, very good, but the worst are horrid. The provincial monumental mason in France has been more ambitious, so his fall has been greater in many cases, but what could be more banal than the average war memorial to be seen in going about rural England to-day? It is curious how the idea has prevailed so frequently of employing the local monumental mason, regardless of his limitations, both to design (a euphemism) and to execute war memorials. What is even more distressing is that members of committees, with conspicuous exceptions, have not got the knowledge to distinguish between good and bad, which brings us back again to the all-important question of the education of the public.

How truly Professor Lethaby has pointed out that "We do not allow shoddy in cricket or football, but reserve it for serious things like houses and books, furniture and funerals."

No consideration of the subject of æsthetics would be complete without reference, so far as the affairs of the church are concerned, to the intelligent functioning of the newly-formed diocesan advisory committees whose activities must have been of great assistance to perplexed chancellors in need of expert advice. It is all to the good that the granting of a faculty in the future will not be such an easy and merely formal proceeding as it has too frequently been in the past, and the check on vandalism will be considerable. This commendable innovation is distinctly a forward move, and is more than a ray of hope for the encouragement of the best contemporary craftsmanship. The example thus set is bound to bear fruit in other directions. For instance, the new machinery set up incidentally strengthens the work of the Society for the Protection of Ancient Buildings, and less directly that also of the Civic Arts Association.

Another healthy sign is the way in which the admirable suggestion for a register of craftsmen, made by Mr. H. B. Creswell (in his letter to the "Journal" of the R.I.B.A. of September 23), is gaining ground and looks like becoming an accomplished fact. Some such scheme is urgently needed to help the individual and genuine craftsman in his fight for a living against the bottomless purse of mere commercialism. Mr. Cresswell put the case so well that all architects should read and re-read his letter and mark, learn, and inwardly digest what he has written without any exaggeration. He referred to sub-letting. That really is the crux of the whole question. If architects would, whenever possible, try only to deal with the actual executants, half the battle would be won. Moreover, each individual craftsman should have credit for his work.

Notwithstanding the apathy of the frivolous and movie-minded, to say nothing of trade fluctuations, British art and craftsmanship survive and flourish, and I, for one, feel that there is every reason for optimism in the future outlook.

# The War Memorial Chapel at the Royal Military College, Sandhurst

### A. C. MARTIN, F.R.I.B.A., Architect

WHEN completed the Chapel of the Royal Military College, Sandhurst, will be one of the greatest memorials to officers in existence, commemorating upwards of seventy regiments and corps, the Indian Army, the Cavalry, and very many individual officers. The Royal Military College was moved from Great Marlow to Sandhurst in 1812. The first chapel was a room opening out of the Grand Entrance, and it was first used in 1813. When a new chapel was opened in 1879 this room became a museum, later on was a mess room, and it is now a library.

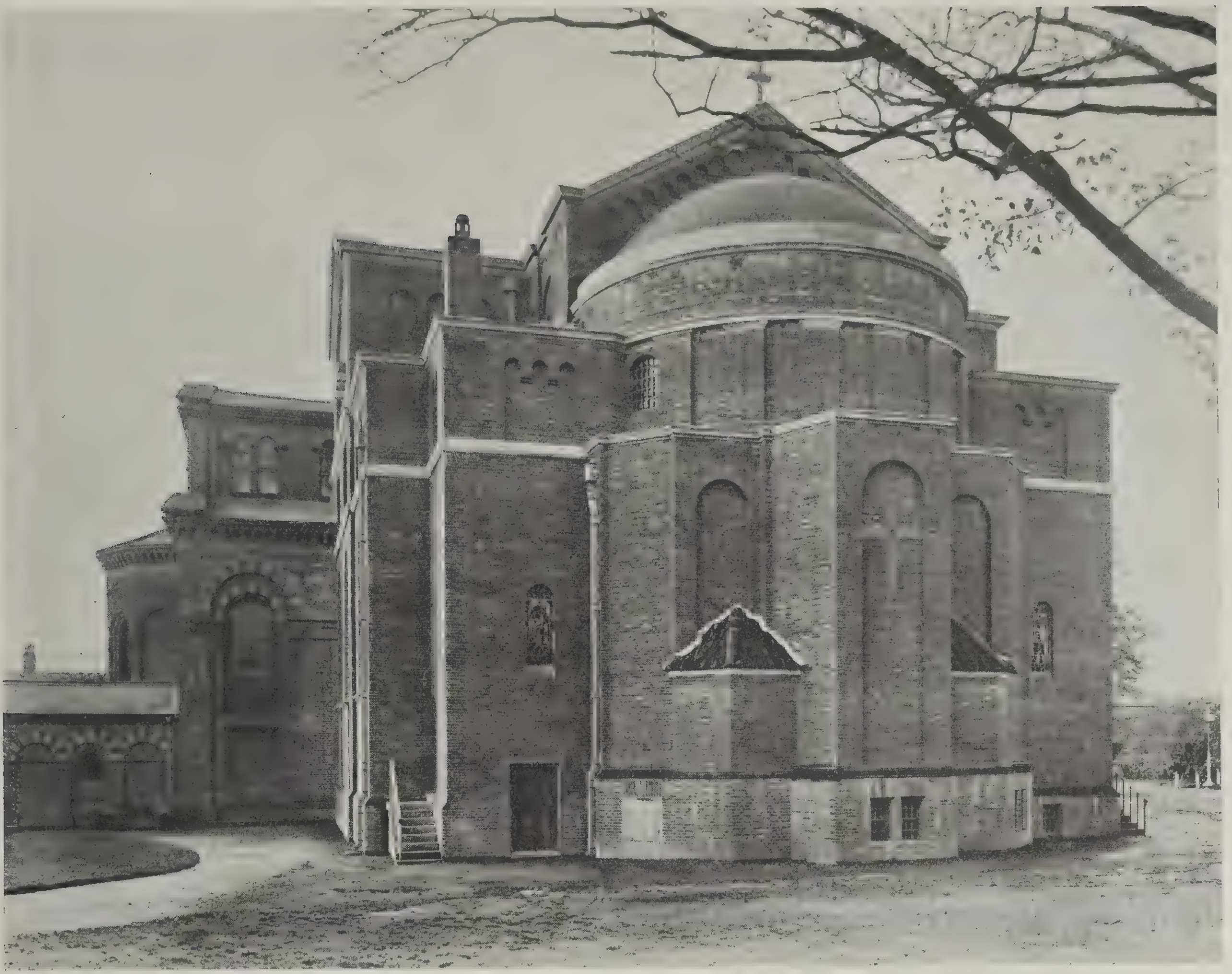
When it was decided to build a separate chapel a discussion arose as to the most suitable site, and some of those in authority wished it to be in front of the College buildings. The present site, however, was selected, and in 1879 the chapel was dedicated with the name of Christ Church.

The Royal Engineers were responsible for the design of the building, and they took a church in Florence as their model. Shortly after the chapel was built a scheme of decoration, copied from the Cathedral Church at Siena, was drawn up by Colonel R. H. Williams, R.E. This consisted of a combination of alabaster and choice marbles. A remnant of it can still be seen near the vestry door.

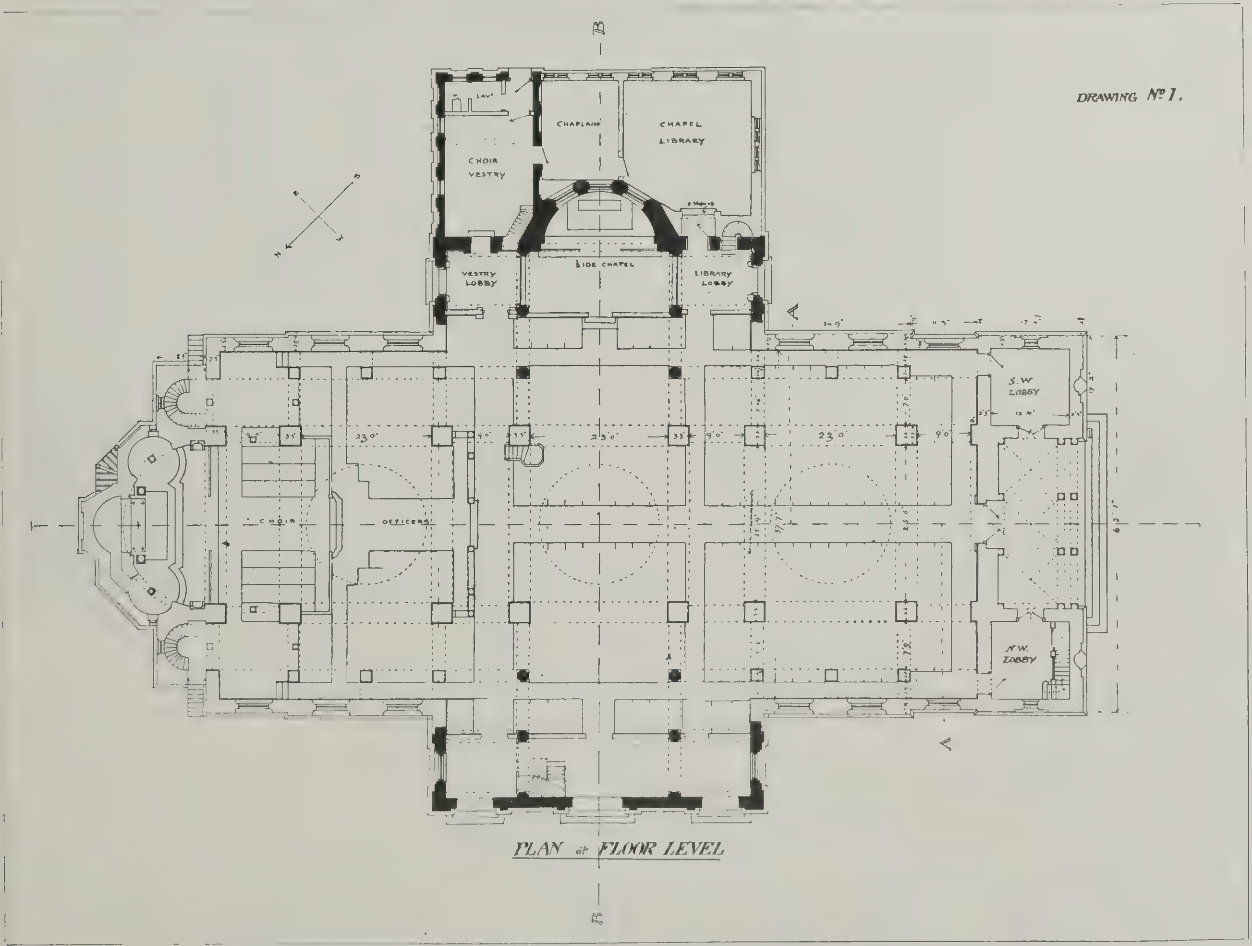
In June, 1883, a Memorial Fund was instituted, with the intention of inscribing on special "War Panels" the names of all those who had passed through the College and had lost their lives on active service. Circular marble tablets were also put up, and, by direction of the Commander-in-Chief, H.R.H. the Duke of Cambridge, they were reserved for the names of past Governors of the College. Relatives were also allowed to have private memorials cut on the walls, between the tablets and panels.

Ten of these war panels were completed with the names of those who fell in the campaigns from 1855 to 1898, and they bear some 240 names in all.

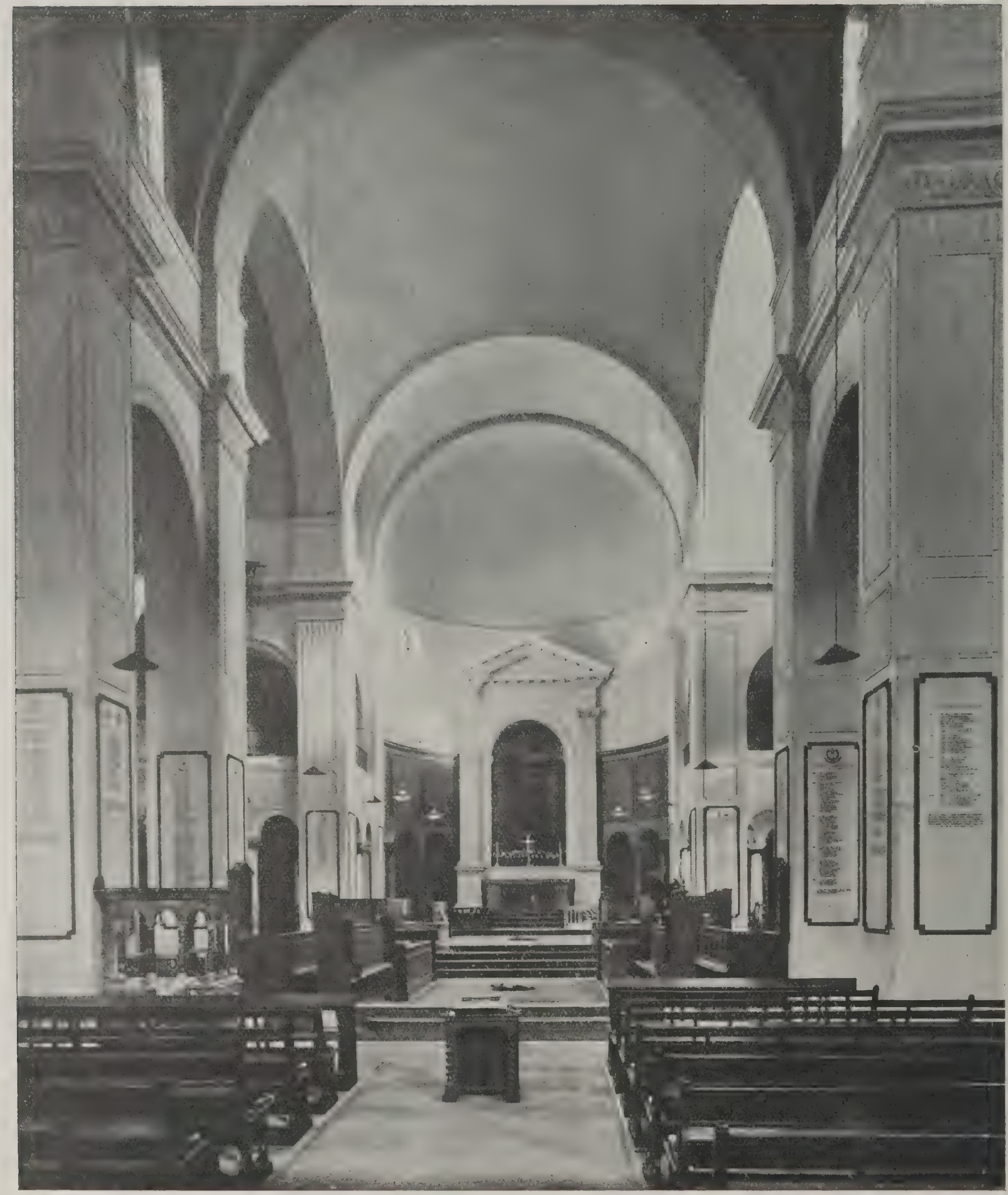
Then came the South African War, and its toll of 262 lives of past Sandhurst Cadets. Only three panels remained, and these were quite insufficient for so many names. Some new arrangement had to be made, and Mr. G. F. Bodley, R.A., was called in to advise. He suggested that the original dado of strips of coloured marble should be removed, and that a series of twin panels of Rossa Antica marble should be put up in its place. This was carried



THE NORTH-EAST ELEVATION.

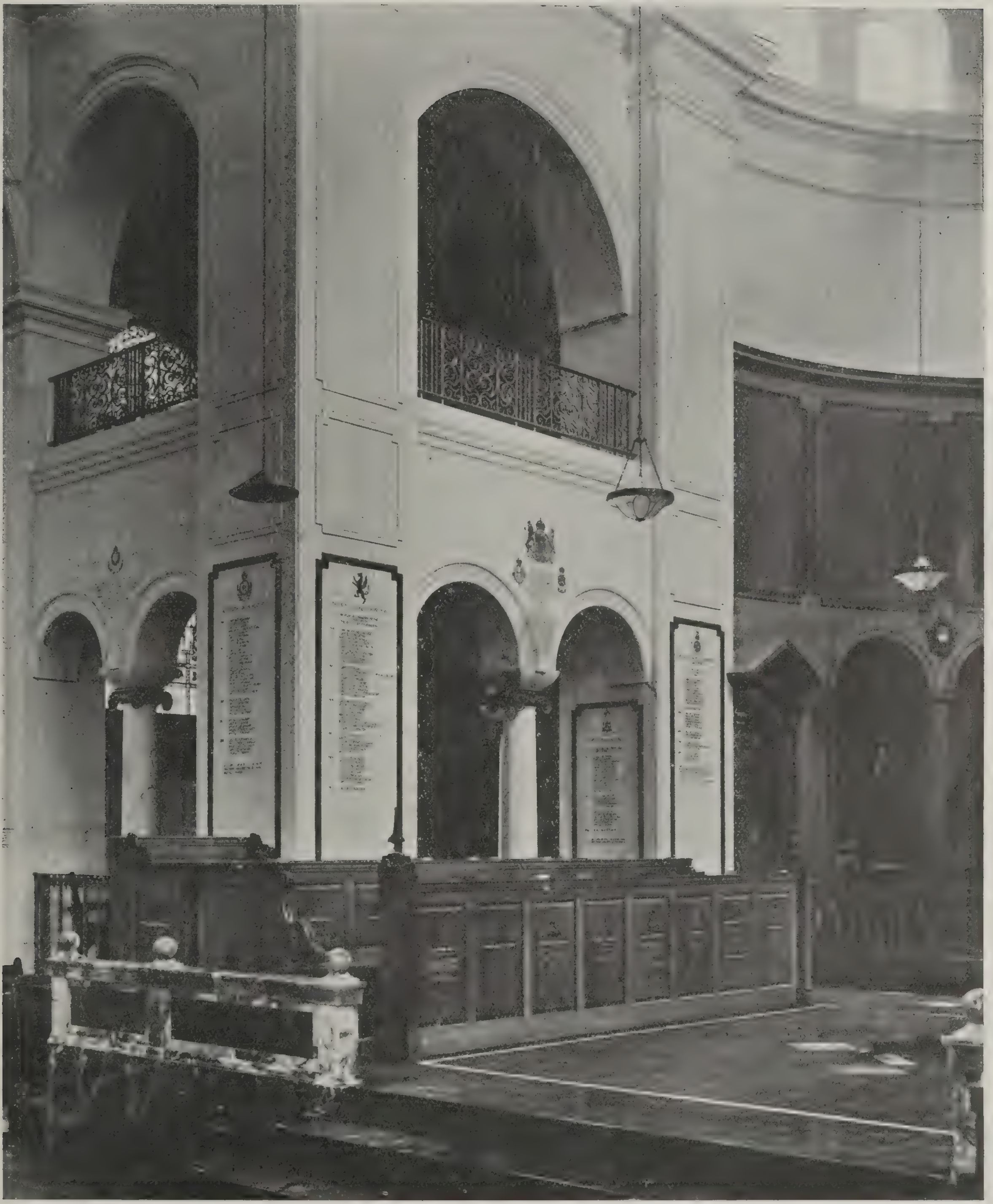


THE WAR MEMORIAL CHAPEL AT THE ROYAL MILITARY COLLEGE, SANDHURST
A. C. MARTIN, F.R.I.B.A., ARCHITECT



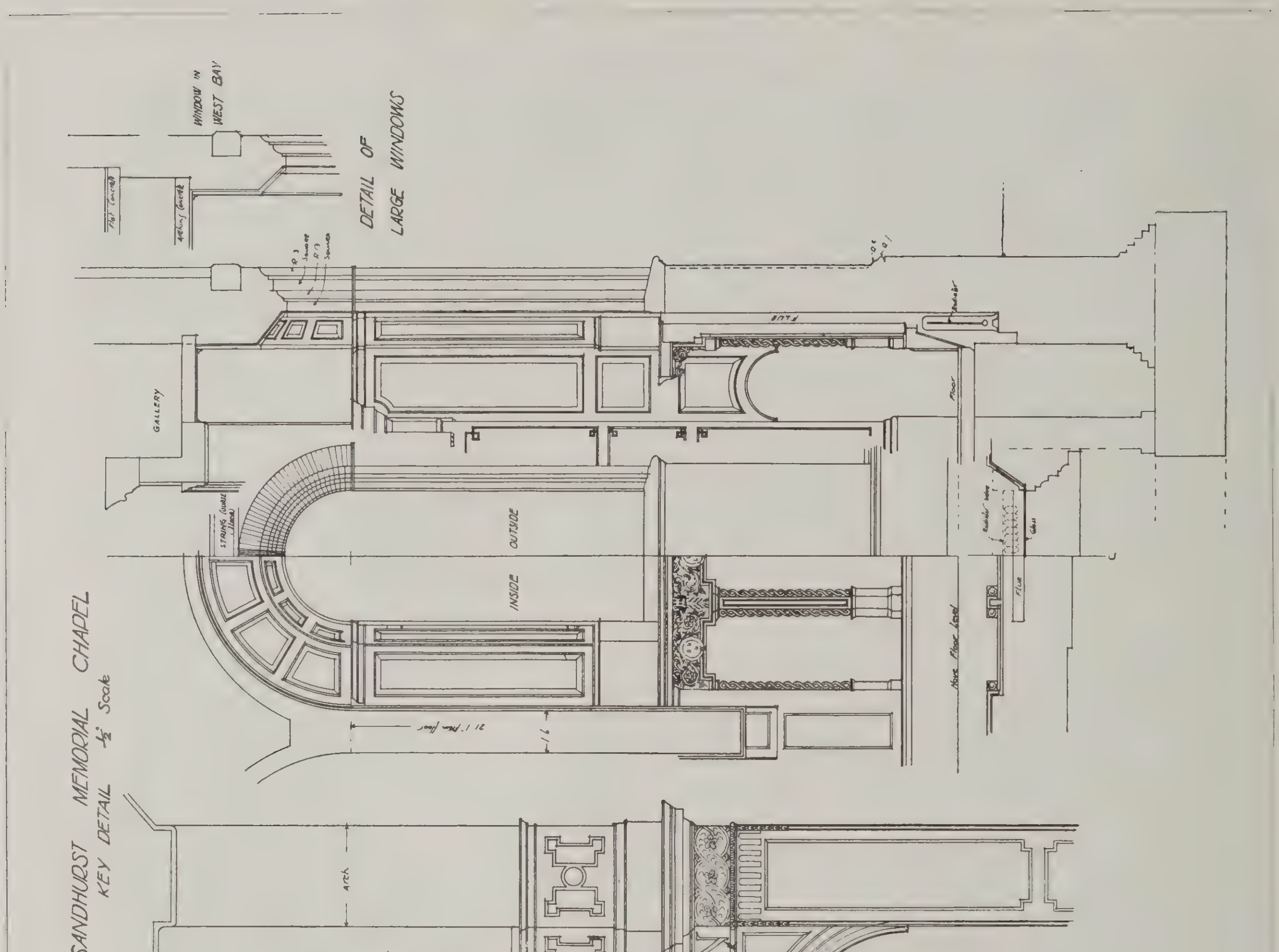
THE WAR MEMORIAL CHAPEL AT THE ROYAL MILITARY COLLEGE, SANDHURST: THE ALTAR, THE CHOIR, AND THE OFFICERS' SEATS.

A. C MARTIN, F.R.I.B.A., ARCHITECT.

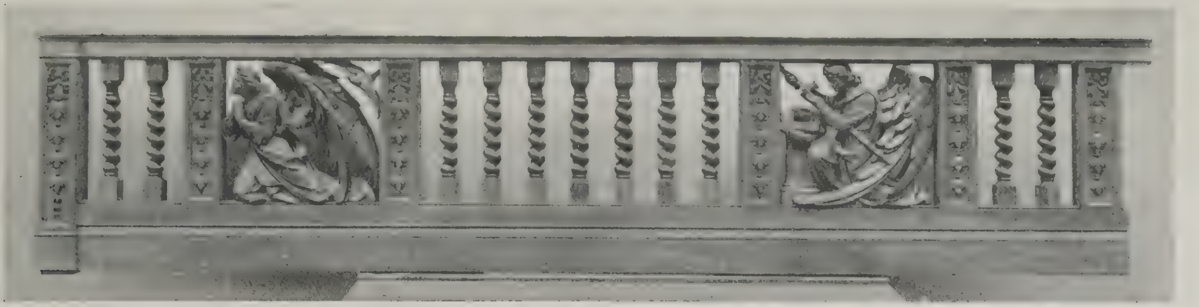


THE WAR MEMORIAL CHAPEL AT THE ROYAL MILITARY COLLEGE, SANDHURST
A DETAIL IN THE CHOIR.

A. C. MARTIN, F.R.I.B.A., ARCHITECT.



THE WAR MEMORIAL CHAPEL AT THE ROYAL MILITARY COLLEGE, SANDHURST: DETAILS OF WINDOWS. A. C. MARTIN, F.R.I.B.A., ARCHITECT.



THE ALTAR RAIL.

out on the south wall, and on these panels are the remainder of the names from the South African War, and names from later campaigns as well. Sad to relate, the discarded marble was cast aside into some outhouses, and was seriously damaged by exposure to the weather.

At the same time Mr. Bodley was asked to draw up a new scheme of decoration. He made several recommendations, and some of these, as time and funds allowed, were carried out.

The new building of the College was completed in 1911, and the number of cadets in residence was largely increased. The chapel was not large enough to seat all at one time, and so it was that in this year the enlargement of the chapel first came to be considered.

It was then looked upon as a necessary addition to the College and a fair charge on public funds. The only difficulty was to decide exactly how the enlargement should be done, and General Stopford and others who were interested spent much time in an endeavour to devise the best method of carrying out the alteration.

Nothing was done before the war. During the war Captain Arthur Campbell Martin, a Fellow of the Royal Institute of British Architects, was appointed temporarily to the staff of the College. As an officer of the College, who, at the same time, was an architect by profession, it was natural that his opinion should be asked, and it was he who suggested that the enlarged building should be placed across the original chapel, which would then become the centre of the whole structure. It may be said at once that the orientation offered no difficulty, as it was merely a change from south-east to north-east. The advantages of this plan were that a building of good proportions and with ample accommodation could be erected, and that at the same time it would present great possibilities for the decorative treatment of the interior.

Captain Martin entered into the matter with enthusiasm and, on his own initiative, drew plans to show how, in his opinion, the alteration could best be made. The fitness and the beauty of these plans were quickly appreciated, and an eminent architect was asked for his criticisms on them. He received them with great praise, and declared that the whole conception was a stroke of genius.

While this plan for enlarging the chapel was gradually taking form, many were turning over in their minds—

WAR MEMORIAL PANELS IN THE CHAPEL AT THE ROYAL MILITARY COLLEGE, SANDHURST haphazard, more than by design, for the war was not at an end—the possible forms a memorial to past cadets might take. It had become a tradition of the place that the names of all cadets who afterwards fell on active service should be inscribed upon the chapel walls. Yet the walls were already so covered that they would hardly hold another name. To take all the new names the chapel must be enlarged.

The way now seemed clear and obvious. If the size of the chapel was increased there would be seating room for all the College, and there would be space upon the walls to record the names of the fallen, which number over 4,000, and so carry on the old tradition.

So it was that the scheme of enlarging and decorating the chapel was definitely adopted as the War Memorial of the College. A committee was formed, and the approval of the Army Council obtained. Captain Martin's plans were at once accepted, and later they were exhibited in the Royal Academy.

A Memorial Fund had been in existence on a modest scale for many years, and it now became the foundation on which new funds were to be raised. The first appeal was sent in January, 1918, to the relatives of those who had laid down their lives. A further general appeal was issued in October of the same year.

Permission was obtained to commence the work and to carry it on as funds became available. No doubt it would have been more economical to wait until there was sufficient money to undertake and complete the whole plan in a single contract. However, many had responded to the general appeal for funds, or had undertaken to provide their own private memorials. They were not prepared to wait for an indefinite period, and it was only natural, and, indeed, inevitable, that it should be so. In these circumstances it was felt that personal sentiment and opinion had a prior claim to strict financial policy, and it was decided to carry out the building in four sections—the laying of the foundations, the building of a new east end, the conversion of the existing chapel into the centre part of the enlarged chapel, and, finally, the erection of a new west end.

The contract was given to Sir Henry Holloway (Messrs. Holloway Brothers, of Westminster), and in the autumn of 1918 the new foundations were commenced. They were completed in the following spring, and then lack of funds stopped the work for a year.

On March 1, 1920, the new east end was commenced. The building took some fourteen months, and on May 5, 1921, the Archbishop of Canterbury performed the opening ceremony.

Then came another interval of a year. On May 29, 1922, work was again started, and the original building was altered to the design of the new plans. It was opened on November 5, 1922, with a general dedication of all the memorials by the Bishop of Oxford.

The building of the west end is a matter for the future. The architecture of the enlarged chapel follows the Byzantine style of Northern Italy, but the combination of white marble with oak woodwork is quite unique. It is of interest that the style of the original chapel was also taken from Northern Italy. The general scheme of decoration was that the names should be engraved in the marble or oak on the walls and pillars. Not only is the main structure the work of the architect, but almost every detail of the interior decoration as well.

The piers and columns are of marble, the domes are being adorned with mosaics, and the windows filled with stained glass. The work is being carried out in three sections. Seventy regiments of the British Army have provided their own regimental memorial panels, many of which have been erected in this part of the church.

THE QUEEN'S PANEL IN THE MEMORIAL CHAPEL AT THE ROYAL MILITARY COLLEGE, SANDHURST.

The structural work on the second section, the central portion, is particularly interesting. In a building which is intended to convey an impression of beauty the decorations, as a general rule, hide the construction. In this chapel, therefore, the reinforced concrete work is entirely covered.

All the domes and the vaults are of reinforced concrete, as well as the pendentives. The dome at the back of the altar consists of an inner and an outer dome separated from each other by an air space. The reason for this construction was that the exterior of this dome is exposed to the open air, whereas the other domes and the vaults are protected by the main roof. The dome is covered with costly decorations.

The sub-contractors were as follows: Farmer and Brindley and Anselm, Odling and Sons (marble); Walton, Gooddy and Cripps (marble paving); H. H. Martyn & Co., Cheltenham (oakwork and carving); A. May (oakwork and carving around wall panels); C. Hall, Hampstead (wrought ironwork); G. Jackson and Sons (plasterwork); Powell and Sons and Kempe & Co. (windows); Trussed Concrete Steel Co., Ltd. (reinforced concrete work). The mosaic over the altar is the work of Mr. B. Anrep. The whole of the vaulting is eventually to be clothed in mosaic by him.

# English Architecture

MR. HUBERT C. CORLETTE, in reading a paper on "English Architecture" before the Manchester Society of Architects, said:—Architecture is a something in buildings when we consider them as a whole and not in their parts alone. It involves both the plan, or arrangement for accommodation, and the external appearance of any work, as a whole, a completed unit, together with the many parts that all combine and make this whole. And it also involves, perhaps more than anything else, the consideration of the materials used, the methods of construction employed, and the climate of the country in which the building is found. These are the elementary utilities out of which it is made and without which it cannot exist. They are the rugged raw materials upon which mind must operate before building commences and before architecture begins to be released from its tomb of unhewn rocks; or before the product of the furnace and the kiln is clothed or shaped by another fire of energy controlled by mind and marshalled by imagination into things of form that are a new creation.

We have seen the confusion bred by Italian revivals, Greek revivals, Gothic revivals. And we are all probably agreed that no revival that will mean an effort to reproduce the works of the past has any interest for us to-day. But it may be that we can still discover fresh ideas in these old forms of thought that will help us and find new ways of solving questions which we are meeting every day.

Much of the failure that has followed these revivals can be traced to false principles which have apparently governed those who advocated and took an active part in causing them.

One thing seems to have been a common fault of procedure in all these different attempts to change or return to the course of tradition, or to return from a state of affairs in which all real sense of tradition had been lost. That thing was this. Men studied parts of buildings in detail and forgot to regard their form as a completed whole. And surely there can be little doubt that it is form in the mass and whole conception that calls first for attention if we would know anything of architecture, past, present, or future. Detail and decoration, fragments of buildings, these are not architecture. They are like chapters and paragraphs extracted from larger volumes. And it must be conceded that no man ever appreciated the full idea of a book in its structure and form, character, style, and meaning without knowing it as a whole instead of by chapters or by chapter headings.

Other reasons helped to cause failure in these revivals. In one case we find an attempt to introduce into northern climates methods of building and design suitable in southern climes and developed to be used where there was much sun and little rain. Or the architectural thought of a Greek or a Latin race is imposed on a Gothic people. Again we find that revival in one country may be, as it was in Italy, an attempt to return to and recover their own national tradition that had been lost. With the people of that country and climate it was a legitimate aspiration. It was an actual effort to revive something lost. But to carry this same attempt at revival beyond the borders of the country where it was revived, and try and make it apply where it had never been known as a native tradition was to falsify history and destroy one national tradition by the introduction of another and an alien one.

If we turn to consider Gothic conceptions in architecture we shall find that they possess much the same sense of unity in design as the Greek builders expressed so well. In their essential nature both these traditional schools followed like principles. These principles showed that structure was the necessary element by which form could be, and should be, developed. And all changes of essential form were to be derived from structural needs. In fact, the plan, with the use for which a building was made, was the foundation out of which all real building tradition and architectural design arose. Climate allowed, or demanded, certain forms; materials dictated some methods. But these all met together and were combined in one. And it was the functional office, the structural nature, worked out as a building problem, in every subordinate part, that provided new ideas, suggested differences of form, and gave architectural importance and interest to the finished work.

This practical basis made all good architecture reasonable. It gave impetus to thought. It made the creative aspect of the art rest on common sense while it was contriving to make each useful thing a piece of beauty in a beautiful total conception. Our creative effort must begin with things, not abstract ideas alone. And so we come back to fact and find that necessity in building is the mother of invention in architecture. That is how the Greeks, within their limits, were architectural inventors. And it is by this same means, using new method, that the Gothic builders became such architectural creators.

There are few things so remarkable in the history of the arts as the apparent ease, the entire freedom, with which the Gothic builders turned from one kind of work to another. And when they moved from one problem to the next they did so with their characteristic energy of action and of thought. They approached their task without fear, and attacked it without misgivings. For every new enterprise they were ready with fresh ideas. And in building they seldom, if ever, said the same thing twice over in the same way. They took things as they came, handled them and left them, and passed on to the next, never looking backward, but always forward, to see what might be coming. They lived architecturally not in the past, but in the present, doing what it demanded, not waiting, but moving on to meet the future.

We see this in their parish churches and in their vast cathedrals.

If we examine the old cottages of the period, the comparatively few that remain, or the houses both large and small, of which there are many in all parts of England, it is still possible to see what the Gothic mind, working through English tradition could do when it was turned away from ecclesiastical to secular building during nearly two centuries.

There is little need to urge the Gothic character and quality in all these houses. It is evident. It is obvious. And it is generally admitted. That they showed in part, and mostly in small details, some evidence of Italian influence none can or need deny. This only proves an English readiness to be receptive and to use contributions of skill and of idea from all quarters. The growth of the whole body of the national language in all its literary forms showed the same power to absorb useful elements. But it should have been the same in the language and traditions of architecture as it was with the language of the nation. In the one case the imposition of a foreign tongue had been refused and rejected more than once. In the other, as the history of English architecture shows too clearly, a foreign idiom was imposed by foreign scholarship, brought from foreign schools, both by foreign and by English agencies.

A question may be asked. What use is it now to dwell on these particular buildings; we have already much knowledge of them? That is true. But it may be said we can never know too much about them. And we shall probably never know all the different influences and powers, mental and social, political and ecclesiastical, that brought them into being. Our purpose in studying them is to try and find, or to suggest, if we cannot find some of the ideas, the principles and methods of work that seem to be hid in them. It is important that we should know more, if we may, because they are the result, the evidence of what an English national building and craft tradition could do.

# The British Empire Exhibition (1924) in Embryo

### By PERCY L. MARKS, Licentiate R.I.B.A.

IT is a far cry from Sir Edward Watkin to the British Empire Exhibition, but there is a certain connection between them after all; or, at least, it may be said that they are on common ground at the accessible Wembley Park. Sir Edward's dreams of a vast development at this spot were never realized. For many years the landscape for miles around was rendered hideous by the four-legged skeleton platform of the would-be rival to the Eiffel Tower; in very truth it proved to be but a second Tower of Babel, and, like that tower, it disappeared into the realms of nothingness.

There is, however, every reason to suppose that the exhibition now rising from the ground on a freehold site of 120 acres will meet with the success of which Sir Edward dreamed in vain. If enterprise, enthusiasm, breadth of purpose and public support can accomplish this success, then the latter is assured.

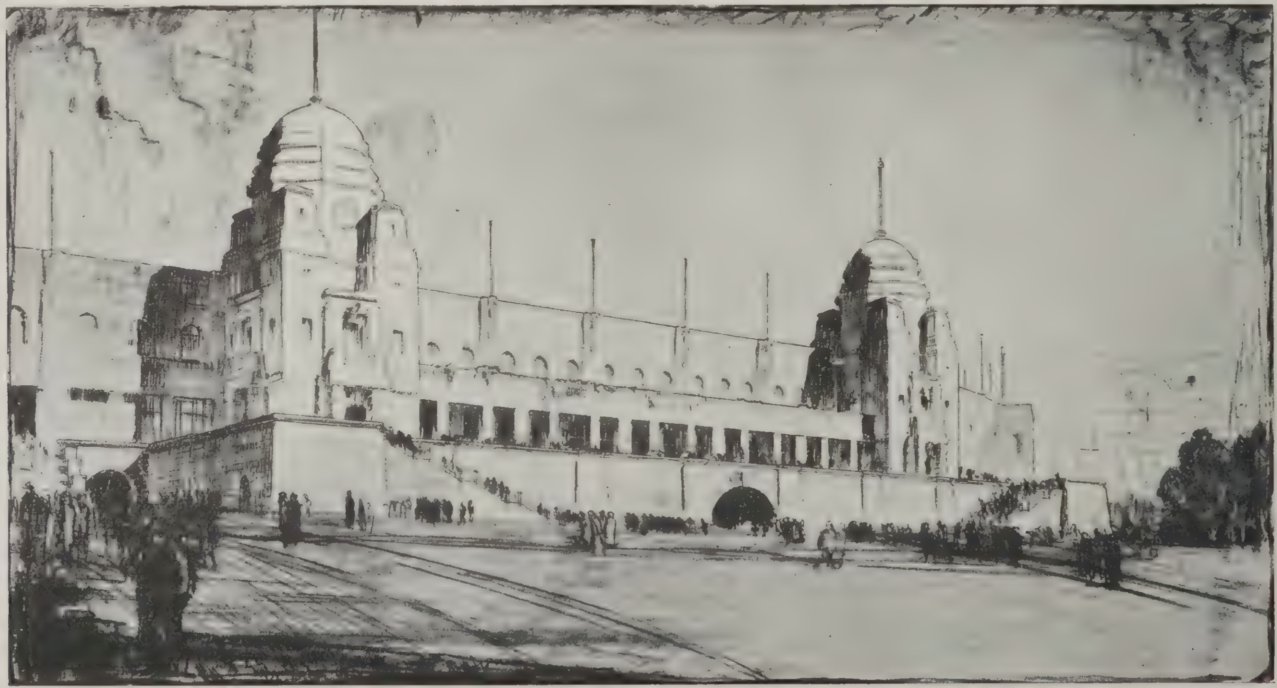
The scheme was initially due to the imperialistic visions of the late Lord Strathcona. Temporarily suspended during the raging of the World War, it was revived in 1919, and is destined to mature next year. Indeed, a portion, and that not an unimportant section, is to be completed by next April, when it is intended to open the stadium for the holding of the Football Association Cup Tie Final. By that time, too, the whole scheme will doubtless present an appearance more in accord with the necessities of the general inauguration of the exhibition in April 1924.

At the moment, it is true, there is not much to see, except the stadium; and this dominates the landscape, even as the Colosseum at Rome overlords it on the City of Seven Hills. But before giving an account of these works, it is well to mention the names of some of those responsible for the gigantic creation of the near future. The architects for the whole scheme are Mr. John Simpson, P.P.R.I.B.A., and Mr. Maxwell Ayrton, F.R.I.B.A.; with them is associated as consulting engineer Mr. E. O. Williams, B.Sc., who is getting out the details of the structures, and whose genius is even now apparent in the stadium and industrial hall works. An engineer of Mr. Williams's repute may be trusted to calculate stresses and strains properly, but at the same time it is a curious point in local authority tactics to delegate authority in practice, and to resort to the Gilbertian method of allowing the engineer to approve his own scheme; in other words, the Wembley U.D.C. declines to accept the responsibility of deciding whether the stadium is, or is not, well and truly designed to carry the loads, and it elected to disapprove *in forma* the plans submitted, and upon the inadequate plea that no precedent exists for an urban authority dealing with a work of such magnitude.

It is to be hoped that if architects, other than Messrs. Simpson and Ayrton, are employed for designing the Dominions blocks, the same air of permanence will be obtained as these architects are providing, and proposing to provide, in such blocks as are with certainty being entrusted to them.

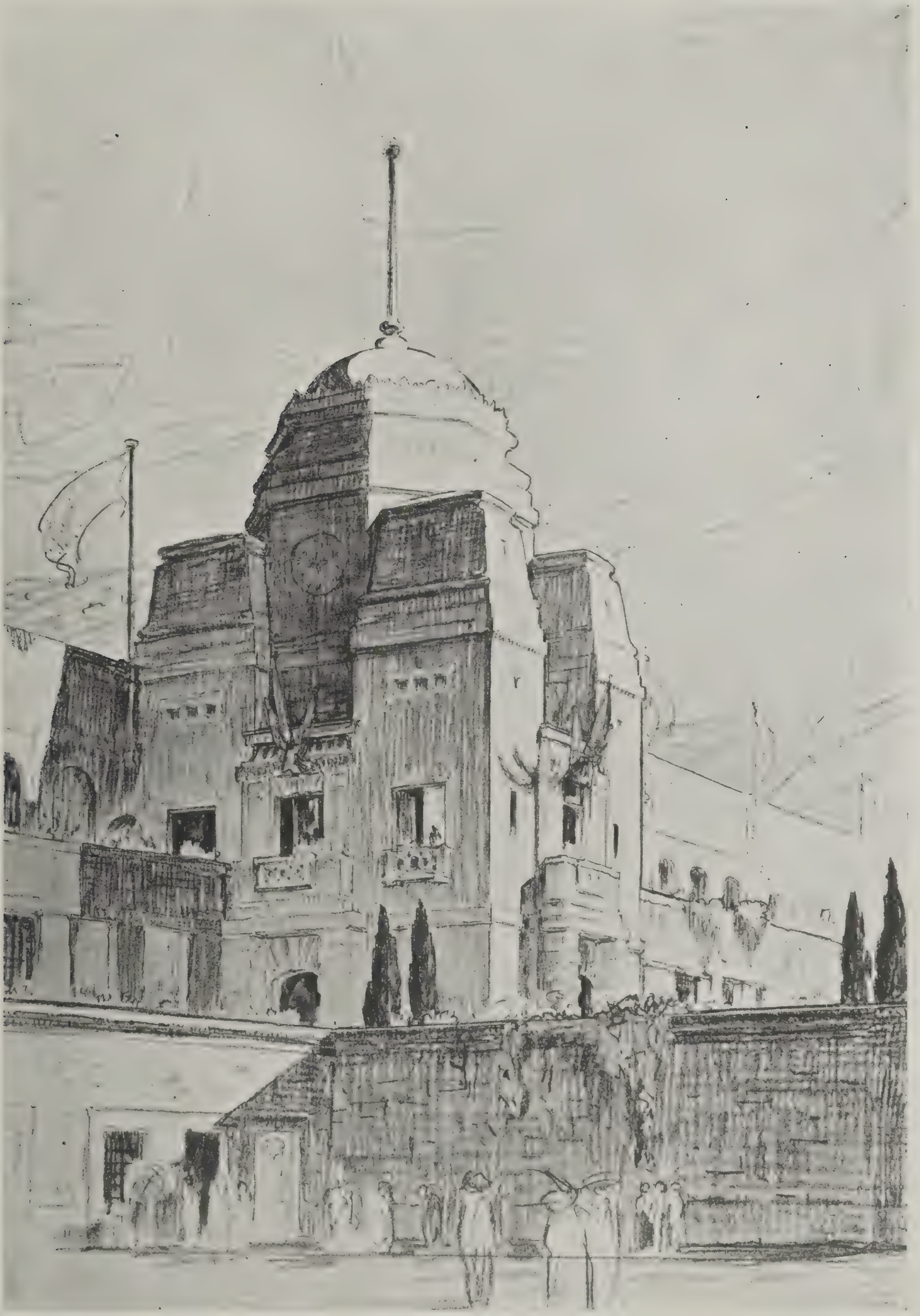
It is, indeed, a source of great satisfaction (which other exhibitions have not furnished) that the buildings are intended to be erected *en permanence*, instead of the "Staff" eccentricities, to which one has unfortunately become accustomed, though not inured. And this difference of character is apparently to be reflected in the architectural design of the elevations, if one may judge not only by the portion of the stadium in evidence, but also by the paper designs of some of the other buildings. In viewing the stadium, the work of capable architects is at once apparent in the mass and in the distribution, the former having the terrace approach to prove the justice of this criticism, and the latter having the encircling arches, 50 ft. span and 45 ft. in height and semi-circular-headed. The Royal entrance archway is excellent. The latter is entered from the external ground level, but the encircling arches which admit to the public accommodation are approached by flights of steps, spaced at intervals of four of the arches. There is also the perron approach to the main terrace with its flanking towers, though it is early as yet to judge of the effect which these towers may produce. The encircling archways give entry for a 40 ft. road, under the shelter of the stands, thus providing comfortable access to the various portions of the theatre.

A width of seat, 17½ in. only, scarcely seems adequate for comfort, and it would be better to sacrifice some of the accommodation rather than make everyone uncomfortable. And there is one thing more which I desire to say before proceeding to other points, which is, that anything in the nature of fulsome or unmeaning praise of the work of architects, engineer or others concerned would be objectionable; let it therefore suffice to



A VIEW OF THE STADIUM.

JOHN W. SIMPSON, P.P.R.I.B.A., AND MAXWELL AYRTON, F.R.I.B.A., ARCHITECTS.



THE BRITISH EMPIRE EXHIBITION, WEMBLEY PARK: A CORNER FEATURE.
JOHN W. SIMPSON, P.P.R.I.B.A., AND MAXWELL AYRTON, F.R.I.B.A., ARCHITECTS

add, that whereas the outcome of the architects' labours may possibly not satisfy the artistic views of all, or even of nearly all, one feels confident that the great bulk of educated opinion will approve their work.

Some less general remarks may advisedly follow at this stage. And, firstly, to deal with the stadium, which is (and is likely to remain) the *pièce de résistance*. Earlier the almost obvious comparison was made to the Colosseum; but the Wembley building is much larger than its prototype, being, in fact, half as large again, whilst the enclosed area is two and a half times the size. Comparing the accommodation of the Roman and English amphitheatres, the figures are as 80,000 to 126,000. Do not these particulars better indicate the gargantuan proportions of the later structure than such statistics as the following, to which, however, readers of this JOURNAL are very welcome? Can you or I comfortably visualize one-seventh million tons of excavation; one-five-hundredth million tons of structural steel, half a million rivets, and one-fortieth million tons of concrete? But it may be more readily visualized when it is stated that the outer circumference of the structure approximates half a mile.

The only completed portion so far is the arena, which, in defiance of its etymological significance, is turfed; but it cannot be expected that footballers shall play upon a sanded surface merely to satisfy ultra-precisionists. Some 2½ acres is thus laid under turf 2½ in. thick, obtained from the adjoining old golf links. The foundation of the playing pitch is the natural clay, which has been covered with 10 in. of varying grades of cinder, and above that and immediately beneath the turves is a bed, 5 in. deep, of specially prepared soil.

There are two running tracks, namely, a ¼-mile oval track round the playing field, and a sprint track, providing not only for 100 yards racing, but also for 220 yards; the latter is notable in being the only straight 220 yards' track in the United Kingdom, and this arrow-flight is obtained by means of a tunnel under the stand in the southern wing, which permits the longer sprint to start before entry into the arena. The pity of it to me seems to be that, whilst providing for such a huge amphitheatre, it was not made even larger, so as to permit the full, straight track on the arena, and thus enable spectators to witness the start-off of the sprints.

Accommodation for about 500 athlete competitors will be found under the stand, with shower baths and lavatory fittings. A direct gangway thence to the major axis of the arena is provided by way of a central tunnel passage. For footballers there will be separate dressing-rooms, with baths; their training quarters in connection will contain a gymnasium, plunge bath, recreation-room, and offices.

An integral part of this vast building will be a restaurant, with a capacity for 1,000 visitors, and it is intended to render this available for dances, conferences, and the like purposes; but what about the 125,000 balance (or the large proportion of them) who will be wanting to be fed simultaneously? However, they will find large tea-rooms, a buffet or so, and cloak-room accommodation.

The members of the fourth estate are to be provided for with special care; a spacious gallery in the best position will be allocated to the Press, and equipped with all the latest conveniences. Crows' nests will be also provided for cinematographic purposes.

To revert, however, to the general public (professional enthusiasm having led me astray for the moment), the architects have devoted the greatest and most thoughtful attention to the provision of a building that will *contrast* favourably, rather than merely *compare* favourably, with sports buildings elsewhere. The use of reinforced concrete is, of course, a powerful aid to them in being able to minimize obstructive details of construction, and of this they have taken full advantage.

Mr. E. O. Williams has evolved from the architects' radical idea a highly eminent work of steel and concrete. The sloping terraces are formed of reinforced concrete beams, carried on radial steel girders, which at their outer ends are supported on and in the curtain wall. The ground falls from west to east, on the latter side the level of the arena approximating to the former ground level. This necessitated east to west excavation, which was carried out by means of the Bucyrus dragline excavator, removing a ton of soil at a bite, and the excavated material was utilized to form the embanking at the eastern end. This has been supplemented above the ground level by a continuation of the sloping terraces on a system of steel framework, supported by reinforced concrete stanchions. Across the radial girders are placed the precast reinforced concrete steps for the accommodation of the public, the curtain wall, of course, being formed in situ by means of shuttering, which is of wood, and where the effect of tooling is desired (as, for example, to the bases of the towers), the necessary channels are prepared in the timbering.

Messrs. Edward Wood & Co., of Ordsall, are supplying the steelwork to the extent of 1,400 tons; pneumatic riveting is employed, the plant for this work comprising a standard "Sentinel" compressor and receiver by Messrs. Alley and MacClellan, with some half-a-dozen pneumatic riveting hammers supplied by the Ingersoll-Rand Co.

The stanchions, roof trusses, and other precast work of the stadium and industrial halls are being cast on the exhibition site; an upright drum mixer, supplied by Messrs. Stothert and Pitt, is used for mixing the concrete, the ballast being furnished by the Rickmansworth Gravel Co., and the cement by the Cement Marketing Co.

The sewering of the exhibition is being carried out with Stanton-Hume reinforced concrete pipes of diameters ranging from 6 in. to 4 ft. 6 in. These pipes are made by a special centrifugal process, automatically removing the water and thus obtaining a highly dense concrete. Certain lines of drains up to 9 in. diameter are being laid with glazed stoneware pipes supplied by Messrs. Thomas Wragg and Sons. A special type of Hailyburg manhole cover is being supplied to the design of the drainage engineers, Messrs. Field and Bean.

Contrasting with water discharge is the water service supply, which is being laid in cast-iron pipes ranging in diameter from 3 in. to 9 in. to an extent of several miles, the Staveley Coal and Iron Co. being the supplying firm.

The general contractors for the exhibition are Sir Robert McAlpine and Sons.

Though at present the stadium is chiefly in evidence, yet the industrial hall is also beginning to make a show with its structural stanchions and roof trusses in reinforced concrete. The main spans are 70 ft., and the subsidiary spans are 50 ft., but at the period of inspection the embryo condition of this hall was only less embryonic than the exhibition in general. At a later date this JOURNAL will be very pleased to supplement this present account with a more detailed description of the British Empire (1924) Exhibition.

## The Bicentenary of Sir Christopher Wren

American architects are preparing to observe next February the two-hundredth anniversary of the death of Sir Christopher Wren, who has left an indelible impression on American architecture.

The American observance will be consistent with the celebration in England, where the Royal Institute of British Architects has set aside the entire week commencing February 26, 1923, as Commemoration Week in honour of Wren.

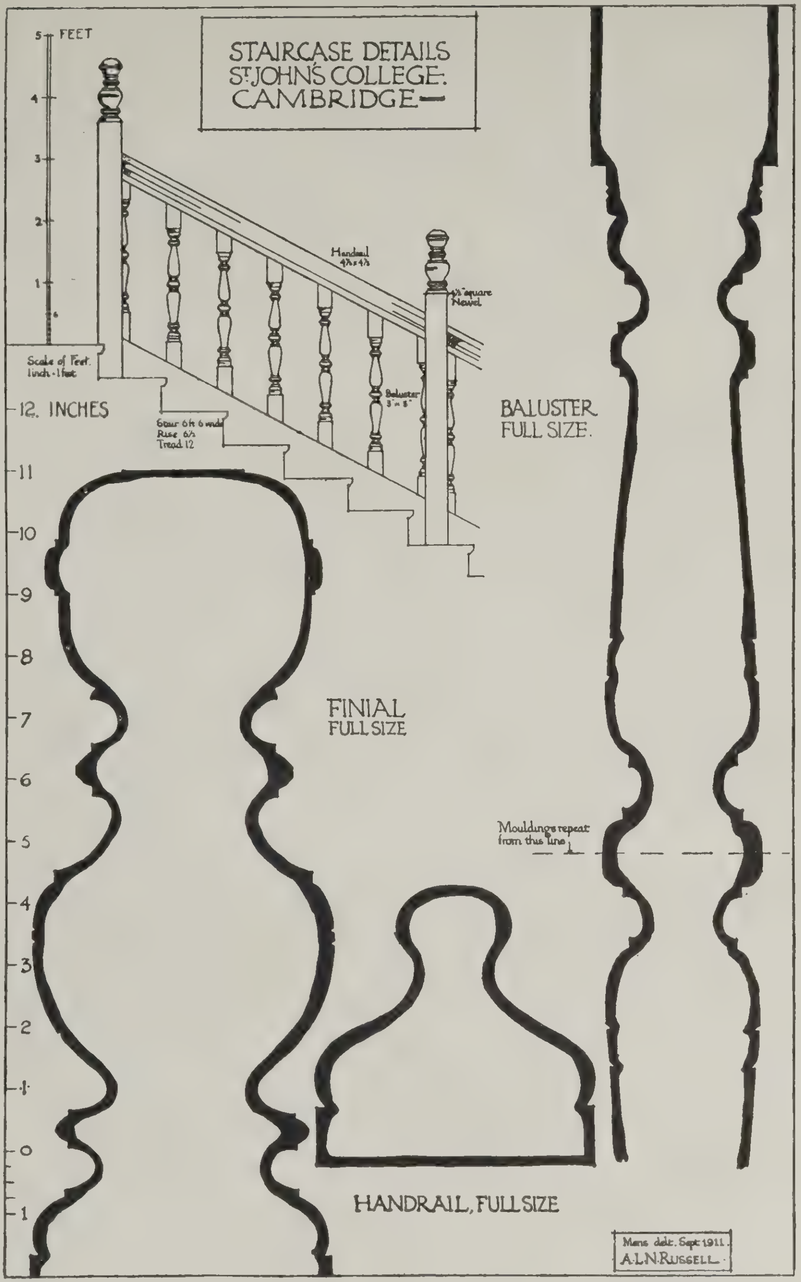
In America there is hardly a city that does not boast one or more Wren spires on its churches. The White House is distinctly Wren; the National Capitol shows his influence; Independence Hall, Philadelphia, with his palladium motif of one tall arch window flanked by square-topped ones, is Wren. In Boston the State Capitol, designed by Charles Bullfinch, who drew his inspiration from Wren, and the old South and North churches are among the notable Wren examples.

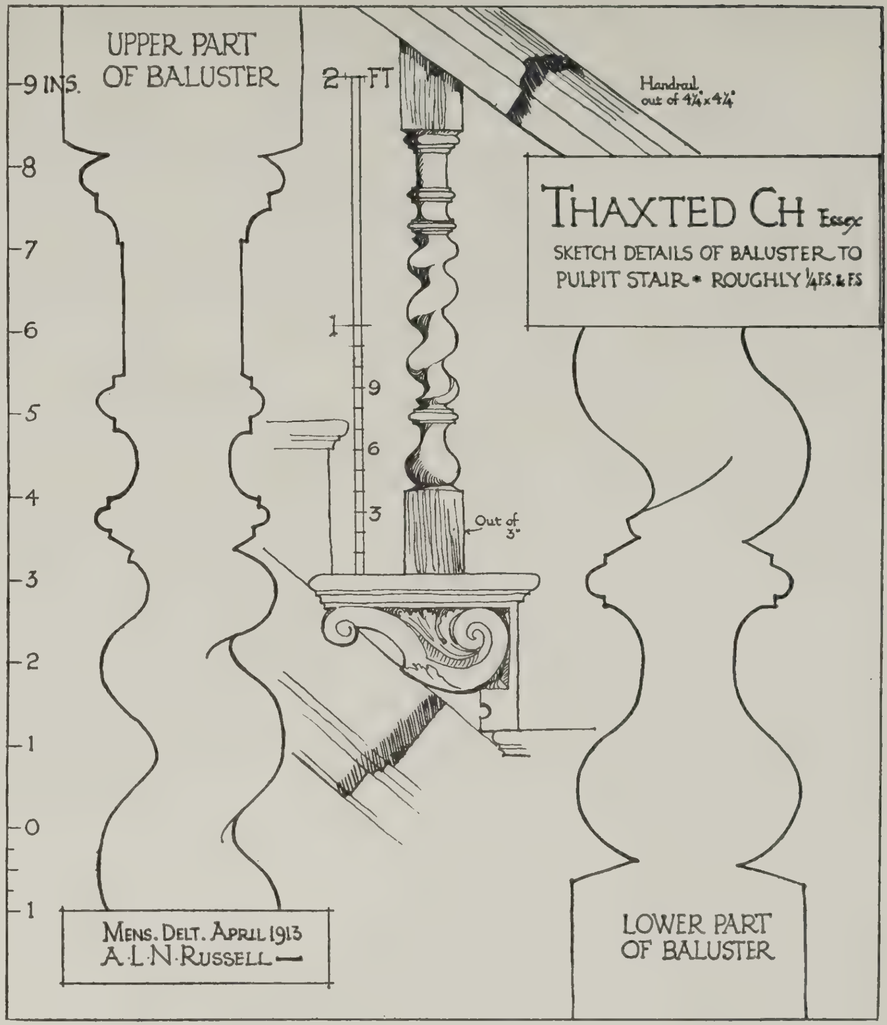
New York boasts one of the finest Wren spires in the country on St. Paul's Chapel, which stands with its face turned away from Broadway. Other noted Wren spires are seen on Trinity Church, Newport; the First Baptist Church of Providence; Christ Church, Philadelphia; the First Christian Church, Hartford; Park Street Church, Boston; First Congregational, Lyme (Conn.); and others. In Chicago the best example of the Wren type is St. Paul's of the Midway. Here, however, the spire has never been completed.

The grand committee which is organizing the Christopher Wren Bicentenary Celebration, to take place next February, has arranged for the publication by Messrs. Hodder and Stoughton of an illustrated memorial volume dealing with the career and achievements of the greatest of British architects. This volume will be edited by Mr. Rudolf Dircks, Librarian of the Royal Institute of British Architects, and will contain chapters contributed by eminent architects, men of science, and others who can speak with authority of Sir Christopher Wren's place in the history of British art and science. The whole of the profits arising from the sale of the book will be handed over to the fund which is now being raised by the Dean and Chapter of St. Paul's for the preservation of the cathedral. Only a limited number of copies will be printed, and it is hoped these will be purchased mainly by learned societies.

# Measured Drawings. 20.—Staircases at St. John's, Cambridge, and Thaxted Church.

Measured and Drawn by A. L. N. Russell.


STAIRCASE DETAILS
ST. JOHN'S COLLEGE: CAMBRIDGE—
5 FEET
4
3
2
1
6
Scale of Feet. 1inch - 1foot
Handrail 4½ x 4½
4½" square Newel
Baluster 3" x 3"
Stair 6ft 6 wide Rise 6½ Tread 12
12. INCHES
11
10
9
8
7
6
5
4
3
2
1
0
1
BALUSTER FULL SIZE.
FINIAL FULL SIZE
Mouldings repeat from this line
HANDRAIL, FULL SIZE
Mens delt. Sept 1911. A.L.N.RUSSELL.



These details are of the library staircase at St. John's College, Cambridge, and the baluster of the pulpit stair in Thaxted Church. The various Cambridge colleges are very rich in delightful 17th and 18th century staircases, both of the humbler and more homely variety, and of the more imposing type of which the library staircase at St. John's is an example. It is characteristic of the richness and interest of Thaxted Church that, besides all its wealth of Gothic stonework and woodwork, it should afford such a charming example of Renaissance work as the pulpit and pulpit stair of which the above is a detail.

# Correspondence

## Influence of Flood Lighting on Architectural Form

*To the Editors of* THE ARCHITECTS' JOURNAL.

SIRS,—The illustration of Wolseley House in your issue for December 13 makes it appropriate perhaps for a layman in architectural matters to ask a pertinent question on the influence of "flood-lighting" on architectural form. If the effectiveness of cornice and capital, moulding and hood, depends largely on their catching the light of heaven and trapping the shadows, will it now be necessary to design these features of a building so as to secure equal effect by day or by night? Or is architectural detail so simple and so adaptable that an artist can rejoice every night to see his creation standing with unruffled composure on its head?

It is no doubt true that in the past buildings have had to submit to the test of being seen in the oblique light of street lamps, but "flood-lighting" would seem to introduce a principle of illumination not mildly unsuitable, but wildly contradictory to that which is natural. However, I am anxious to draw the views of architects on the point rather than to express my own opinion.

W. MCG. EAGAR.

## Weaknesses of Collar Roofs

*To the Editors of* THE ARCHITECTS' JOURNAL.

SIRS,—In the article published in your issue for December 27, "Architect" switches off from the weaknesses of collar roofs to the subject of economy in roof construction. Mr. Gunn's original note dealt with the question of strength, and my subsequent contribution was intended as an addition and to give what I considered to be the best way to make a collar roof strong, viz., by putting at the point of junction a support (purlin) under the collar and rafter, the latter bird's-mouthed, and therefore resting on it and the wall plate without thrust on the wall.

This weak spot is not really eliminated in Mr. Aston's Fig. 1, though his other roofs are excellent, but more suited for farm sheds, etc., than for dwelling-houses.

My roof is by no means extravagant. In place of a principal I have just a simple beam across the middle of the room, supporting the purlins at the centre of their length, all weights are dead, and there are no spreading thrusts. The two inner purlins under the ceiling are not vital to the work, but add to security and to the satisfaction of the eye and of the heirs of the builder, and for the same reason possibly the upper purlins are on the side of slight redundancy, but it is not necessarily economical to sail very near the wind when it comes to a matter of strength in building. I wanted my client's great-grandson to be pleased about the roof.

W. B. HOPKINS, A.R.I.B.A.

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# "The Daily Mail" Labour-saving Bungalow Competition

THE assessors, Mr. E. Guy Dawber, F.R.I.B.A., and Professor A. E. Richardson, F.R.I.B.A., have made the following awards in "The Daily Mail" Labour-Saving Bungalow Competition :—

First Prize, £300 : Mr. Jas. M. D. Henderson, A.R.I.B.A., M.S.A., 1 Holmston Road, Ayr, N.B. Second Prize, £125 : Mr. C. Murray Hennell, F.S.I., and Mr. C. H. James, A.R.I.B.A., 19 Russell Square, Bloomsbury, W.C.1. Third Prize, £75 : Mr. J. S. Hodges, A.R.I.B.A., 19 Craven Road, Harlesden, N.W.10. 768 designs were submitted.

The first prize is a posthumous award, Mr. Henderson having died on November 21. Mr. Henderson had been on the staff of the Ayr Burgh surveyor for fifteen years and was chief architectural assistant. In a recent open competition for a housing scheme in the town his plans were placed first by the assessor, but owing to his position as an employee he was not entrusted with the work. He was thirty-seven.

The assessors, in judging the designs, have had in view the suitability of erection in any part of Great Britain. Their report states: That placed first fulfils these important requirements inasmuch as its character, though traditional, is thoroughly modern and economical. It could be built in brick and tile in the Home Counties; in rough-cast and thatch in Somerset and Devon; in stone in the Cotswold district; in roughcast and slate in Scotland, Wales, and the Lake District.

The Design Placed First.—The plan is symmetrical, the bathroom and bedrooms on the one side balancing the kitchen and servants' quarters on the other. There are no dark corners, and natural lighting is assured. The roofing is simple, and perfectly expresses the plan. If built, it might be advisable to omit the gables and to carry the hipped roof through at either end.

The Design Placed Second.—The plan is direct and the lighting good, the bedroom accommodation balancing the kitchen and dining-room. Its main lines follow the design placed first. There are, however, minor points which are not so straightforward. The elevations are in good taste, but lack the simplicity of the successful design.

The Design Placed Third.—This plan closely follows the lines of the first and second, but looks generally more official than domestic. It could be improved by adopting a less severe treatment.

In conclusion, the assessors wish to record their appreciation of the greatly improved standard of the work submitted in this competition, which is a distinct advance on that of previous competitions for designs for small houses. But they would strongly emphasize the fact that many of the designs submitted have no architectural character and show eccentric ornamentation and unnecessary features that should be avoided. Designers of this type of house should realize that the simple use of materials without any meaningless detail and absurdities would produce far more pleasing results at much less cost.

Appended are some interesting details with regard to the planning and construction of the successful design :—

The foundations to be of cement concrete, the walls to be of brick, built of two 4½ in. thicknesses, with 2 in. space between, the outer and inner thicknesses to be tied together with iron ties. The exterior of walls to be covered with cement rough-casting. The roof to be covered with red tiles. The floors throughout are finished with a surface of jointless flooring, with covings at intersection of wall and floor. All corners to be coved and mouldings practically eliminated, to prevent accumulation of dust and dirt.

All lengthy passages and waste space have been eliminated as far as possible.

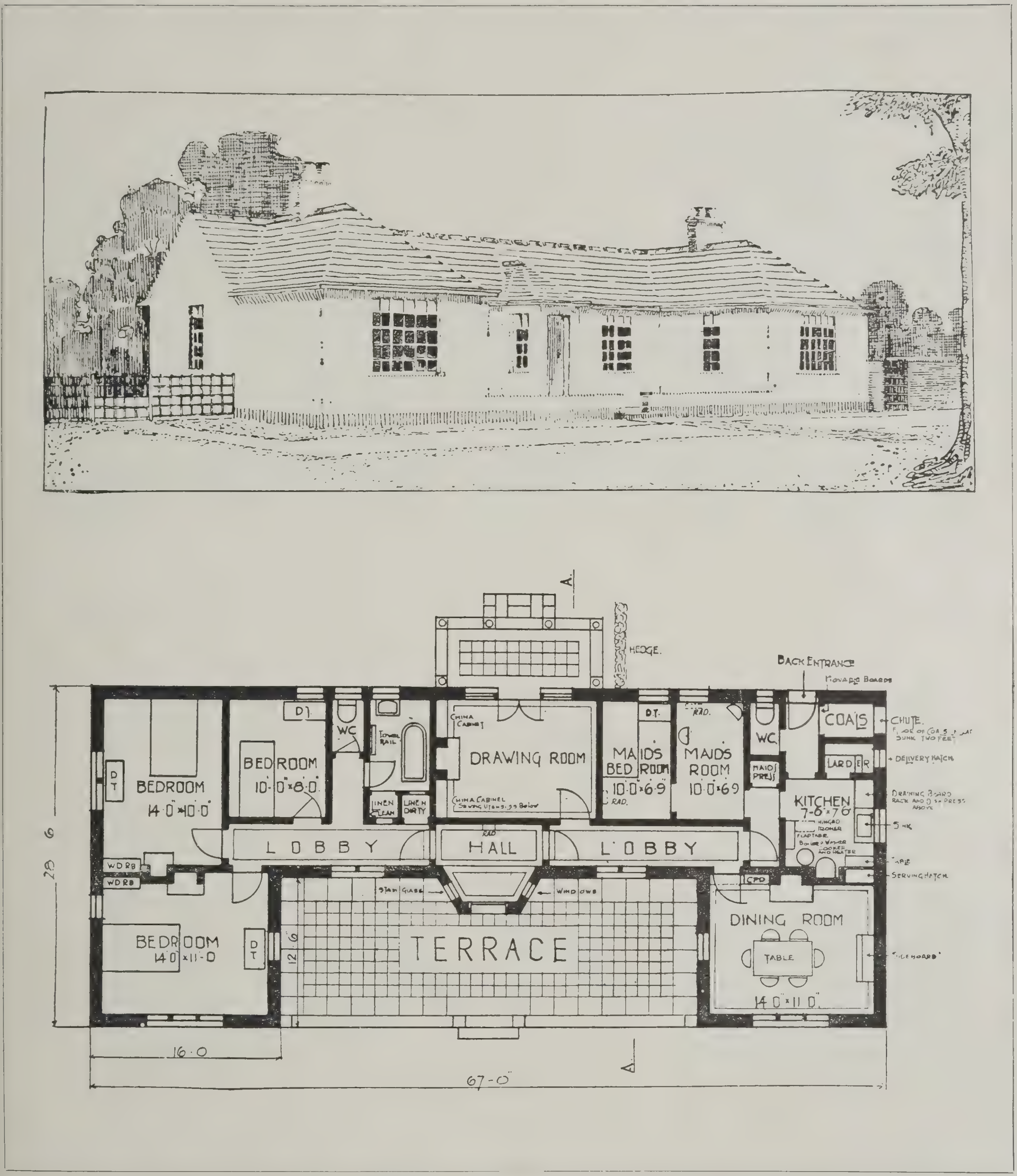
Special attention has been given in this design to the grouping of all the bedrooms and bathroom together in one wing, with a cut-off door in passage, thus giving complete privacy to this part of the house.

The dining-room has been placed convenient to the kitchen, and a serving hatch is provided between these two rooms, thus saving an immense amount of walking between these two apartments. This service arrangement is practically a cupboard in the wall, with serving hatch in the centre drawer below, and shelves for china, etc., above.

There are no bright fittings; all door handles, taps, heating, cooking and washing appliances are either vitreous enamel or oxidized iron.

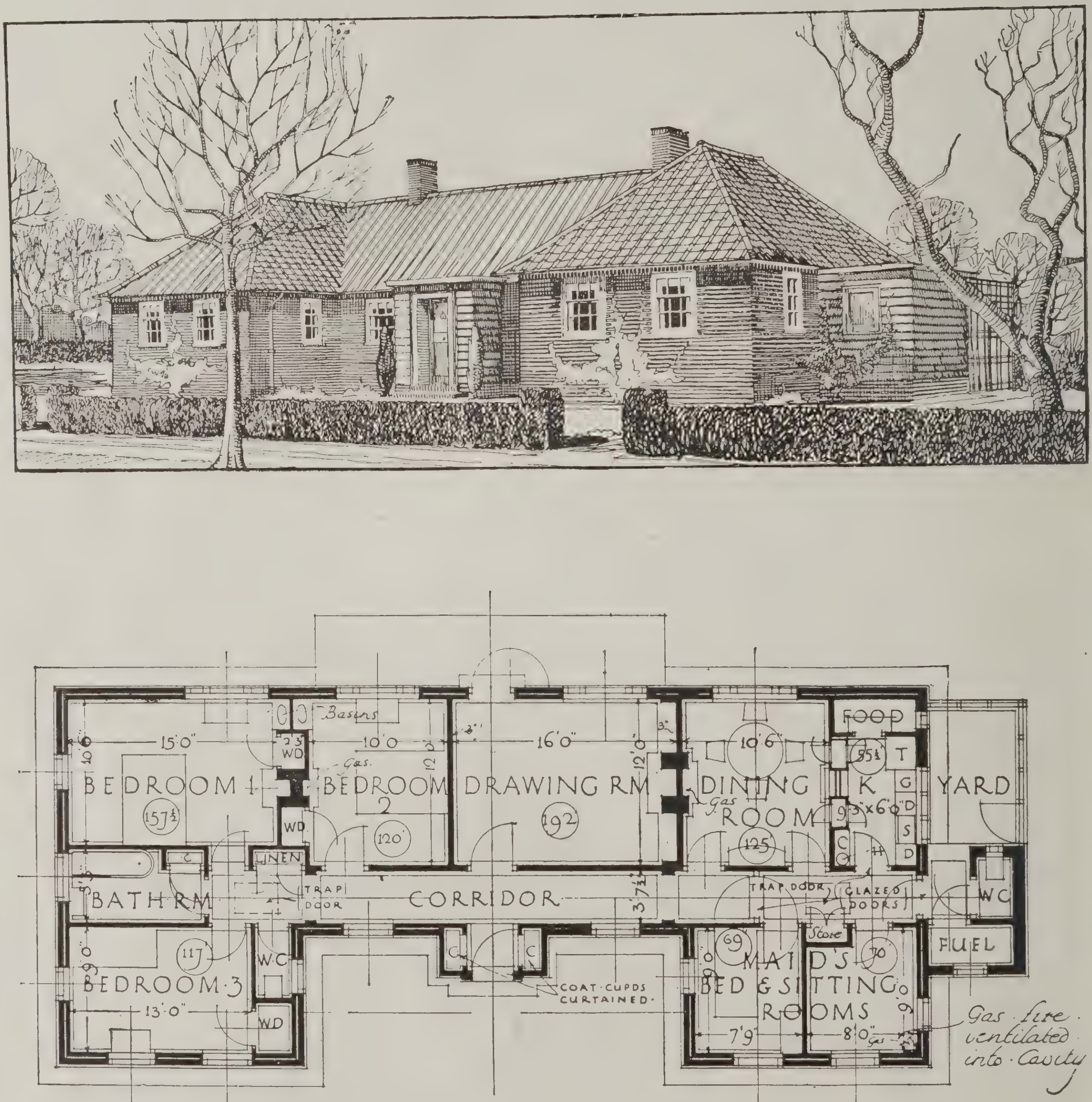
Reception rooms and bedrooms are fitted with power plugs for electric fires. Radiators heated from kitchen boiler are fitted in hall and maids' rooms, and are hung in such a way that they may be swung out from the wall for cleaning purposes.

Steel casement frames are proposed for all window sashes, being hung and built in such a way that both sides may be cleaned from the inside. The maintenance of such windows is infinitesimal, and they are not liable to rot.



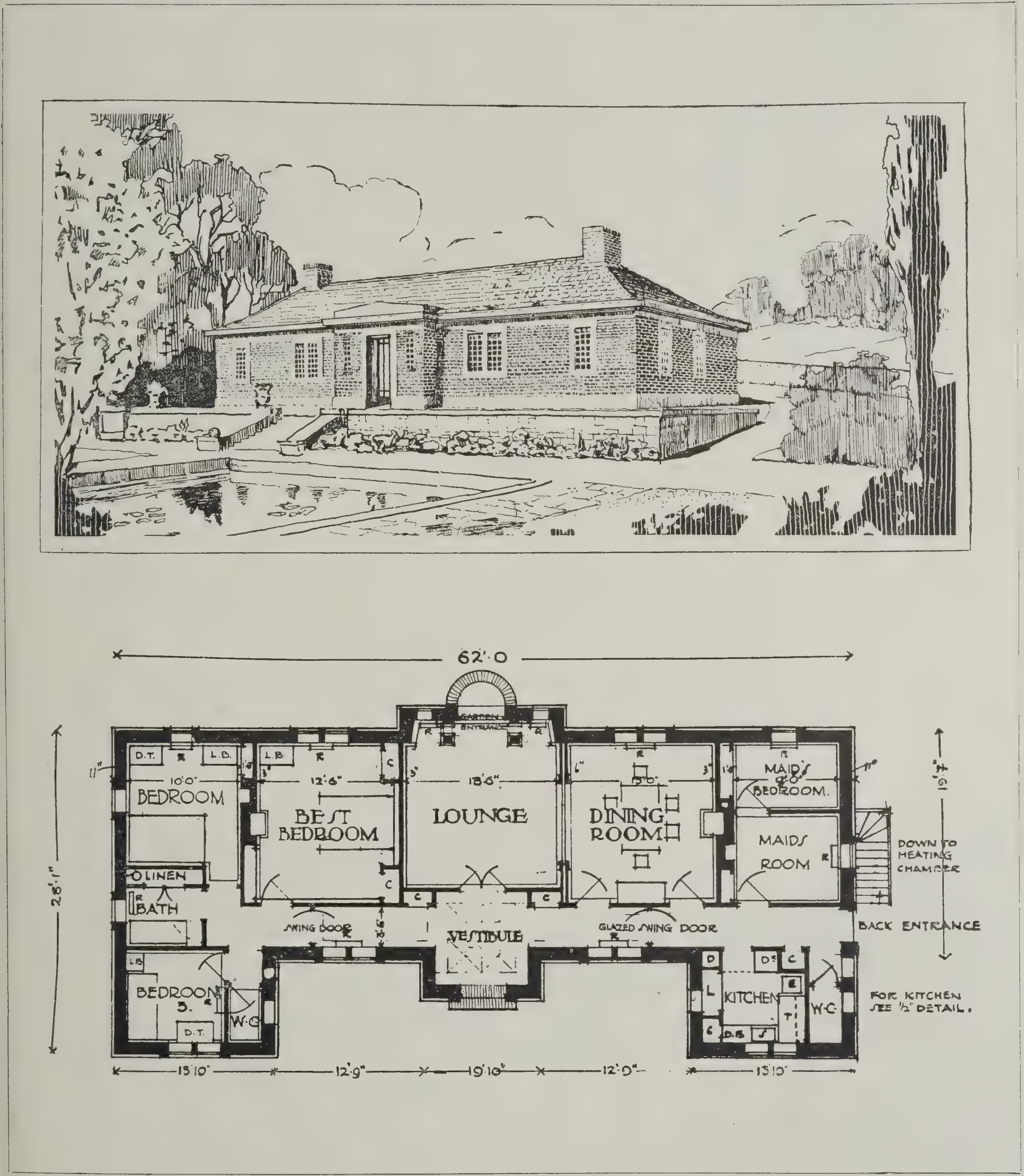
THE "DAILY MAIL" LABOUR-SAVING BUNGALOW COMPETITION: WINNING DESIGN

JAMES M. D. HENDERSON, A.R.I.B.A., M.S.A., ARCHITECT.



THE "DAILY MAIL" LABOUR-SAVING BUNGALOW COMPETITION: SECOND PREMIATED DESIGN.

C. MURRAY HENNELL, F.S.I., AND C. H. JAMES, A.R.I.B.A., ARCHITECTS.



THE "DAILY MAIL" LABOUR-SAVING BUNGALOW COMPETITION: THIRD PREMIATED DESIGN.

J. S. HODGES, A.R.I.B.A., ARCHITECT.

# Magazines of the Month*

## A Literary and Pictorial Digest

THE January issue of THE ARCHITECTURAL REVIEW is its usual sumptuous self. The frontispiece is composed of a three-colour reproduction of a William Walcot painting, "The Etruscan Temple of Jupiter Capitolinus." In sheer beauty of colour it could not be excelled. Mr. Kineton Parkes contributes an article on American Sculpture. Of this, the writer says: "It may be taken for granted that firstly, American sculpture, like British sculpture, followed Canova and Thorvaldsen as nearly as its practitioners were able to get to those masters' styles; secondly, it began to change when the influence was removed from Rome to Paris, for France has, above all claims in universal culture, that of preserving a high, and in varying ways, dignified status of the art of sculpture, and all the other countries of the world have benefited by this consistency; thirdly, the traditional French influence began to wane when Rodin, Rosso, and Meunier had definitely made themselves felt forces by which they impelled in the newer directions of naturalism, realism, and impressionism, many of the more vital of the young men and women of America as of other countries. Moreover, America suffered the invasion of the young continental artists who went from Europe with the fresh gospel already developed; the new ideas and technique perfected in Munich and Florence, and ready, not only for the perversion of the old classical traditions, but ready, indeed, to pervert the doctrines of Rodin, Rosso, and Meunier, and to preach a still higher message."

"With all these potent sociological factors at work it is not surprising to realize the fine assorted virtues which American sculpture possesses: its idealism; its realism; its historic sense and its classical tendencies, all expressed in portraits and monuments and memorials; in fountains and garden groups; in studies of children and animals; in Indian studies and in museum and domestic pieces. American sculpture is an accomplished composite thing, full of seriousness, intensity, and honesty; it lacks only one thing—a great revelation.

"There are humanity and truth; insight and imagination; decorative and architectural feeling; a love of human and animal form; and in American sculpture, as a whole, there are earnestness, accomplishment of treatment, and good taste. Finally, it must be said that American sculpture, apart from some retrogressions in the early classical periods, has never been decadent. With the quite modern influences, the archaic, the primitive, and the negroid, New York is not universally concerned; not more so than London, much less so than Paris, Belgrade, Budapest, Munich, Amsterdam, the Scandinavian countries, and Finland. New York and London rely mostly for the exhibition of these phases of the plastic art of to-day on foreign exponents. Cubism, post-impressionism, vorticism have their votaries in America as in England, but the English - speaking nations have never distinguished themselves by vivid and avid discoveries of, or futurist excursions into, the dim and distant past. Greece and Italy, with occasional back-glances at Assyria and Egypt, have been our hunting-grounds when we might very well have been employed in the more exciting and more profitable employment of pure creation."

A new feature is begun in "Leaves from a Sketch Book," Sir Reginald Blomfield's sketch-book being the first to be drawn from. Of those given, we reproduce one.

The December issue of GARDEN CITIES AND TOWN PLANNING expresses itself as being neither disappointed nor elated by the results of the General Election, "whatever may be the opinions of the association's individual members."

"It is true," the commentator continues, "that certain parties have been quick to declare that no new National Housing

THE LOWER LODE, TEWKESBURY.
From a Pencil Drawing by Sir Reginald Blomfield, R.A.
(*From "The Architectural Review."*)

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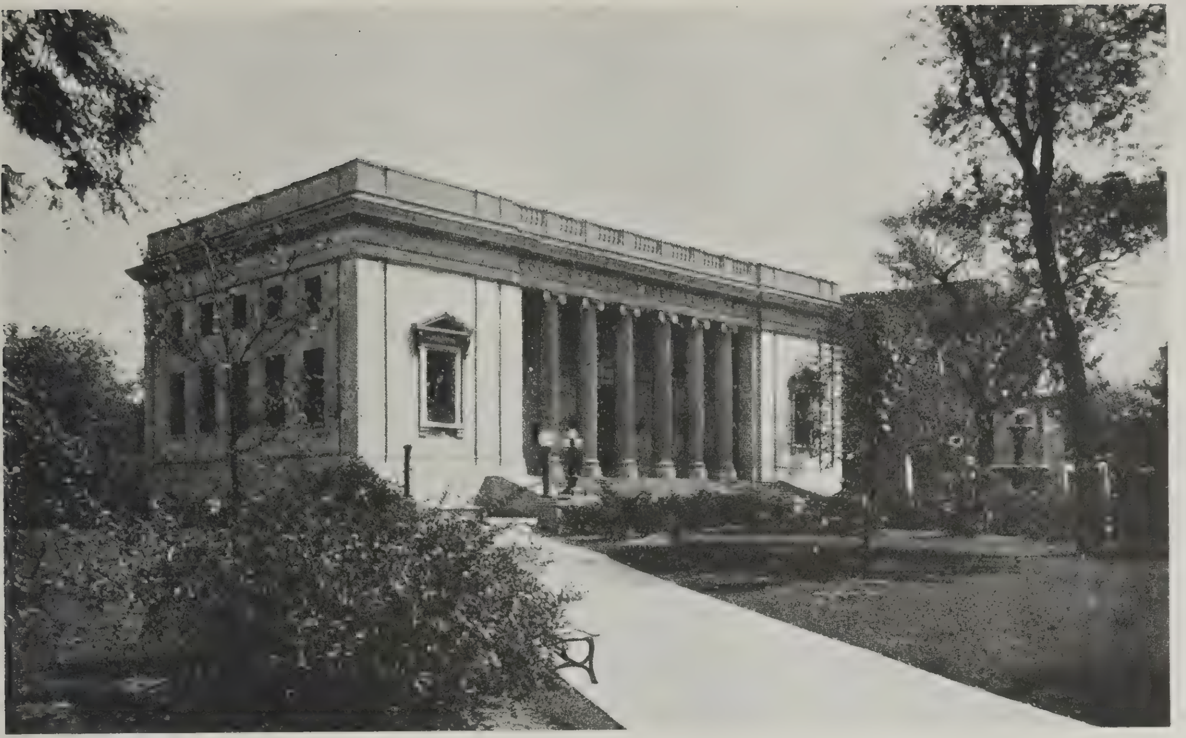
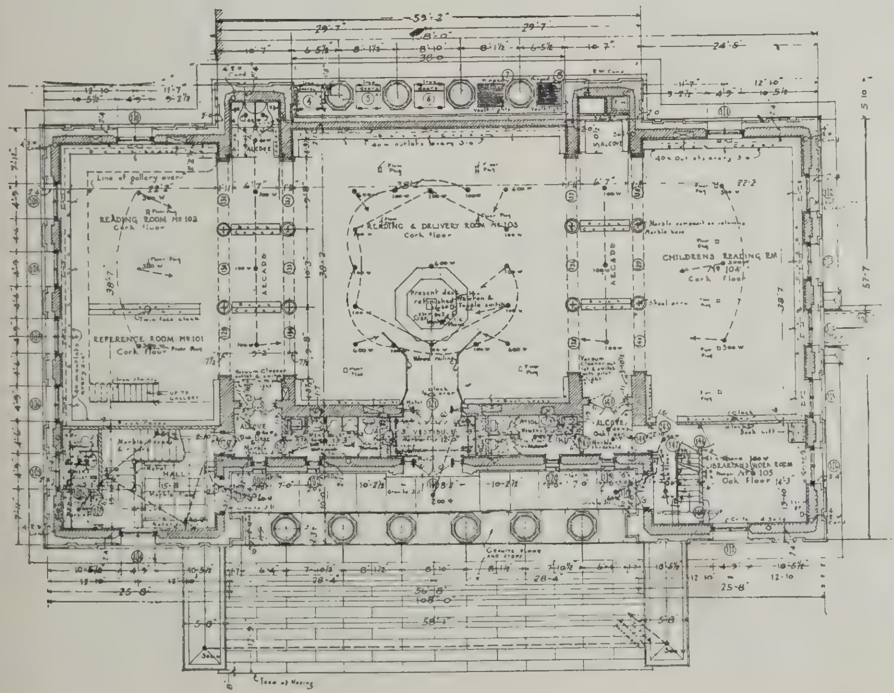
* All the above magazines and many others may be seen in the Reading Room at 29 Tothill Street, Westminster.



THE COOPER FREE PUBLIC LIBRARY, CAMDEN, N.J.
WALTER T. KARCHER AND LIVINGSTON SMITH, ARCHITECTS.
(*From "The American Architect*.")

Scheme will now be produced, and that early steps will be taken to repeal the Rent Restriction Acts. We do not feel any certainty on either of these points. If the Rent Restriction Acts are repealed, the housing issue will become clearer—and more acute—than ever, and no determination to live in tranquillity could resist the pressure for an adjustment of wages which—to the great profit, be it said, of the owners of houses built before the war—would enable economic rents to be paid for houses built at post-war prices. The production of a National Housing Scheme is not so important as the formulation of a National Housing Policy which will, quite apart from *a priori* convictions on the desirability or detestability of State enterprise, secure the provision of an adequate number of houses, of adequate quality, in the places where their building will most adequately meet the industrial and social needs of the country. In any case there is no need to despair of a Government which has expressed its intention of securing peace and tranquillity. There can be no peace for any government which does not deal constructively with the material conditions which create discontent and unrest, physical deterioration and moral disintegration"


READING ROOM No 102
REFERENCE ROOM No 101
READING & DELIVERY ROOM No 103
ARCADE
ARCADE
CHILDRENS READING RM No 104
HALL
ALCOVE
ALCOVE
LIBRARIANS WORK ROOM No 105
59'-2"
38'-7"

GROUND-FLOOR PLAN OF THE COOPER FREE PUBLIC LIBRARY, CAMDEN, N.J.
(*From "The American Architect*.")

The American Architect and the Architectural Review for December 6 illustrates the Cooper Free Library, Camden, N.J. (Walter T. Karcher and Livingston Smith, architects).

The type of construction selected was wall-bearing steel, fireproofed. In fact, comparatively little steel was used in this building. The massive walls all carried straight up, and the only steel necessary was that required for lintels and roof-rafters. All walls both exterior and interior are of masonry, all floors and roof of reinforced concrete slab.

Limestone is used throughout on all four sides of the exterior. Granite is used for the steps. All window frames and sash and the exterior lamps are of bronze. The roof is covered with red quarry tile, in order that the building may not look unsightly when viewed from above from any overlooking office buildings or apartment houses. Incidentally, a feature of the base of the building is the stone seat that entirely surrounds the library. It is not only effective architecturally in this case, but situated in a public square, as this building is, it is a most practical feature.

Another distinctive element of exterior treatment is the glass mosaic frieze back of the large columns of the front portico. This frieze extends entirely across the front, is over 50 ft. in length and 7 ft. high. No piece of glass in this frieze is over $\frac{3}{8}$ in. in size. It was executed by Nicolo D'Ascenzo. The use of a coloured frieze in this position relieves the dull monotony of the usual grey wall back of such a colonnade and gives a richness to the shadow that is decidedly unusual and most pleasing. A row of electric lights concealed above the architrave within the portico permits this frieze to be lighted at night with striking effect.

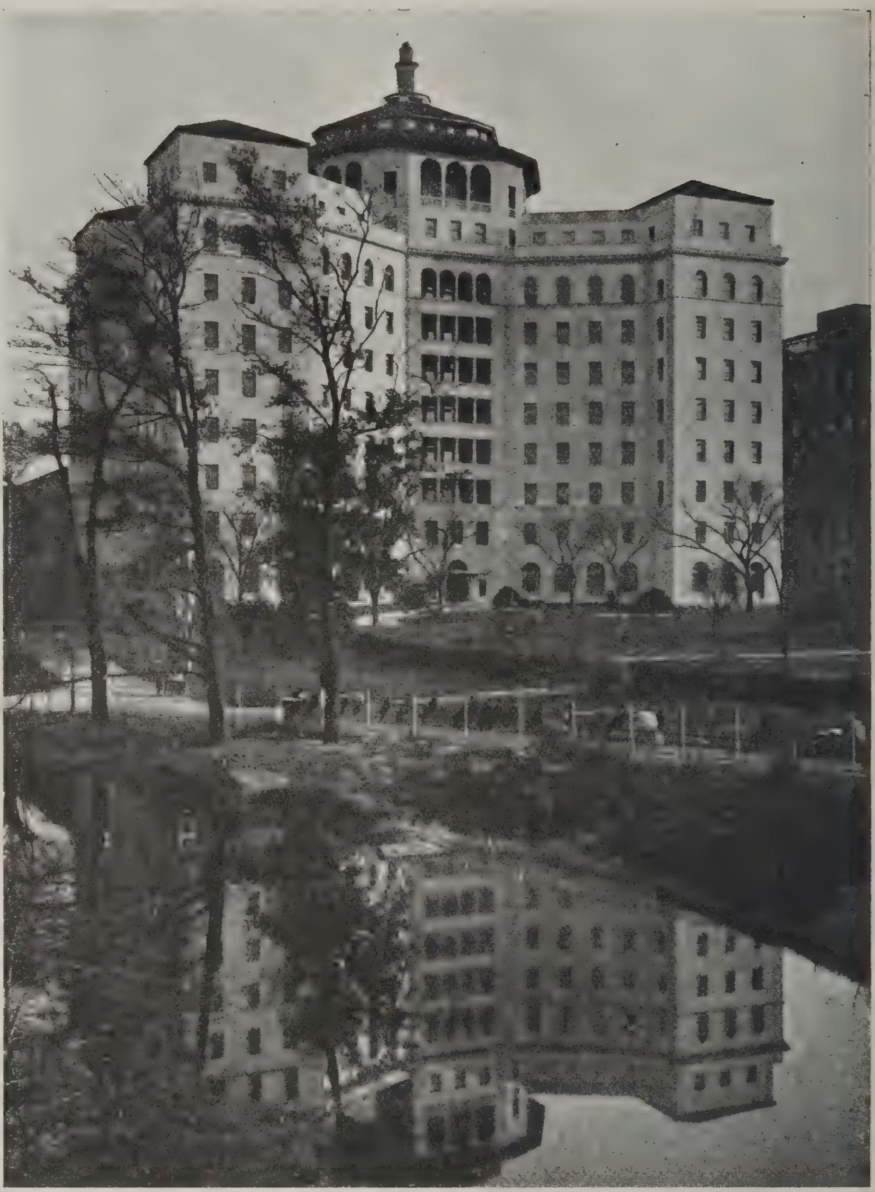
The December issue of THE ARCHITECTURAL FORUM concerns itself with hospitals, and articles are contributed by experts on Modern Hospital Design, The Selection and Development of Sites, Details of Planning, Equipment, Prevention of Sound Travel, Heating and Ventilating, etc. Of the many illustrations given we reproduce the Fifth Avenue Hospital, New York.

Mr. Richard Schmidt, F.A.I.A., in his comprehensive article on "Modern Hospital Design," treats of the general hospital, hospitals for the insane, contagious hospitals, tuberculosis hospitals, open-air buildings, obstetrical, surgical, and children's hospitals. We trust that the following observations by the author upon the subject of "atmosphere" will be regarded: "A proper mental attitude of the patient was hardly possible in the older forms of hospitals which resembled correctional institutions, and it cannot be questioned that patients will be more cheerful, looking forward to the success of operations with more certainty, and benefiting greatly if everything they see about a hospital is familiar and inviting, rather than calculated to arouse curiosity and possibly fear. Many discerning hospital administrators have not been slow to appreciate the desirability of making their institutions attractive to the eyes and minds of the patients, and have happily compromised between the most rigid simplicity and the details of hotel and house finish and decoration. It may cost a little more to clean a projecting architrave and panel work than it does the institutional flush casings of doorways, or to use flat paints than it does glossy enamel, but the results in the quick recovery of patients seem to be worth the additional expense.

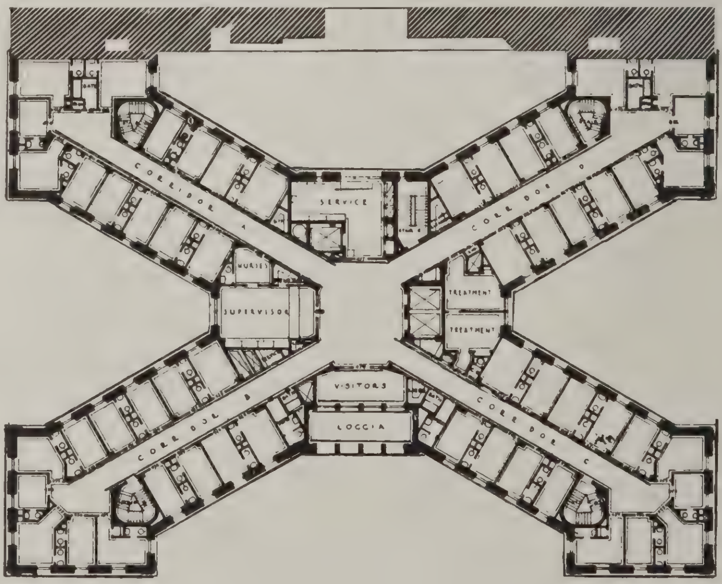
"The entrance, reception rooms, parlours, and porches for convalescing patients, for receiving their relatives and friends, should be furnished with as much care as is used in the best hotels and residences. In very large hospitals, parlours for the reception of friends and relatives should be convenient of access to every convalescent, and the cost of replacing the more delicate furniture required for the kind of furnishings mentioned should be considered a necessary expense."

What is said about the necessity for better provision in the accommodation for nurses and staff should also be marked:—

"The very low ratio of non-employment in this country in the past three or four years has made it increasingly difficult to attract women to the profession of nursing. Due to this, and also because it is only common justice, it is desirable to provide proper and adequate accommodations for the nurses, internes, orderlies and other employees of the hospital. Many hospitals are built with little thought of the number of nurses which will be required or the accommodation they should have, and when the hospital is built and completed there is generally not sufficient money available to build a proper nurses' home, and they are lodged in rented quarters, obviously unsuitable, and fed in unattractive, cramped basement dining-rooms. Manifestly every estimate of the cost of a hospital should include the cost of a proper building for the nurses, with social, reception and dining-rooms, sewing

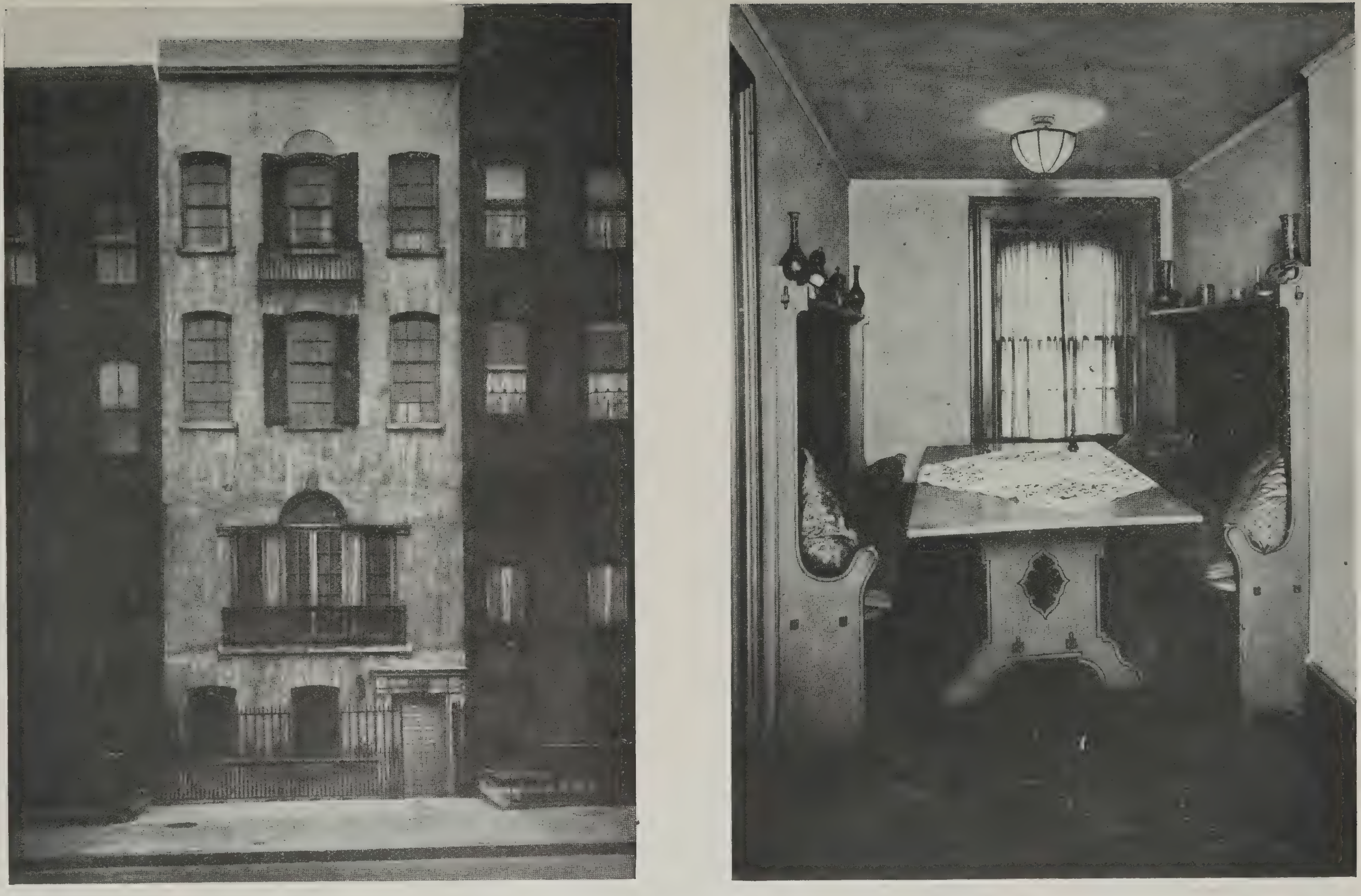


A GENERAL VIEW.



TYPICAL FLOOR PLAN.

FIFTH AVENUE HOSPITAL, NEW YORK.
YORK AND SAWYER, ARCHITECTS. WILEY E. WOODBURY, M.D., CONSULTANT.
*(From "The Architectural Forum.")*

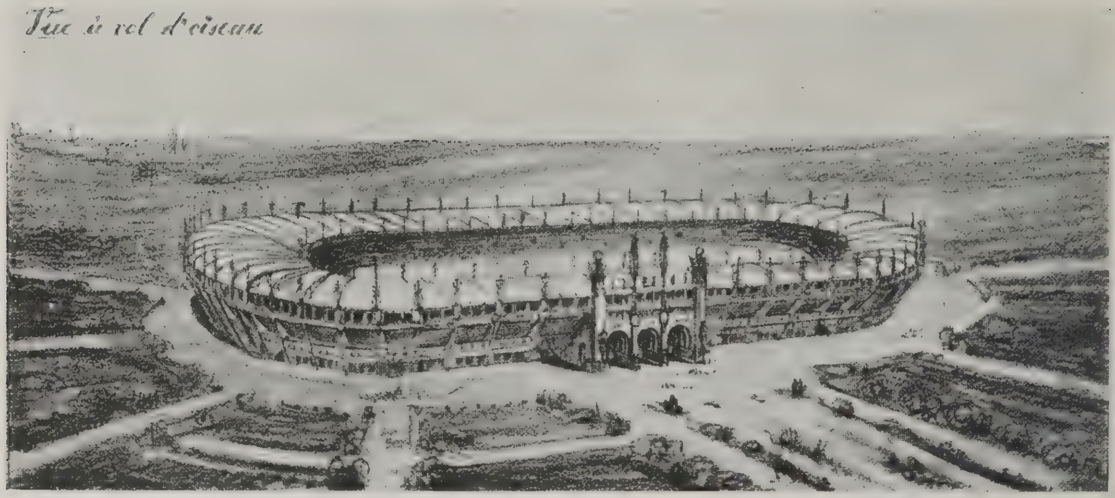


THE EXTERIOR.

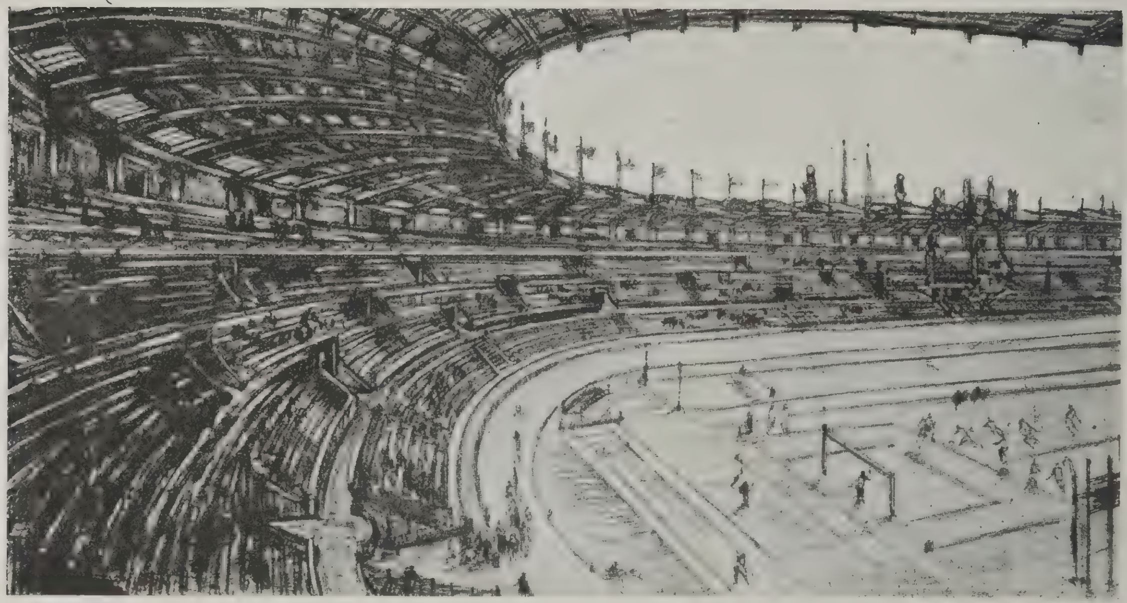
THE BREAKFAST NOOK.

HOUSE OF MR. CLAYTON SEDGWICK COOPER, EAST 48TH STREET, NEW YORK. DWIGHT JAMES BAUM, ARCHITECT

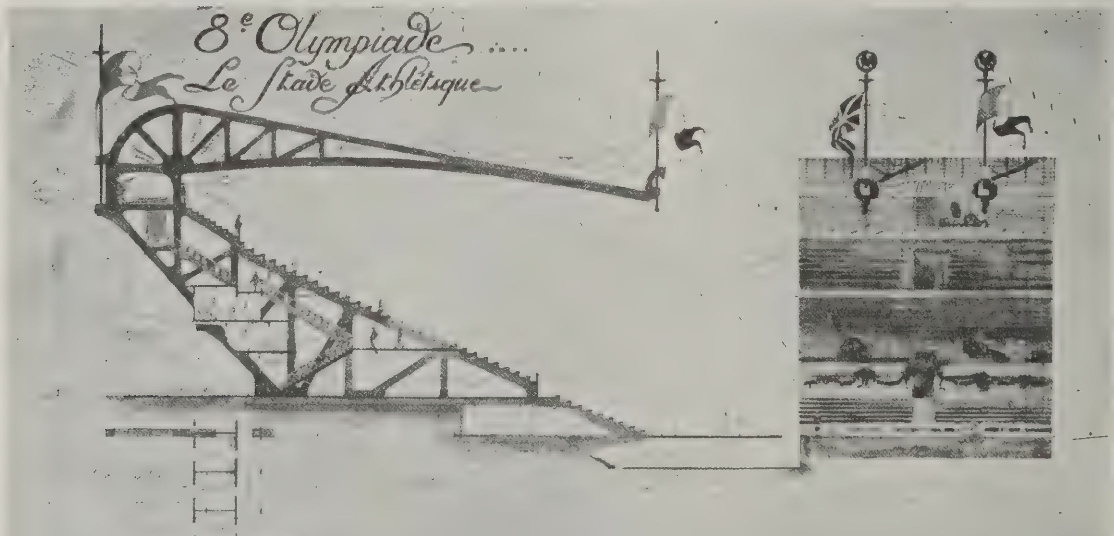
(*From "The American Architect."*)



A BIRD'S-EYE VIEW.



AN INTERIOR PERSPECTIVE.



SECTION SHOWING CONSTRUCTION OF SEATING.

A PROJECT FOR A MEMORIAL STADIUM.

M. GUILLAUME TRONCHET, ARCHITECT-IN-CHIEF TO THE FRENCH GOVERNMENT

*(From "L'Architecture.")*

room and laundry where they can do a little of that kind of work when necessary, also a sitting-room in connection with each group of sleeping rooms where the nurses can relax before retiring.

"It seems to be the consensus of opinion among superintendents of nurses that single-bed rooms are more desirable than two-bed rooms, though possibly some nurses may suffer less from nostalgia during their freshman years if they have roommates. If the hospital can afford them a gymnasium and swimming pool will be appreciated accommodations, and if a training school is combined with the hospital, the teaching rooms, laboratories, diet kitchen and demonstration rooms are better located in the nurses' home than in the hospital proper. The home should be sufficiently removed from the hospital to permit the nurses to relax when off duty, and to enjoy themselves in natural and reasonable pleasures without disturbing the patients in the hospital. The accommodations should be made as nearly as possible like those of a good American home."

L'ARCHITECTURE for November gives M. Guillaume Tronchet's project for a war memorial stadium, which would be the biggest in the world and capable of seating 80,000 spectators.

The December issue of L'ARCHITECTURE illustrates work exhibited at the Salon d'Automne, among which is a photograph of the remarkable staircase (reproduced) designed by M. René Binet for the Grands Magasins du Printemps—since destroyed by fire.

## The Art of the Ancient Egyptian

Professor Flinders Petrie, in a lecture upon Ancient Egyptian workmanship at King's College, spoke of the extraordinary skill, conscientious Workmanship, and manual dexterity of the ancient Egyptian. He first exhibited some wonderful photographs of examples of ripple-flaking in flint, done purely for decorative purposes.

The regularity of the work was marvellous, and has never been approached, yet the specimens illustrated were executed 7,000 years before Christ, or about ninety centuries ago. Work of the same kind done much later, about the beginning of the historic period, showed signs of deteriorated workmanship because the use of copper had begun, and men preferred to work in the more plastic material.

Photographs of stone vases and circular bowls were next shown, and these too were executed with perfect skill, though no lathe or other rotary appliance had been used in their manufacture.

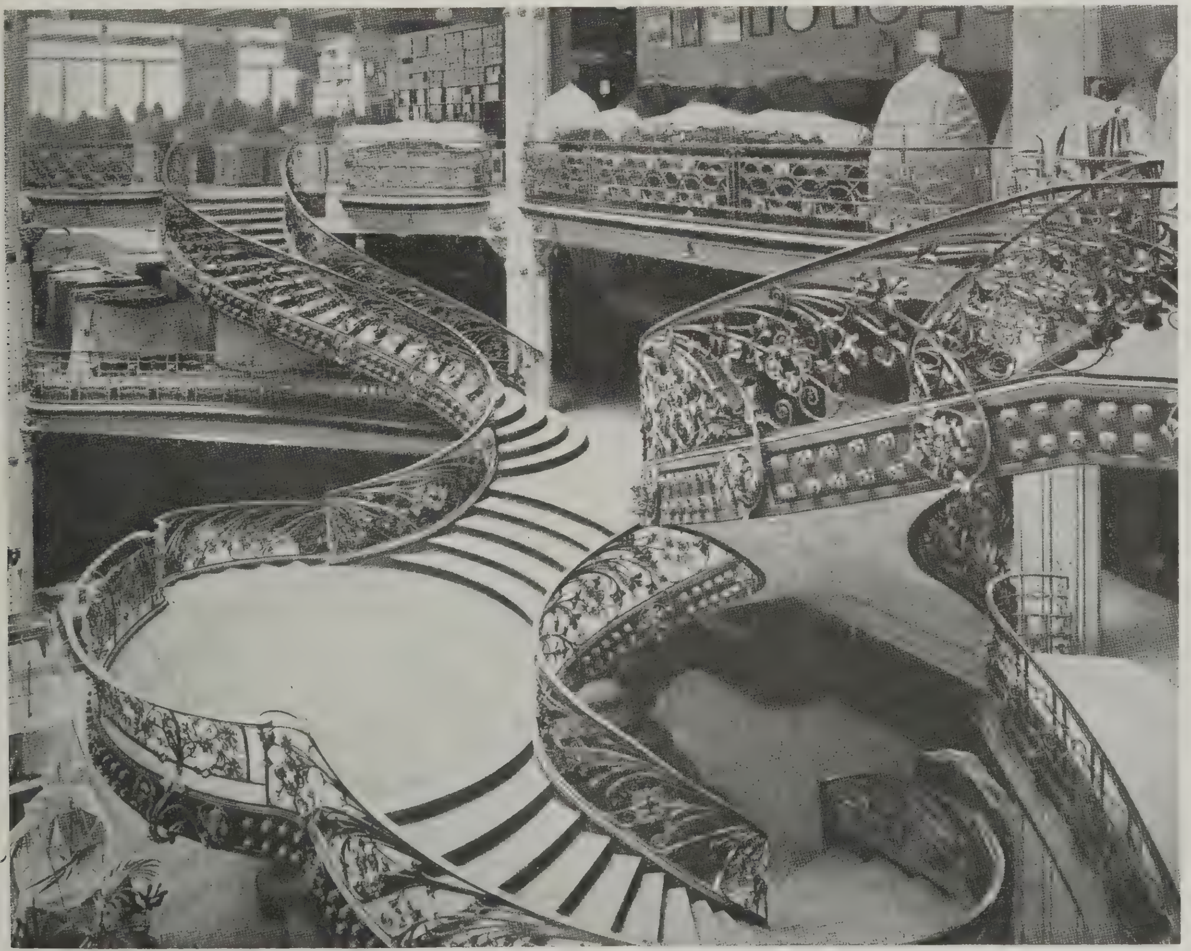
They were fashioned and rubbed down by hand, yet the work was so true that a large stone bowl 2 ft. in diameter was nowhere more than a quarter of an inch thick and was perfectly circular in form.

The skill and æsthetic appreciation of perfection of form in the ancient Egyptian had never been equalled, and the wonder of it all was that most of his work was not intended for exhibition but to be placed in a tomb out of human sight for ever. Professor Petrie said he had measured work in Egypt which was true to the straight within four-thousandths of an inch, yet it was entirely hand-wrought.

Next there was shown a photograph of two pieces of cloth, one taken from an Egyptian tomb about 7,000 years old, the other a piece of the finest modern cambric handkerchief. The ancient fabric more than rivalled the modern in evenness of thread and regularity of weaving, yet the former was handspun and handwoven, while the latter was the product of the most perfect machinery that could be devised.

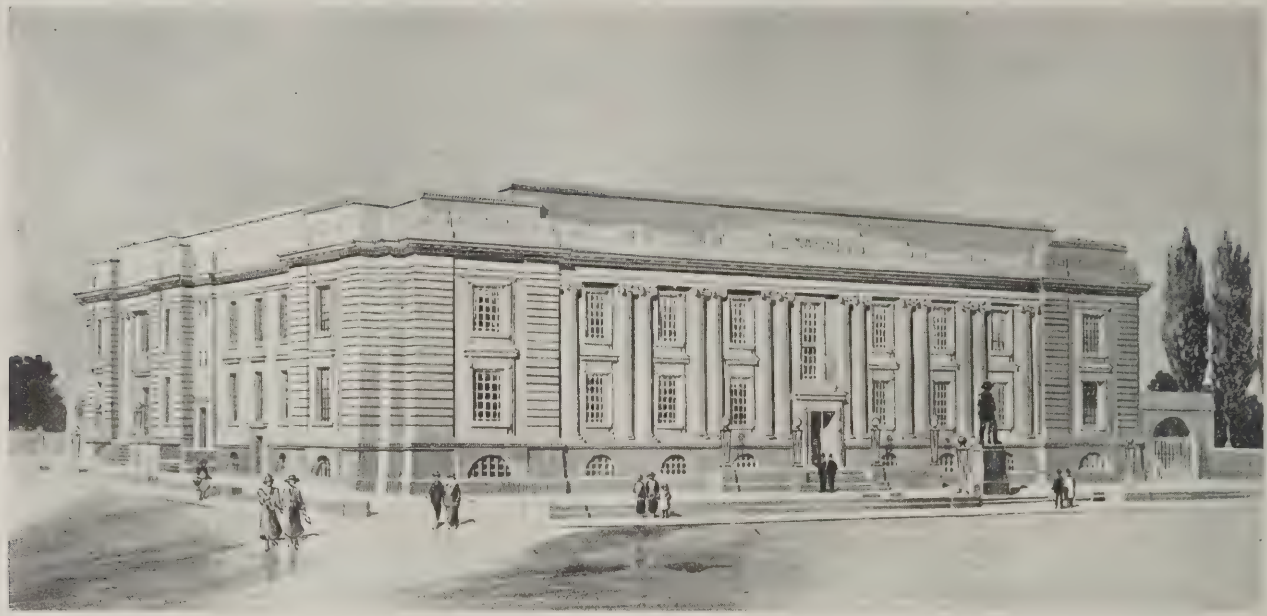
Many other beautiful things were shown, including specimens of goldsmiths' and jewellers' work, woven coloured patterns, and so on, which modern skill could not reproduce. Professor Petrie mentioned that one of the pieces of inlaid metal and coloured stonework shown was recently taken to the most expert jeweller in Paris, who was asked to make a copy of it. The jeweller said he could not do it, and that it would take years of specialized training before the most expert workman could even attempt it.

The same minute perfection was observable in Egyptian statuary work, where small anatomical details that modern sculptors ignored were reproduced with complete fidelity.



THE STAIRCASE IN THE GRANDS MAGASINS DU PRINTEMPS, PARIS.
RENÉ BINET, ARCHITECT.

(*From "L'Architecture."*)



THE WINNING DESIGN.

# Colwyn Bay Town Hall Competition

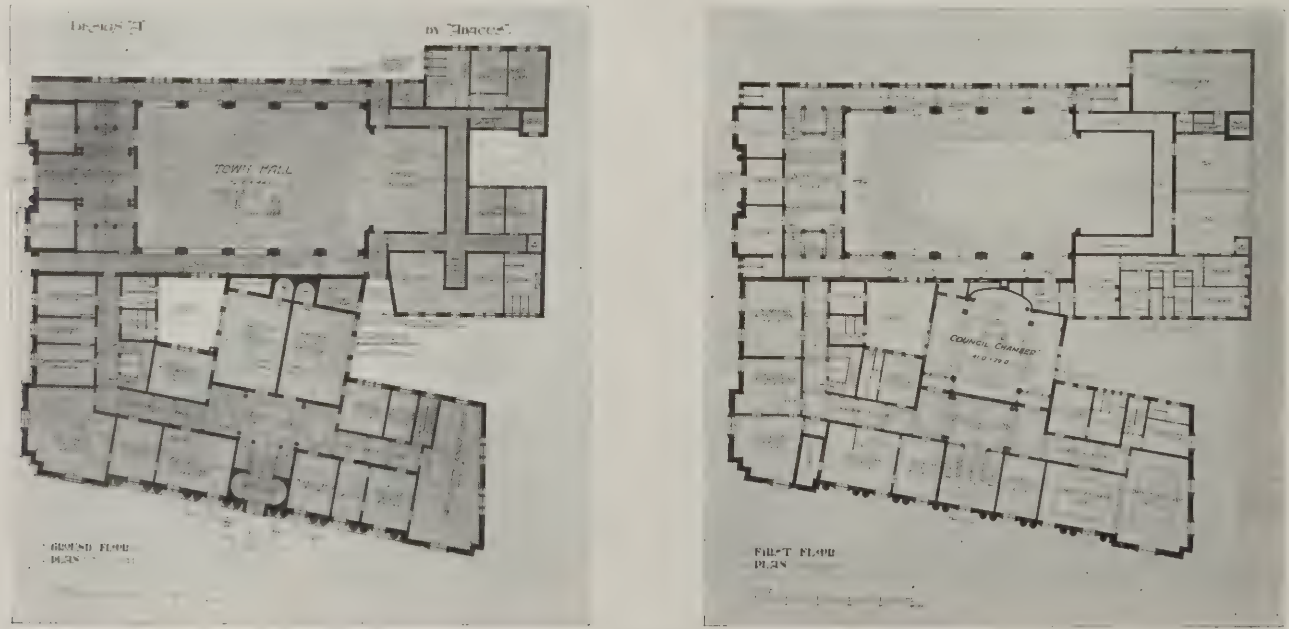
As announced in our last issue, the assessor, Mr. F. P. Lockwood, has awarded first place in the Colwyn Bay Town Hall competition to the design submitted by Messrs. J. M. Porter and Co., of Colwyn Bay, architects.

In the successful design the general lay-out of the buildings is such that provision has been made for complete municipal offices and town hall, each of which could be erected separately. The authors suggest that the town hall portion, together with the fire and ambulance stations, might be built first.

After the first portion had been erected (if it was found necessary to proceed with the construction of the offices) a part could be arranged to temporarily accommodate a certain number of the officials while the existing premises were removed and the whole scheme completed.

The town hall portion has been designed for use in connection with the social and public requirements of the town and district. Twelve hundred people can be seated in the body of the hall and in the balcony on the first floor, but this accommodation could be greatly increased. The main entrance to the hall, from Coed Pella Road, gives access through a vestibule into a foyer, from which two large staircases lead up to the crush hall on the balcony floor. Along each side of the hall on both floors is a promenade corridor giving easy access to the various seats, and allowing ample exits being provided direct into the open. A stage is provided, together with the necessary retiring rooms, and is sufficiently large to be used for theatrical purposes. In the event of the hall being used for dances or other public functions, a kitchen and scullery are arranged for catering. There is also an ambulance station (with store) to accommodate two motor ambulances, a fire station to house a complete equipment, a workroom for repairs, and caretaker's quarters with separate entrance.

In the municipal offices ample provision has been provided for the existing staff, but provision has been made for future expansion. The main entrance is in the centre of the building facing Conway Road, and leads to an entrance hall giving direct access to the "rates" offices, so planned that in the event of large extension in this portion of the work being required they can be thrown into one room. In direct communication with each of the "rates" offices is a private room for collectors and overseers. On each side of the entrance are the main



GROUND AND FIRST FLOOR PLANS OF THE WINNING DESIGN

J. M. PORTER AND CO. ARCHITECTS.

offices for the gas and electricity departments, and also for the accountant. Provision is also made for the medical officer of health and sanitary inspector, and to these particular rooms a subsidiary entrance is given from Coed Pella Road, which entrance also gives direct access to the gas and electricity showrooms placed in the basement.

The council chamber is on the first floor, and is centrally situated directly opposite the main staircase. Access to the chamber is obtained from an ante-hall, and there are the usual retiring-rooms for the chairman, members, and lady members. The public gallery is on one side of the council chamber, and is reached by a separate staircase over which the caretaker would have special supervision from the outside of the building.

The two large committee-rooms are so planned that they may be formed into one room by the removal of a sliding partition. On this floor accommodation is also provided for the staff of the town clerk and the surveyor. Means of communication are provided between the town hall and the offices, through the main corridors on both floors, also from the council chamber. Retiring-rooms for the staff, internal telephone call office, and town information bureau are provided, and an electric lift, in addition to the secondary staircase, will serve the three floors of offices.

The basement is devoted to storage for the various departments, and to the showrooms for the gas and electricity departments. A boiler-house is centrally situated, large enough to accommodate the necessary fittings for the complete heating and ventilation of the buildings.

The elevations to Coed Pella and Conway Roads are shown to be carried out in stone, the whole design being based upon the Greek Classic style. Effect is obtained by broad masses rather than by small detailed work, elaboration in this having been carefully avoided, except in the case of the main cornices and entablature.

# Reinforced Concrete Calculations for Beginners. V

## By Professor HENRY ADAMS, M.Inst.C.E.

(*Continued from December 6, page 813.*)

When a beam is supported at the ends and loaded on top the bending moments produce not only the longitudinal stresses of tension and compression, but also shearing forces. Suppose the beam to be composed of a number of thin planks laid one above the other, they will slide on each other as in Fig. 9, showing that in a solid beam the same tendency to horizontal shear must exist. The load also produces a tendency for the different parts of the beam to slide on each other vertically, as in Fig. 10, but we cannot show this experimentally without using carefully devised apparatus. It must be sufficient for the present to take it on trust that these stresses exist. With a central load the vertical shear is equal from end to end of the beam, but with a uniformly distributed load the shear varies from a maximum at the ends, equal to half the total load including the weight of the beam itself, to nothing at the centre of the span, as in Fig. 11. In comparing the bending moments and the shear stresses it will be seen that where one is at a maximum the other is at a minimum, and vice versa. As the longitudinal reinforcement is put in to provide for the bending moments, so it is necessary to see that the shear is provided for. The concrete is allowed to take 60 lb. sq. in. of total vertical cross section, therefore 24 × 12 × 60 = 17,280 lb. In the present case the maximum shear is only 9,600 lb., so that the concrete is sufficient to meet it without any added shear reinforcement.

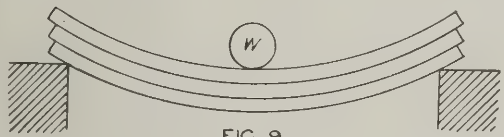


FIG. 9

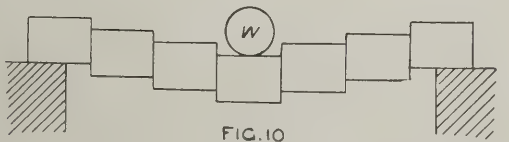


FIG. 10

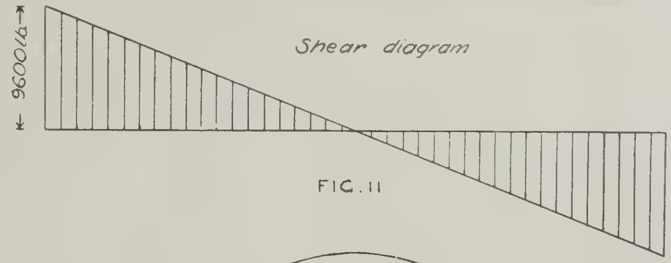


FIG. 11

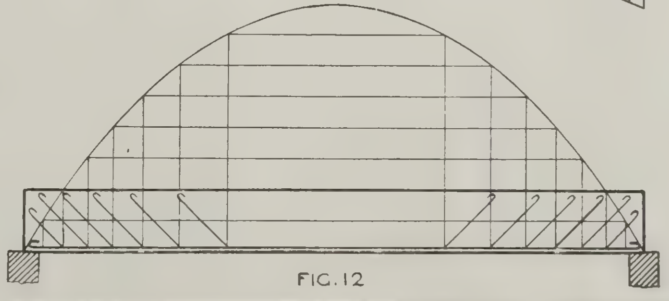


FIG. 12

Some designers prefer to put in special shear stirrups to take all the shear, finding their position as in Fig. 12. The parabola is made any height, the centre line divided into eight or ten equal parts. The intersecting points projected downwards and shear stirrups twisted round the longitudinal bars and bent up at 45 deg. as shown. Adopting this method the stirrups are brought automatically closer together towards the ends of the beam, enabling uniform sections to meet the varying stress. Sometimes these stirrups are placed vertically, but as the direction of the stress they have to meet is diagonal, the resultant of the vertical and horizontal forces, it is better to place them as shown. They should be secured in the positions shown, so that they do not slip while the concrete is being placed in position. The writer has found cases of failure where the stirrups were misplaced through ignorance of the workmen.

Each stirrup will be double, hence the name, and there are frequently two stirrups together at the same point of the span. The total sectional area of the stirrups at each point should be sufficient to provide for the shear half-way to the next stirrups on each side. The simplest way to provide for the approximate requirements is to make the total sectional area of shear members on each side of the centre $\frac{1}{48}$ of the sectional area of the beam. A more correct method is to take the maximum shear stress, subtract sixty times the sectional area of beam to allow for shear strength of concrete, divide the remainder by 10,000, the allowable shear stress on steel, which will give the total sectional area required on each side of centre. Dividing this again by the number of stirrups will give the requisite sectional area of each, placed as in Fig. 12.

(*To be continued.*)

# Societies and Institutions

### *R.I.B.A. Council Meeting.*

The Council of the R.I.B.A. at its last meeting accepted an invitation from the Architectural League of New York to dispatch the Exhibition of Contemporary Architecture to that city to form the British Section of an International Exhibition of Architecture. The exhibition will open in February, and it is anticipated that it will afterwards be sent to a number of other large cities.

Other business transacted at the meeting included the following :—

London Squares.—The Council endorsed the action taken by the Art and Town-planning Committees and the London Society with regard to the measures to be taken for protecting London squares.

The Franco-British Union of Architects.—The Council made a grant of £20 in aid of the work of the British Committee of the Franco-British Union of Architects for the current year.

The British Engineering Standards Association.—Mr. Max Clarke was appointed to represent the R.I.B.A. on a sub-committee appointed to consider the standardization of cast-iron half-round and other moulded gutters.

National Registration of Plumbers.—Mr. H. D. Searles-Wood was appointed to represent the R.I.B.A. on the council for the National Registration of Plumbers.

The Royal Sanitary Institute Congress, 1923.—Mr. H. D. Searles-Wood and Mr. John Bilson were appointed representatives of the R.I.B.A. at the Thirty-fourth Congress and Exhibition of the Royal Sanitary Institute to be held in Hull from July 30 to August 4, 1923.

### *Exhibition of Architecture, Town-Planning, and Complementary Arts.*

The Council of the R.I.B.A. have approved in principle and referred to the Art Standing Committee for consideration a proposal for the holding of an exhibition of architecture, town-planning, and the following complementary arts: 1, Mural decorative painting; 2, Sculpture and ornamental carving and casting; 2 (*a*), Furniture and woodwork; (*b*), Tapestries, weaving, and decorative hangings; (*c*) Pottery and ceramics; (*d*) Metal work; (*e*) Household utensils and appliances.

### *Architectural Vacancy in Palestine.*

The R.I.B.A. have received the following particulars of a vacancy for a chief architectural draughtsman in the Department of Public Works, Palestine :—

Qualifications.—Energetic and rapid architectural draughtsman with a sound knowledge of construction and design. Must be able to develop working drawings from sketches, and be capable of directing the work of others. Some years of experience in an office of repute essential.

Salary.—Commencing salary £30 per month, increasing £1 per month for every year of satisfactory service up to a maximum of £35 per month, plus a high cost of living allowance liable to fluctuation, but at present amounting to £2·80 per month.

Quarters.—If married, Government may provide living accommodation for which 8 per cent. of total emoluments will be deducted monthly from salary.

Leave.—Six weeks in each year of service.

Passage.—Second class by boat and first by train to Palestine, and back at conclusion of contract.

Probation.—For one year the candidate will be on probation, during which time he will be liable to discharge on the expiration of three months' notice. On the other hand, if his work gives satisfaction, he may, at the end of the probationary year, be offered a post in the permanent service of the Palestine Government.

Candidates, in the first instance, should address their applications to Mr. Ian MacAlister, Secretary of the R.I.B.A., 9 Conduit Street, London, W.1.

### *The Allied Societies and the "R.I.B.A. Journal."*

Arrangements have been made for the supply of the "R.I.B.A. Journal" (post free) to members of the allied societies who are not members of the R.I.B.A. at a specially reduced subscription of 12s. a year. Those who wish to take advantage of this arrangement are requested to send their names to the Secretary of the R.I.B.A., 9 Conduit Street, W.1.

### *The Wessex Society of Architects.*

An important development in the organization of the architectural profession in the West of England has just been completed by an agreement between the Bristol Society of Architects and the Gloucestershire Architectural Association. The two bodies have been combined in a new body known as "The Wessex Society of Architects." The new society will have as its province the counties of Somerset, Gloucestershire, Wiltshire, and Dorset, and the two constituent societies will retain their original titles as branches of the Wessex Society. Mr. Thomas Hardy, O.M., the poet and novelist, who is an Honorary Fellow of the R.I.B.A., has accepted the first Honorary Fellowship of the new body, which has been admitted as an "Allied Society" of the Royal Institute.

### *Period Costume Ball in Birmingham.*

The Grosvenor Room at the Grand Hotel, which one associates with long dinners and longer oratory, recently presented a pretty and novel picture. Under the light diffused by electric chandeliers and bulbs, a hundred or more figures moved rhythmically to the strains of the languorous waltz or the newer or more lively dance tunes. In the modified revelry that prevailed one felt that a very good attempt had been made to recapture the gaiety of nights that belong to the ante-bellum period. The bringing together of all these people in such happy circumstances was the outcome of efforts started by the Birmingham Architectural Association, and resulting in the formation of a committee of management representing, in addition to that body, the Central School of Art, the Birmingham Society of Artists, the local branch of the Institute of Civil Engineers, the Civic Society, the Repertory Theatre and the Midland Arts Club. By this social gathering the various artistic and scientific bodies were brought into closer relationship with the ultimate object of making their ideals effective in civic improvement. The ball was intended to display period costumes, but as evening dress was optional too many of the company took advantage of the opportunity to escape exercising their ingenuity. Still, if the periods were inadequately represented in costume, there was a very lively introduction of colour and variety. One saw, for instance, the Stuart, the Georgian, and the Early Victorian types reproduced. Another English type of feminine beauty displayed suggested Dolly Varden. Two of the most striking figures were an Early Dane in a helmet and cloak and a lady whose shimmering dress of gold and pink conveyed a capital idea of the dazzling glory of a Queen of Sheba. An Egyptian in white raiment, throwing up the dark square-trimmed beard and sun-browned complexion, found a delightful partner in a lady dressed after the Turkish fashion. Later on when several members of the repertory company arrived, still more variety in colour and costume was added to the company. Though, perhaps, not achieving all that was expected by the Civic Arts Carnival Committee as a period costume ball, it proved an enjoyable social function.—"The Birmingham Post."

### *A Handy Pocket Diary.*

A handy "Architects' and Surveyors' Pocket Diary" has been issued by the Architects' and Surveyors' Assistants' Professional Union. In addition to the diary proper, pages devoted to personal memoranda, such as engagements, telephone numbers, and cash notes, there are a large number of particulars of the greatest value, with regard to the leading professional bodies and training centres, and the various architectural scholarships and prizes. A list of the latest technical publications is also given, together with much useful technical data, and a variety of other useful information. The president of the Professional Union is Mr. A. J. Penty, Licentiate R.I.B.A., and the general secretary is Mr. John Mitchell. The head office is at 36 Victoria Street, London, S.W.1, and there are sub-branches in numerous areas.

### *The Institution of Structural Engineers.*

Pursuant to an Order of Court made by Mr. Justice Eve on November 28, 1922, and confirmed by the Board of Trade, the title of The Concrete Institute has been altered to "The Institution of Structural Engineers." With the advent of concrete, reinforced concrete, and special steels, a specialized profession has been developed during the past few years—that of the structural engineer; so that civil engineering is now divided under three main heads—electrical, mechanical, and structural. The former two divisions have been represented by powerful professional institutions for many years past, and, as a matter of fact, the structural division has been for many years represented by The Concrete Institute, which has now changed its title the more accurately to denote its special functions as a professional society for structural engineers. The classes of membership are: Members, Associates, Associate-Members, Graduates, and Students. Admission is by examination through the Graduate or Associate-Membership Class. The address continues for the moment to be Denison House, Vauxhall Bridge Road, Westminster; but we learn that there is a prospect that in the near future the Institution will acquire premises of its own.

# Land Conveyance and Building Prospects

AT a meeting of the Auctioneers' and Estate Agents' Institute, held at Russell Square—the president (Mr. James S. Motion) in the chair—Mr. T. P. Bennett, F.R.I.B.A., discussed the subject of "Land Conveyance and Building Prospects" in an exhaustive and valuable paper. He remarked that there was a French proverb which stated "If building goes well, all goes well," and it might be proved without difficulty that this was in accordance with actual experience. Active and satisfactory building was a necessity for the well-being of any community, and it appeared to him that no body of professional or business men could influence this matter to so great an extent as could those who were dealing with land. The land agent, surveyor, and landowner were all in various ways and various degrees in control of this basic commodity of building propositions, and if they were actively interested in building, the well-being of the nation would be advanced enormously. That a large amount of co-operation was possible between estate agents and architects seemed to him indisputable—on the one hand, co-operation of individuals, which probably obtained to a substantial extent at the present moment, and on the other, collective co-operation, which was only in its infancy, but which should have very large and important results. The men of the Victorian era were essentially individualists; the men of the present time appreciated more and more the value of collectivism, and the results which accrued to the individual as a result of collective effort. It was beyond question that knowledge and ability amongst architects had increased enormously in the past few years. It seemed to him that even in his own comparatively short experience this standard had advanced. He did not wish to suggest that it was limited to the younger generation of architects, for he thought it had spread over the whole of the profession. If this was so, it was possible that the time had arrived when auctioneers and estate agents and architects should reconsider their spheres of activity, and should examine the advantages which might accrue from closer collaboration. Mr. Bennett proceeded to tabulate the contributions which he thought each side might make to such a system of collaboration, and which would be to their mutual advantage, to the encouragement of building, and to the ultimate advantage of every member of the community. A survey of the methods of land conveyance in use all over the country suggested that even some surveyors themselves had not yet decided whether one method was any more suitable than another. If, amongst the wide differences of practice, it was possible to generalize, then he would say that apparently land which was reasonably low in cost was dealt with under the freehold system, and land which tended to be dearer was dealt with under leases. Pre-war (a very useful term) the bulk of the houses erected in this country were the result of the work of the speculative builder. Much as we condemned him in some respects, we owed him a certain debt of gratitude, but we could never have tolerated him or obtained half the benefit we had if his activities had not been kept in check by the leasehold system and the control exercised under it by the ground landlords and their surveyors. If we were to extend the system of providing houses for a large number of purchasers of small means, then some extensive system of hire-purchase for land appeared to him to be a necessity. He was convinced that all building on an extensive scale by public authorities was financially impossible. The private owner with sufficient means to purchase the freehold was, unquestionably, the most desirable prospective building owner and of the greatest use to the public at large. With regard to the leasehold system, pure and simple, this was a transaction which had appealed in the past primarily to the speculative builder. In the light of public and political feeling at the present time, he thought that speculative building would have an immense chance of success if it was carried out by active co-operation between land agents, architects, and builders, upon some economic system of collaboration which would provide houses with the maximum standard of comfort, artistic appearance, and economy of cost.

Mr. J. Geo. Head, proposing a vote of thanks to Mr. Bennett for his excellent address, said he thought the plan of co-operation was a sound idea. They would all agree that the production of houses was dependent upon confidence, and the best thing they could do to establish confidence was to remove the spectre of uncertainty which met them at every turn.

Sir Howell Williams said he was sorry to find that underlying Mr. Bennett's remarks there was a strong tendency to favour the leasehold system. He hated it; he had hated it with all his mind and reason all his life. The only other country he knew of that had a leasehold system similar to ours was Turkey. He owned a very large estate in the North of London—the Copenhagen estate. It was freehold. There should be no dual ownership of land and the property that was on it. In his opinion only a public authority should hold ground-rents and create leaseholds.

Colonel G. E. Kent (Portsmouth), Mr. W. S. Edgson, Mr. J. C. Platt, and Mr. C. E. Young also took part in the discussion.

Mr. Bennett, in reply, referring to a question raised by Mr. Head, said he thought we had reached a very fair measure of stabilization of building prices. Those prices were sufficiently stable to justify people in building if they wished to do so, if they had any reason for doing so. As to another question put by Mr. Head whether they could produce schemes with costs attached to them, he (Mr. Bennett) thought that in general they could.

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# Three More Women Associates

THREE women, Miss Gertrude W. M. Leverkus, Miss Winifred Ryle, and Miss Eleanor K. D. Hughes, have been elected Associates of the R.I.B.A. This is the first time for over twenty years that a woman has qualified for membership. There are now five women Associates, the other two being Miss Bessie A. Charles and Miss Ethel M. Charles, who were elected in 1900 and 1898 respectively, and the latter distinguished herself in 1905 by winning the Royal Institute Essay Medal.

Miss Leverkus, whose portrait appears on this page, was born in 1898 and educated at the Sydenham High School, Sydenham, where she matriculated in 1915. Miss Leverkus took the Bachelor of Arts degree course at the Bartlett School of Architecture, University College, and obtained her degree in June 1918. Since then she has been with Messrs. Horace Field and H. Dighton Pearson, FF.R.I.B.A., with the exception of the time spent travelling on the Continent.

MISS GERTRUDE W. M. LEVERKUS.

Miss Hughes studied architecture first at the Municipal College, Bournemouth; then for three years in the Architectural Association Schools, and afterwards worked for the Final Examination under Mr. C. E. Varndell, F.R.I.B.A.

Miss Winifred Ryle spent three years at the Brighton School of Art, and became a student at the Architectural Association Schools in 1917, when they were first open to women. After staying four years at the A.A. Miss Ryle worked by herself, with private coaching, for the Final Examination of the R.I.B.A., which she took last June. Miss Ryle is now busy with two small houses which are in course of erection at Pangbourne.

Women are finding architecture extremely attractive as a career. There is a good percentage of women students in the schools of architecture, where many of them have already achieved distinction, and in the near future there is likely to be a great increase in the number of women applicants for admission to the R.I.B.A. and its allied societies.

# Law Reports

## Builders' Claim

*Coe* v. *Carless.*

Dec. 19. Official Referees' Court.
Before Mr. G. A. Scott.

This was an action in which the plaintiff, Mr. Chas. Henry Coe, builder and decorator, of Walton-on-the-Naze, claimed from the Rev. C. Carless, also of Walton, the sum of £228 6s. 1d., balance of account of £818 6s. 1d., for work done at defendant's premises. It appeared that the order for the work was given in March 1920, at which time defendant was purchasing the premise upon which it was done. It consisted of three parts—a double-fronted house known as Gunfleet House, a cottage, and St. Joseph's College. The defendant purchased the property cheaply because it was in a dilapidated condition. He paid £1,800 for the lot, which had been occupied by the military during the war and had suffered accordingly. The defendant called in the plaintiff to put the premises in repair, the chief work required being decorations, plastering, and carpentering. Shortly after the work was started the defendant went to reside at the college and saw what was going on. The work extended from March to September 1920, and no complaint, said counsel, was made about the quality of the work or the charges until defendant was pressed for payment. The plaintiff's charges were based upon the net cost of materials and labour, plus 10 per cent., which included profit and overhead charges.

The defendant did not dispute that the work had been done, but pleaded bad workmanship and excessive charges. He paid £100 into court.

Mr. Gould, architect and surveyor, of Station Road, Clacton, gave evidence for the plaintiff, stating that after inspection of the work done by plaintiff in detail he priced it at £815, having regard to the high cost of labour and materials prevailing at the time.

His Lordship, after hearing a great deal of evidence on both sides gave judgment for the plaintiff on the claim for £153 6s. 1d. with costs. He also gave judgment for plaintiff on a counterclaim set up by defendant, with costs.

## Light and Air Dispute

*Page* v. *Pirie and Another.*

Dec. 7. Chancery Division.
Before Mr. Justice Sargant.

In this case Mr. G. D. Page, of Monkville Avenue, Finchley Road, sued Mr. A. Pirie, of Monkville Avenue, and Mr. S. M. Wilson, of Ramsgate, in regard to the light to his premises. He sought to restrain defendants from erecting or permitting to remain any building on land in Monkville Avenue belonging to Pirie so as to obstruct the windows of plaintiff's premises, which were conveyed by Pirie to plaintiff on September 15, 1921. The house Monkville was conveyed to plaintiff by Pirie in consideration of a payment of £2,525. At that date Pirie was the owner of the adjoining land on the western side of the house, the boundary being a wooden fence. Plaintiff's case was that the house enjoyed full access of light over defendant's land which, at the date of the conveyance, was unbuilt upon. It was alleged that in July, 1922, Pirie removed a portion of the fence, and began to build a wall along the site of the fence in such a manner as to materially obstruct the plaintiff's light. The defendant Marshall is the mortgagee in possession of the land retained by Pirie.

Defendants denied that the fence was the property of the plaintiff, and that at the date of the conveyance plaintiff's house enjoyed full access of light over the land retained by Pirie. It was alleged that during the negotiations for sale plaintiff was well aware that Pirie intended to build on the land retained by him, and he never intended to grant any right of light to Monkville which would prevent him so building.

After hearing evidence in support of plaintiff's case, His Lordship adjourned the hearing in order to personally inspect the property concerned. On his return to court he said he had come to the conclusion that there was such an obstruction of light as would amount to a nuisance and would seriously interfere with the comfortable enjoyment of plaintiff's house. At the same time the obstruction was not such that he ought to grant a mandatory injunction. It was a case for damages. He would assess the damages at £190—£10 a year on an eighteen years' purchase, and £10 for obstruction down to the date of the trespass. Plaintiff would be allowed costs, and the £190 would be provided by the first mortgagee, who would add it to his security.

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# Obituary

*The late Mr. J. Carmichael.*

It is with deep regret that we record the death, in Glasgow, of Mr. James Carmichael, of Lochgilphead and Kilmichael-Glassary, Argyllshire, builder and contractor, at the age of sixty-seven. Mr. Carmichael was probably the largest individual employer of labour in Argyllshire. One of his most prominent contracts was the Crinan sea-wall. It is of Irish masonry, and is admired by the many passengers going through the Crinan Canal en route for Oban. The breast wall extends almost from Minard to the head of Lochfyne. His other works include: the house "Fasnacloich"; a house at Argyll for Mr. T. Bullough, of Lancashire, together with the steadings, cottages, dam, etc. (Neill Gillies, architect); "Ardkinglas," and the renovation of Dunderave Castle, for Sir Andrew Noble (Sir Robert Lorimer, architect); Bargullean House, for Mr. Martin McDonald (Sir Robert Lorimer, architect); Schuna House, on the Island of Schuna, together with piers, breakwaters, etc., for Mr. McLean Buckley (Neill Gillies, architect); additions to Dunmore House, for Fraser Campbell, of Dunmore (Neill Gillies, architect); Sanatorium for Consumptives, Oban (Neill Gillies, architect); "Scotnish," for Mr. Ralph Walker, of Leicester (Albert E. King & Co., architects); Eredine House, Loch Awe, for Mr. James Scott (the late James Edgar, architect); Ardtarig House, with roads, fishing pools, etc., for Sir Kenneth Anderson (Alfred E. Gregg, architect); additions to Invernoden, for Sir Harry Lauder (John Breignen, architect); additions to Toward Castle, for Major Andrew Coates, D.S.O. (F. W. Deas, architect); and additions to Taynish, for Lt.-Col. D. Campbell, of Ross.

In addition Mr. Carmichael carried out eighteen miles of new roads, artificial lochs, repairs to the church, etc., on the Island of Jura, for Mr. Crossman and Lord Astor, and for thirty years maintained and developed the whole of the roads in the Mid-Argyll district, together with new roads on the islands of Islay and Kintyre.

*The late Mr. S. B. Rudd.*

By the passing away of Mr. Samuel Bentley Rudd, of Grantham, in his eighty-third year, the building trade is poorer by a notable figure. Up till about two years ago, when failing health caused him to retire from active business, Mr. Bentley Rudd was head of the firm of Rudd and Son, a name which he had made stand for work of the highest character. He carried out works of a considerable size of general character, but the work which he excelled in and which was nearest his heart was the building and repairing of churches. From the architect's point of view, Mr. Bentley Rudd was an ideal builder in every way. He had worked for practically all the prominent church architects of the latter half of the nineteenth century, from Pugin, Gilbert Scott, Brooks, Pearson, Bodley, Blomfield, and a host of almost forgotten people, to Tapper Temple Moore, and Nicholson.

From his long experience he was ever ready with assistance in overcoming difficulties, and though his suggestions were never obtruded, yet architects could depend on his sound advice. He was exceedingly diplomatic, and was frequently able to smooth away difficulties with clients who wished to do things detrimental to the work in hand. Clergy and church architects especially valued him knowing that his devout churchmanship not only made him treat a church reverently, but ensured it being reverently treated by all who worked there. He had the trust and confidence of every architect for whom he worked; his work, being done by a trained body of workmen whom he knew and who knew him, had that personal touch which is essential for all work of the highest class. He had served his town well, having been Mayor as far back as the first Jubilee, and was for forty-one years guardian of his parish church as churchwarden. His pride in the good work which he did was only excelled by his joy in the doing of it.

# The Week's News

### *Hull War Memorial.*

It is proposed to build a war memorial at Hull.

### *Darlington Grammar School.*

The Education Committee are to make alterations to the Grammar School.

### *Aberdeen's War Memorial.*

Aberdeen is to expend £66,000 on a war memorial court and additional accommodation at the Art Gallery.

### *New Hospital for Malton.*

Earl Fitzwilliam has offered to the town of Malton a site in the Middlecave Road for the new hospital.

### *An Edinburgh War Memorial.*

A war memorial is to be erected at Merchiston Castle School, Edinburgh, at a cost of about £15,000.

### *Westminster Hall Roof.*

The Office of Works have presented to the Royal Institute of British Architects a piece of timber from the roof of Westminster Hall.

### *New Year Honours.*

Sir Frank Baines, C.B.E., M.V.O. Director of H.M. Office of Works) was promoted C.V.O. in the list of New Year honours.

### *New Church for Allerston.*

The Pickering Wesleyan Circuit have ssued instructions for the preparation of estimates and plans for a new church at Allerston.

### *Building Companies in Scotland.*

During the past year sixteen companies connected with the building and kindred trades were registered in Scotand. The aggregate capital was £160,500.

### *Professional Practice.*

Mr. Alfred H. Weeks, F.S.I., has commenced practice at 35 Commercial Street, Newport, Mon., as a "chartered quantity surveyor."

### *The Wertheimer Sargents.*

The portraits of the family of the late Mr. Asher Wertheimer, by Sargent, are now on view in Room XXVI at the National Gallery.

### *Whitby War Memorial Hospital.*

The trustees of the Whitby Cottage Hospital have acquired land in Spring Hill as a site for the War Memorial Hospital.

### *Wrexham Road Improvements.*

The Wrexham Rural District Council have approved sewerage and road improvement schemes involving an outlay of £135,000.

### *Messrs. C. D. and E. Chuter and Mrs. L. Hoyle.*

The President of the Royal Institute of British Architects has appointed Mr. Max Clarke, F.R.I.B.A., as arbitrator in this matter.

### *Old London Church Unsafe.*

The Wren church of St. Margaret's, Lothbury, has been reported upon as unsafe. Mr. Mervyn Macartney has been consulted.

### *Builders' Wages.*

Trouble is threatened in the building trade, consequent on the desire of certain sections of employers to reduce wages and increase the number of working hours.

### *"Metal Worker to the King."*

The Royal Warrant of Metal Worker to H.M. the King has been granted to Mr. J. Starkie Gardner, of 121 South Lambeth Road, London, S.W.8, art metal worker.

### *Major H. Barnes, F.R.I.B.A.*

Major H. Barnes, F.R.I.B.A., is to stand again for Newcastle in the Parliamentary by-election caused by the death of the recently elected Labour member.

### *Housing in Scarborough.*

A scheme of flats in the east ward at Scarborough is incorporated in a draft housing scheme approved by the Scarborough Town Council.

### *Folkestone Sewerage.*

The Ministry of Health have sanctioned a loan of £55,000 to construct a large outfall sewer along the beach to Copt Point where it discharges into the sea. The engineers for the scheme are Messrs. W. H. Radford and Son, of Nottingham.

### *Architectural Partnership.*

Mr. E. Keynes Purchase, F.R.I.B.A., F.S.I., and Mr. Roland Welch, A.R.I.B.A. have entered into partnership. The title of the firm will be Messrs. E. Keynes Purchase and Roland Welch, and the address 20 and 22 Maddox Street, W.1. Telephone: Mayfair 2404.

### *£4,000,000 Scheme for Beautifying Paris.*

The Paris City Fathers contemplate spending more than £4,000,000 during 1923 in beautifying and improving the capital. It is proposed to spend £8,000 on cleaning out the lakes in the Bois de Boulogne, and another £150,000 on providing public baths.

### *223–227 Regent Street.*

In reproducing the elevation of the above building in last week's issue of THE ARCHITECTS' JOURNAL, it should have been made clear that Mr. Gordon Jeeves is architect for the reconstruction of No. 225 only. Messrs. Yates, Cook and Darbyshire are entirely responsible for the remainder of the block.

### *The Chelsea Arts Club Ball.*

The Chelsea Arts Club Ball this year will have the president of the Royal Academy in charge of its scheme of decoration, which will centralize on an Antarctic setting, Commander Wild and the officers of the "Quest" having promised to lend the architect their assistance.

### *Rubber Roads in London.*

A stretch of roadway in Borough High Street, Southwark, has just been covered with a new type of rubber block to test the value of rubber roads. Half an inch of the top portion of the blocks consists of rubber of the quality and resiliency which has proved successful in previous tests. The remainder is of hard rubber.

### *The Chapels of St. Peter and St. Andrew's College, Grahamstown.*

The Chapels of St. Peter and of St. Andrew's College at Grahamstown, South Africa, illustrated in our issue for December 27, were designed by Mr. Herbert Baker, A.R.A., F.R.I.B.A., in collaboration with Mr. F. K. Kendall, who was then his partner at Cape Town. Mr Kendall was primarily responsible for the work carried out by Mr. Baker at that time in Cape Colony.

### *Belfast Art Gallery.*

In 1914 the Belfast Corporation proposed to build a public art gallery and museum, and sixty-nine competitive designs were submitted to the assessor, Sir John J. Burnet. Mr. James C. Wynnes, F.R.I.B.A., was appointed architect for the new buildings. Owing to the outbreak of the war the erection of the buildings was held over. It has now been arranged to proceed with their erection at a probable cost of £80,000.

### *Changes of Address.*

Mr. Hugh T. Morgan, A.R.I.B.A., has moved his office to 14 Gray's Inn Square, W.C.1. Telephone: Chancery 8058.

Mr. Henry Tanner, F.R.I.B.A., has moved to 3 Hanover Square, W.1. Telephone: Mayfair 861, 862.

Mr. C. Cowles-Voysey, A.R.I.B.A., has moved his office to 14 Gray's Inn Square, W.C.1. Telephone: Chancery 8058.

Messrs. F. J. Fisher, M.S.A., and S. H. Fisher, A.R.I.B.A., have moved to 38 Bloomsbury Square, W.C.1. Telephone: Museum 4889.

Mr. Percy Bacon, late of 11 Newman Street, has moved to 4 Endsleigh Gardens, London, N.W.1. He has practised the art of stained glass at the old address for some thirty years, and has moved to much larger premises on account of a greatly increasing amount of work.

### *Goldsborough Hall, near Knaresborough.*

The old Elizabethan Yorkshire home of Princess Mary and Viscount Lascelles has almost been reconstructed internally. For six months the builders have been at work making separate entrances to some of the rooms, and restoring a recessed window to a room in the south-west corner. The room, which has a rich Jacobean plaster frieze, will, it is supposed, become the Princess's private sitting-room. The hall at one time possessed only two bathrooms, now eight more have been added, making ten altogether.

### *New Cambridge College.*

Sir Aston Webb, President of the Royal Academy, has been commissioned to design the new buildings for the Wesleyan College at Cambridge University. The Wesleyan College at Cambridge was founded last year in order to provide facilities for Wesleyan students to take the divinity course at one of the premier universities. A fund of £66,000 is already available, and it is hoped to secure a further £22,000 to complete the £40,000 required for endowment.

*Town Planning in West Middlesex.*

At the last meeting of the West Middlesex Joint Town Planning Committee Messrs. Thomas Adams and Longstreth Thompson, the consultants appointed by the committee to prepare a regional plan, presented a preliminary report upon their survey of the existing conditions in the region. The report was very favourably received.

*New Warehouse for Johannesburg.*

The office of His Majesty's Trade Commissioner in South Africa reports that the largest footwear dealers in South Africa have purchased an important site in Johannesburg with an area of 10,000 sq.ft. for the erection of a warehouse to be a centre of distribution of their goods. It is stated that plans are in course of preparation by the architects, and it is hoped that building operations will commence shortly. United Kingdom firms interested in the supply of building and constructional materials may obtain the name and address of the architects and the footwear firm on application to the Department of Overseas Trade, 35 Old Queen Street, London, S.W.1.

*Lectures on Salesmanship.*

A course of five lectures on salesmanship is to be given by Captain Oliver A. Minns, Fellow and Vice-President of the Incorporated Society of Advertisement Consultants, and Fellow of the Royal Economic Society, at the Stillness Road Commercial Evening Institute, Brockley Rise, Honor Oak Park, S.E.23. The lectures, to commence on January 15, will deal with salesmanship as a career, the personality of the salesman, the science of selling, sales management and organization, and selling schemes. The following fees will be charged and should be sent to the principal of the Institute in advance: for students resident in London, 5s.; for students resident outside but working in London, 8s. 6d.; and for students resident outside and not employed in London, 17s.

## Regional Planning—South Wales

It is interesting to note that local authorities are beginning to take action on the lines of the report of the South Wales Regional Survey Committee. That Committee reported in favour of the setting up of a Regional Council for South Wales, but realized that this was a matter requiring a considerable amount of time for its evolution. They therefore recommended for immediate action the setting up of a series of Joint Town Planning Committees.

On December 15, 1922, the Cardiff Corporation called a conference at the City Hall, Cardiff, of the local authorities, in the region of East Glamorgan, that the South Wales Regional Survey Committee had recommended should form a Joint Town Planning Committee. Some sixteen authorities were represented at the conference. Mr. G. L. Pepler, of the Ministry of Health, was unanimously invited to take the chair. Mr. Pepler read a short report on regional town planning by joint committees, and subsequently there was an interesting discussion. As a result it was unanimously decided to recommend to the authorities represented that they should constitute the proposed Joint Town Planning Committee.

It is understood that other groups of local authorities in South Wales are about to take similar action.

## Competition News

*International Labour Office Competition, Geneva.*

The President of the R.I.B.A. has nominated Mr. Edward P. Warren, F.S.A., F.R.I.B.A., as the British member of the jury in connection with the above competition.

*"The Chicago Tribune" Competition.*

The accompanying design submitted by Messrs. Hutton and Taylor, of Glasgow, architects, obtained honourable mention in the worldwide competition for the new office buildings for "The Chicago Tribune," which is to be the "most beautiful building in the world"! The building rises to a height of 400 ft., and comprises twenty-three floors for office space. The winning design was illustrated in our last issue.

[*For list of Competitions Open see page* xxiv.]

## Coming Events

*Wednesday, January* 10.

Glasgow Chapter of the Incorporation of Architects in Scotland.—Symposium: "Architectural Prospects."

*Thursday, January* 11.

Sheffield, South Yorkshire and District Society of Architects.—"Notable Houses of Northamptonshire." By J. H. Gotch, Esq.

Birmingham Town-Planning Lecture. By H. H. Humphries, M.Inst.C.E.

*Friday, January* 12.

Royal Technical College Architectural Craftsmen's Society, Glasgow. — "The Architectural Melting Pot." By John S. McKay.

Institute of Heating and Ventilating Engineers. — "Automatic Temperature Control." By B. R. Wingfield, Ph.D., M.I.E.E.

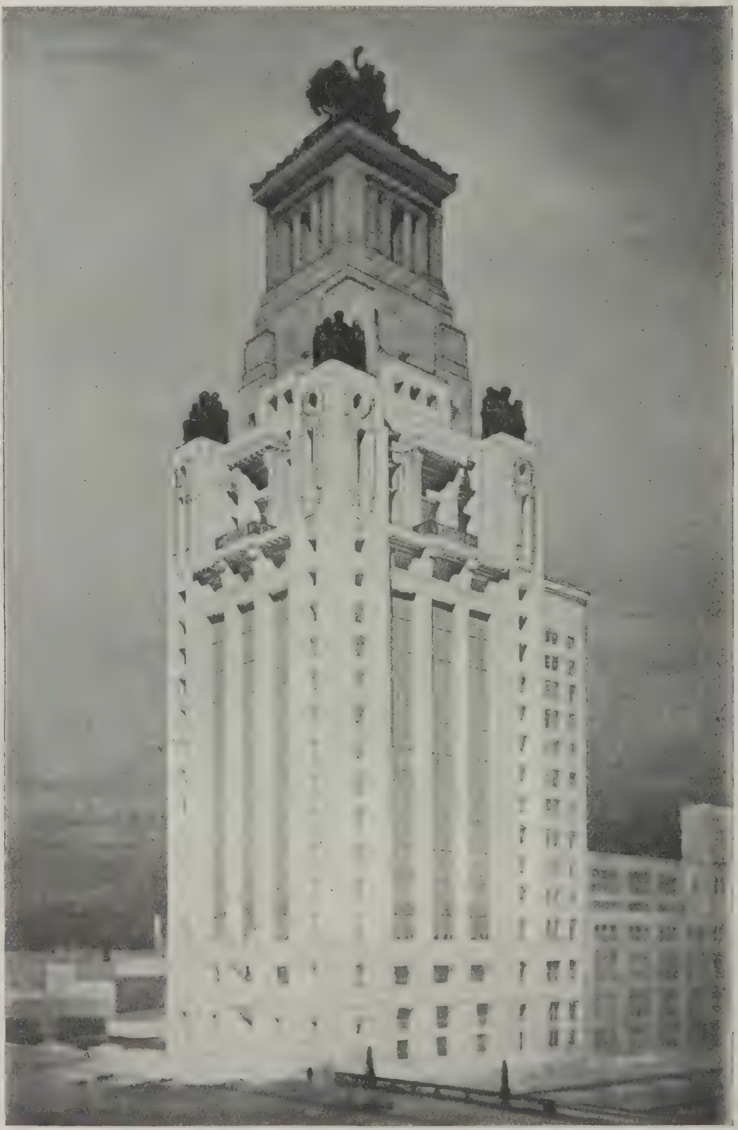
*Monday. January* 15.

Stillness Road Commercial Evening Institute.—"Salesmanship as a Career." By Captain Oliver A. Minns.

*Wednesday, January* 17.

Northern Architectural Association.—"The Rise and Fall of English House Design." By Nathaniel Lloyd.

Royal Society of Arts.—"Hygienic Methods in Painting—the Damp Rubbing Down Process." By C. A. Klein.



"THE CHICAGO TRIBUNE" COMPETITION.
THE HONOURABLE MENTION DESIGN OF HUTTON AND TAYLOR, ARCHITECTS.

# Composition and Jointless Flooring

A LECTURE on "Composition and Jointless Flooring" has been delivered to the Northern Polytechnic stitute, Department of Architecture, rveying, and Building, by Mr. R. R. tler, M.Sc., A.I.C., F.C.S., who treated subject both from the theoretical and practical aspect. The lecturer divided remarks into three sections: (*a*) the blem; (*b*) the chemist's solution; and patent literature.

Dealing with the first section, four in divisions were considered: (1) facy floors subject to much wear and ight; (2) warehouse floors subject to s wear but much weight; (3) shop ors where destructive influences varied; d (4) house floors where the wear was e mainly to pedestrian traffic.

The influences mainly responsible for destruction of the surface in the above ical cases were grouped under six dings: (*a*) attack by the iron tyres trolleys and similar vehicles, particu- ly in warehouses and factories; (*b*) attack on the rubber tyres of trolleys, ., by the materials composing the floor. is also applied particularly to factory l warehouse conditions; (*c*) the effect of on the flooring, as evidenced in oil rks, margarine factories, etc.; (*d*) stantly wet floors; (*e*) the chemical ack on the floor due to *acid* conditions; l (*f*) foot traffic.

The materials available for the pro- ction of a jointless composition were cussed with reference to the binding terial, the groups being: (1) Portland ent; (2) magnesite cement; (3) halt; and (4) rubber.

These various considerations were inter- ted by the lecturer diagrammatically he following manner:—

actory—iron tyres, Portland cement; ehouse — rubber tyres, magnesite; p—oil, water, acids, asphalt; house, t traffic, rubber.

Turning to the second section of his remarks, the lecturer dealt with the four possible binding materials individually, pointing out the influences which were capable of destroying or disintegrating them. He said that freshly laid concrete was liable to attack by such oils as bone oil, wood oil, olive oil, whale oil, tallow, etc., but concrete over a month old was practically unattacked. Mineral oils, derived from the distillation of coal products, etc., were without action on the cement, unless containing free acids.

Water was practically without action on cement. The waterproofing of cement was not a case of protecting the cement from attack, but of filling the pores of the material with an impervious substance thereby preventing the percolation of water through the pores.

Acids were very destructive if allowed to remain in contact with cement, even weak acid such as vinegar having a disintegrating effect. Cases had been known in which the floors of distilleries had been affected by the carbonic acid gas produced in large quantities during the fermentation process.

Alkalies such as potash and soda, and such salts as calcium chloride and sodium chloride had no harmful action, but it appeared that ammonium compounds cause disintegration of the surface in time.

Tar derivatives, if containing no acid, were harmless, and bitumen was used frequently as an acid proofing for cement. The lecturer referred to the publication by the U.S. bureau of standards of data concerning the use of bituminous materials with cement.

Organic fertilizers and manures had a harmful effect on lean concrete (containing a bare percentage of binding material) when freshly laid where a good quality concrete one month old was not affected.

Before proceeding to a consideration of patents in connection with jointless flooring the lecturer mentioned such materials utilized as a cementing agent the binding properties of sodium silicate (water glass). He said that such materials as "Asbestic" and "Uralite" had as basis waste asbestos (short fibres), and this frequently was compressed into sheets sprayed or soaked in a weak solution of sodium silicate and dried.

The production of hard burnt "plaster of Paris" (burnt at about 400 to 500 deg. C.) was described, and its use as flooring mentioned. The great objection to such use was the length of time required for setting, but a great advantage was the intense hardness of the finished floor.

Dealing with the patent literature upon the respective binding materials, mention was made of a patent containing sand, pumice, and Portland cement (1916), which was claimed to be sound and resistant. A fire-proof composition of Portland cement, waste asbestos fibre, and clay (1917) was mentioned; and the lecturer referred to a composition of Portland cement, sawdust, slag, and whiting, which was declared to be acid-proof.

A method of fire-proofing rubber was the subject of one patent (1919), the material used being hydrated aluminium oxide, while another suggested fireproof composition (1916) consists of rubber, cork, and sodium ungstate.

A discussion followed the lecture and was contributed to by Messrs. H. J. Axten, A.R.I.B.A., A. C. Martin, A.R.San.I., H. T. Deacon, and others. During this discussion a case of corrosion of iron work by a specimen of magnesite flooring was mentioned, as well as the laying of magnesite flooring on wood by the use of wire-netting, and the use of sodium silicate as a top dressing to prevent and cure the "dusting" of Portland cement surfaces.

# Trade and Craft

*Street Lighting by Gas.*

he current issue of "A Thousand and Uses for Gas" (No. 106) contains a es of illustrations showing the night ting of London's most important hbourhoods and thoroughfares—kingham Palace, Parliament Square, falgar Square, Whitehall, Regent eet, and Victoria Street—as well as e good examples of side-street and ge illumination. Copies of this resting publication can be obtained ce 6d. post free) from the British mercial Gas Association, 30 Grosor Gardens, S.W.1.

*The Stewart Hollow Concrete Floor.*

Hollow Concrete Floors" is the sub- of an interesting illustrated booklet ch has just been issued by Messrs. nd W. Stewart, of 12 Berkeley Street, don, W.1, contractors and specialists einforced concrete construction and crete piling. The system, for which y advantages are claimed, is the out- e of a long experience in the construc- of concrete floors.

constructing a floor by means of this em: (1) Two reinforcement bars pro- d with nuts and threads at each end are laid side by side, their distance apart being fixed by an end washer plate with holes in same through which the ends of reinforcement bars must pass; (2) a series of hollow concrete blocks are assembled between the two reinforcement bars; (3) the nuts on the bars are tightened against the washer plates and the blocks firmly strung together; (4) a complete hollow beam is thus formed and swung or slid into the required position; (5) the floor can now be used for temporary purposes such as the assembling further units; (6) after a series of hollow beams have been laid side by side the space between is filled with concrete and solid "T" beams are made between the blocks. When the concrete has thoroughly set, which usually takes three to four weeks, the floor is ready for use.

All "T" beams have a standard distance apart of 15 in. C. to C. This can be slightly varied if necessary. For contracts abroad or at a long distance from a railway station the firm can manufacture the blocks on the site, thus keeping the cost at the lowest possible figure.

Among the many advantages claimed for the floor are the following: Temporary timber shuttering is eliminated; erection is rapid, as several floors can be completed at the same time; the wide range of various sized blocks reduces concrete mixed on the site to a minimum; reinforcement cannot be displaced and bars are visible before concrete is laid; the floor sound resisting and fireproof to pass 1a Standard of the Fire Offices' Committee if necessary; designs may be obtained as required to L.C.C. regulations, R.I.B.A. specification or local conditions; the dead weight is exceptionally low, thus reducing the cost of beams and columns and the loads on foundations, etc.; it is adaptable for openings and trimmings to offsets, splayed walls, or reconstruction, and the soffit is flat and roughed for plaster, or can be left for limewashing only.

A recent certified test on two 15 ft. spans with 4 ft. 6 in. cantilevers, for a specified load of three cwts. per sq. ft., and a deflection limited to 1-600th of the span gave a load of six cwts. per sq. ft. and a deflection of 1-1,500th of the span without any fractures or cracks. Guaranteed safe floors are a feature in which the firm specialize.

# Rates of Wages in the Building Trades*

The following table, which is published in the first issue of THE JOURNAL for each month, shows the rates of wages of craftsmen (bricklayers, masons, carpenters and joiners, woodcutting machinists, slaters, plumbers,* plasterers, painters †) and labourers in the building industry. The labour rates for London are given in the Table of Current Prices on pages xix, xx.

| District. | Grade A. | | Grade B. | | Grade C. | | Grade D. | |
|---|---|---|---|---|---|---|---|---|
| | Craftsmen. | Labourers. | Craftsmen. | Labourers. | Craftsmen. | Labourers. | Craftsmen. | Labourers. |
| | s. d. | s. d. | s. d. | s. d. | s. d. | s. d. | s. d. | s. d. |
| North East Coast .. .. .. | 1 8 | 1 3 | — | — | — | — | — | — |
| Yorkshire .. .. .. .. | 1 8 | 1 3 | 1 6½ | 1 2 | 1 4½ | 1 0½ | — | — |
| North Western Counties‡ .. .. | 1 8 | 1 3 | 1 6½ | 1 2 | 1 4½ | 1 0½ | 1 4 | 1 0 |
| Midland Counties .. .. .. | 1 8 | 1 3 | 1 6½ | 1 2 | 1 5 | 1 0¾ | 1 4 | 1 0 |
| Eastern Counties .. .. .. | 1 4½ | 1 0½ | 1 4 | 1 0 | 1 3 | 0 11¼ | — | — |
| Southern Counties .. .. .. | 1 4½ | 1 0½ | 1 4 | 1 0 | 1 3 | 0 11¼ | — | — |
| South Western Counties .. .. | 1 8 | 1 3 | 1 6 | 1 1½ | 1 4½ | 1 0½ | 1 3½ | 0 11¾ |
| South Wales .. .. .. .. | 1 8 | 1 3 | 1 4 | 1 0 | — | — | — | — |
| Scotland§ .. .. .. .. | 1 8 | —¶ | 1 7 | —¶ | 1 6 | —¶ | — | — |

* In the case of towns printed in *italic type* below, the rates shown in the Table for craftsmen do not apply to plumbers.

† Except in Scotland, where painters are not included within the scope of the area grading scheme.

‡ Excluding Liverpool and Birkenhead, where the rates are 1s. 10d. for plumbers, 1s. 9½d. for mason's fixers, 1s. 9d. for other craftsmen, 1s. 5d. for scaffolders, and 1s. 4d. for labourers.

§ Excluding Aberdeen, where the rates remain unaltered at 1s. 7½d. for masons, joiners, and plasterers, 1s. 8d. for slaters, and 1s. 9d. for plumbers.

¶ In Scotland, labourers are not included in the general grading scheme.

## Grading of Towns.

The localities in which the above rates have been reported to be in operation are as follows. In the case of localities printed in *italic type*, the rates shown in the above Table for craftsmen do not apply to plumbers. The rates of wages per hour for men employed by electrical contractors in England and Wales (except Southampton) and Londonderry are as follows:—Grade A districts (London and Watford) 1s. 10d. Grade B (including Burnley and Preston) 1s. 7¾d. Grade C 1s. 6¼d. Grade D (including Sussex) 1s. 4¾d. In Southampton and Belfast the rates are 1s. 6¼d. per hour. Londonderry: bricklayers, masons, carpenters and joiners, slaters, plasterers, and painters, 1s. 5d. Newry: bricklayers, masons, plasterers, and slaters, 1s. 8d.

NORTH EAST COAST :—

*Annfield Plain*, *Birtley*, Bishop Auckland, *Blackhill*, *Blyth*, *Chester-le-Street*, *Consett*, *Darlington*, *Durham*, *Ebchester*, *Gateshead*, *Hartlepools*, *Hebburn*, *Hexham*, *Jarrow*, *Lanchester*, *Leadgate*, Medomsley, *Middlesbrough*, *Morpeth*, *Newcastle*, *North and South Shields*, *Seaham Harbour*, *Stanley*, *Stockton*, *Sunderland*, *Thornaby*, *Tynemouth*, *Wallsend*, *Whitburn*, and *Whitley Bay*.

YORKSHIRE :—

*Grade A.*—*Altofts*, *Barnsley*, *Batley*, *Bingley*, *Birstall*, *Bradford*, *Brighouse*, Calder Valley, Castleford, *Cleckheaton*, *Colne Valley*, *Crosshills*, *Dewsbury*, *Doncaster*, *Gomersal*, Grimsby, *Guiseley*, *Halifax*, *Harrogate*, *Hebden Bridge*, *Heckmondwike*, Holmfirth, *Horbury*, *Hoyland*, Huddersfield, Hull, *Ilkley*, Immingham, *Keighley*, *Knottingley*, *Leeds*, *Liversedge*, *Mexborough*, *Mirfield*, *Morley*, *Normanton*, *Ossett*, *Penistone*, Pontefract, Pudsey, *Rawdon*, *Rotherham*, Scunthorpe, *Selby*, *Sheffield*, *Shipley*, *Sowerby Bridge*, *Stocksbridge*, *Wakefield*, *Wombwell*, *and Yeadon*.

*Grade B.*—Barnoldswick, Beverley, Bridlington, Goole, Hornsea, Scarborough, Skipton, *Whitby* (plumbers 1s. 7d.) and York.

*Grade C.*—Driffield, Kirby Moorside, Malton, Norton, Pickering, and Wetherby.

NORTH WESTERN COUNTIES :—

*Grade A.*—*Accrington*, Adlington, *Alderley Edge*, *Altrincham*, *Ashton-under-Lyne*, *Atherton*, *Bacup*, Barrow, Birkdale, Bispham, *Blackburn*, Blackpool, Blackrod, *Bolton*, Broughton (Flints), *Burnley*, *Bury*, Carlisle, Chester, Chorley, *Church*, Cleveleys, *Clitheroe*, *Colne*, Connahs Quay, Dalton-in-Furness, *Darwen*, *Denton*, *Droylesden*, *Eccles*, *Farnworth*, Fleetwood, Frodsham, *Glossop*, *Great Harwood*, *Haslingden*, Hawarden, Helsby, *Heywood*, Higher Kinnerton, *Horwich*, *Hyde*, Lancaster, *Leigh*, Leyland, *Littleborough*, Longridge, Lymm, Lytham, *Manchester*, *Middleton*, Morecambe, *Mossley*, *Nelson*, *Ormskirk*, *Oswaldtwistle*, *Oldham*, *Padiham*, *Pendlebury*, Poulton, *Preston*, *Prestwich*, Queensferry, *Radcliffe*, *Ramsbottom*, *Rawtenstall*, *Rishton*, *Rochdale*, Runcorn, St. Anne's-on-the-Sea, St. Helens, *Saddleworth*, *Sale*, *Salford*, *Shaw*, Shotton, Southport, *Stalybridge*, *Stockport*, *Swinton*, Thornton, *Todmorden*, *Tyldesley*, *Walkden*, *Warrington*, Westhoughton, *Whalley*, *Whitefield*, Widnes, Wigan, and *Wilmslow*.

*Grade B.*—Askam, Broughton, Buxton, Cleator Moor, Congleton, Coniston, Crewe, Distington, Egremont, Grange-over-Sands, Harrington, Knutsford, *Macclesfield*, Maryport, Market Drayton, Middlewich, Millom, Mold, Nantwich, *New Mills*, Northwich, Sandbach, Tarporley, Ulverston, Winsford and Over, Whitehaven, Workington, and Wrexham.

*Grade C.*—Ambleside, Bala, Bangor, Bowness-on-Windermere, Carnarvon, Colwyn Bay, Conway, Grasmere, Holyhead, Holywell, Kendal, Langdale, Llandudno, Llandudno Junction, Mostyn, Penrith, Prestatyn, Rhos, Rhyl, and Windermere.

MIDLAND COUNTIES :—

*Grade A.*—Alfreton, *Belper*, Bilston, *Birmingham*, *Blackheath*, *Burslem*, *Cheadle*, *Chesterfield*, Coalville, Coventry, *Derby*, *Hanley*, Heanor, Hinckley, *Ilkeston*, Kenilworth, *Leicester*, Lincoln, *Long Eaton*, *Loughborough*, *Mansfield*, Newcastle-under-Lyme, *Nottingham*, *Nuneaton*, Oldbury, Ripley, Stoke-on-Trent, *Sutton Coldfield*, *Sutton-in-Ashfield*, West Bromwich, Willenhall, and Wolverhampton. (Plumbers employed by the Birmingham Master Plumbers' Association within 8 miles of Birmingham, 1s. 9d.)

*Grade B.*—Atherstone, Bewdley, Boston, Brierley Hill, Bromsgrove, Burton-on-Trent, Cannock, Coseley, *Darlaston* (plumbers 1s. 7½d.), Dudley, Gainsborough, Gornal, Grantham, Halesowen, Hednesford, Kidderminster, Knowle, Leamington, *Leek*, Lichfield, Louth, Malvern, Market Harborough, *Matlock*, Melton Mowbray, *Newark*, Northampton, Oakengates, Old Hill, Peterborough, Redditch, Retford, Rugby, *Rugeley* (plumbers 1s. 7½d.), Sedgley, Shifnal, Shrewsbury, Skegness, Sleaford, Solihull, Southwell, *Stafford*, Stamford, Stourbridge, Stourport, Stratford-on-Avon, Swadlincote, Swanwick, Tamworth, *Walsall* (plumbers 1s. 7½d.), Warwick, Wednesbury, Wellington, Worcester, and Worksop.

*Grade C.*—Ashbourne, Bridgnorth, Church Stretton, *Horncastle*, Kettering, Ludlow, Newport, Oakham, Oundle, Raunds, Rushden, Spalding, Thrapston, Uttoxeter, Wellingborough, and Wirksworth.

*Grade D.*—Buckden, Eaton Socon, Huntingdon, St. Ives, and St. Neots.

EASTERN COUNTIES :—

*Grade A.*—Baldock, Bedford, Berkhamsted, Biggleswade, Braintree, Brentwood, Chelmsford, Cambridge, Colchester, Halstead, Hatfield, Harpenden, Hemel Hempstead, Henlow, Hertford, Hitchin, Hoddesdon, Ingatestone, Ipswich, Letchworth, Luton, Norwich, Ongar, St. Albans, Sandy, Sawbridgeworth, Stevenage, Stotfold, Ware, Welwyn, and Witham.

*Grade B.*—Aldeburgh, Ampthill, Attleborough, Aylsham, Braughing, Chatteris, Cromer, Dovercourt, Dunstable, Ely, Fakenham, Felixstowe, Frinton, Gorleston, Halesworth, Harwich, King's Lynn, Leighton Buzzard, Leiston, Lowestoft, March, Much Hadham, Newmarket, North Walsham, Puckeridge, Renthem, Saxmundham, Southwold, Standon, Stowmarket, Walton-on-the-Naze, Wickham Market, Wisbech, Woodbridge, Wymondham, and Yarmouth.

*Grade C.*—Bungay, Coltishall, East Dereham, Royston, Saffron Walden, and Tring.

[N.B.—Bury St. Edmunds :—bricklayers, masons, carpenters and joiners, slaters, plumbers and plasterers, 1s. 4¼d.; painters, 1s. 2d.; labourers, 11d.]

SOUTHERN COUNTIES :—

*Grade A.*—Abingdon, Addlestone, Amersham, Ascot, Ashford (Middlesex), Banbury, Beaconsfield, Bournemouth, Bracknell, Brighton, Byfleet, Chalfont, Chesham, Christchurch, Cremborne, Eastbourne, Eastleigh, Egham, Eton, Gerrard's Cross, Goring, Gosport, Gravesend, Guildford, Henley, Hove, Laleham, Maidenhead, Marlow, Northfleet, Oxford, Poole, Portsmouth, Reading, Southampton, Staines, Stanwell, Sunningdale, Sunninghill, Tilehurst, Tonbridge, Tunbridge Wells, Wallingford, Windsor, Winkfield, Woking, Wokingham, and Wycombe.

*Grade B.*—Arundel, Ashford (Kent), Aylesbury, Bagshot, Basingstoke, Bexhill, Bicester, Bletchley, Bognor, Bosham, Broadstairs, Brockenhurst, Buckingham, Burgess Hill, Camberley, Canterbury, Chatham, Chichester, Chipping Norton, Cranleigh, Deal, Dorking (plumbers 1s. 5d.), Dover, Fareham, Faringdon, Faversham, Fenny Stratford, Folkestone, Gillingham, Godalming, Hailsham, Haslemere, Hastings, Havant, Herne Bay, Horsham, Hythe, Lambourn, Liphook, Littlehampton, Lymington, Maidstone, Margate, Midhurst, Milford, Milton Regis, Newbury, New Milton, Newport Pagnell, Oxted, Pangbourne, Petworth, Ramsgate, Redhill, Reigate, Rochester, Sandgate, St. Leonards, Sevenoaks, Sittingbourne, Strood, Stony Stratford, Stow-on-the-Wold, Thame, Walmer, Wantage, Wendover, Westerham, Westgate, Whitstable, Winchester, Winslow, Witney, Wolverton, Woodstock, and Worthing.

*Grade C.*—Andover, Ardingley, Farnham, Godstone, Hawkhurst, Hartley Wintney,* Haywards Heath, Horley, Isle of Wight, Liss, Petersfield, Rye, Smallfield, Staplehurst, Steep, Turners Hill, and Uckfield.

[N.B.—Leatherhead :—painters, 1s. 5½d.; plumbers, 1s. 6½d.; other tradesmen, 1s. 6d.; labourers, 1s. 1½d.]

SOUTH WESTERN COUNTIES :—

*Grade I.*—Bristol.

*Grade II.*—Plymouth * and Devonport.*

*Grade III.*—Dartmouth,* Exeter,* Kingswear,* Newton Abbot, Paignton, Portishead, Stroud,† Taunton, and Torquay.

*Grade IV.*—Barnstaple, Beaminster, Povey Tracey, Bradford-on-Avon,* Bridgwater, Bridport,* Brixham, Bruton, Burnham-on-Sea, Calne,* Castle Cary, Cheddar,* Cirencester,* Clevedon, Coleford,* Corsham,* Crewkerne,* Dawlish, Dorchester,* Exmouth, Fairford,* Frome,* Glastonbury, Lydney,* Melksham,* Midsomer Norton, Minehead,* Radstock, Shepton Mallet, Street, Swanage,* Teignmouth,* Tetbury,* Thornbury,* Totnes,† Trowbridge,* Wells, Westbury,* Weston-super-Mare, Weymouth,* and Yeovil.*

[N.B.—Bath, Cheltenham, Gloucester* (except painters), Hereford,* and Swindon* :—tradesmen, 1s. 5d.; labourers, 1s. 0¾d.]

SOUTH WALES AND MONMOUTHSHIRE :—

*Grade A.*—Aberavon, Aberdare, Abergavenny, Ammanford, Barry, Bridgend, Briton Ferry, Brynmawr, Cardiff (plumbers, 1s. 8½d.), Chepstow, Duffryn Valley, Ebbw Vale, East Glamorganshire and Monmouthshire Valleys, Garw Valley, Gorseinon, Llanelly, Maesteg, Merthyr, Mountain Ash, Neath, Newport, Ogmore Vale, Pontardulais, Pontypool, Pontypridd, Porthcawl, Port Talbot, Rhondda and Rhymney Valleys, Sirhowy Valley, Swansea, and Tredegar.

*Grade B.*—Haverfordwest, Pembroke and Pembroke Dock.

[N.B.—Brecon and Carmarthen :—tradesmen, 1s. 6d.; labourers, 1s. 1½d. Llandrindod Wells :—tradesmen, 1s. 5d.; labourers, 1s. 0¾d.]

SCOTLAND :—

*Grade A.*—Airdrie, Alloa, Alva, Armadale, Ayr, Bathgate, Bellshill, Bridge of Weir, Buckhaven, Burntisland, Clydebank, Coatbridge, Dumbarton, *Dundee*, Dunfermline, Edinburgh, Falkirk, Glasgow, *Gourock*, Grangemouth, *Greenock*, Haddington, Hamilton, Harthill, Irvine, Kennoway, Kilmarnock, Kirkcaldy, Larbert, Largs, Leith, Leslie, Leven, Markinch, Methil, Motherwell, Neilston, Newmains, Paisley, Pencaitland, Perth, *Port Glasgow*, Renfrew, Stenhousemuir, Stirling, Uddingston, Uphall, Wemyss, Whitburn, Windygates, and Wishaw.

*Grade B.*—Arbroath, Montrose, and Peebles.

*Grade C.*—*Dumfries*, Galashiels, Hawick, and *Maxwelltown*. (Plumbers at Dumfries and Galloway, 1s. 6d.; and at Inverness, 1s. 7d.)

[Douglas and District (Isle of Man :—Bricklayers, masons, carpenters and joiners, plumbers, plasterers, and painters, 1s. 4½d.; labourers, 1s. 0½d.]

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* The rate for painters is 1d. per hour less than that shown for craftsmen in the above table.

† The rate for painters is ½d. per hour less than that shown for craftsmen in the above table.

* From "The Labour Gazette."

ednesday, January 17, 1923

Vol. LVII. No. 1463

# THE ARCHITECTS' JOURNAL & Architectural Engineer

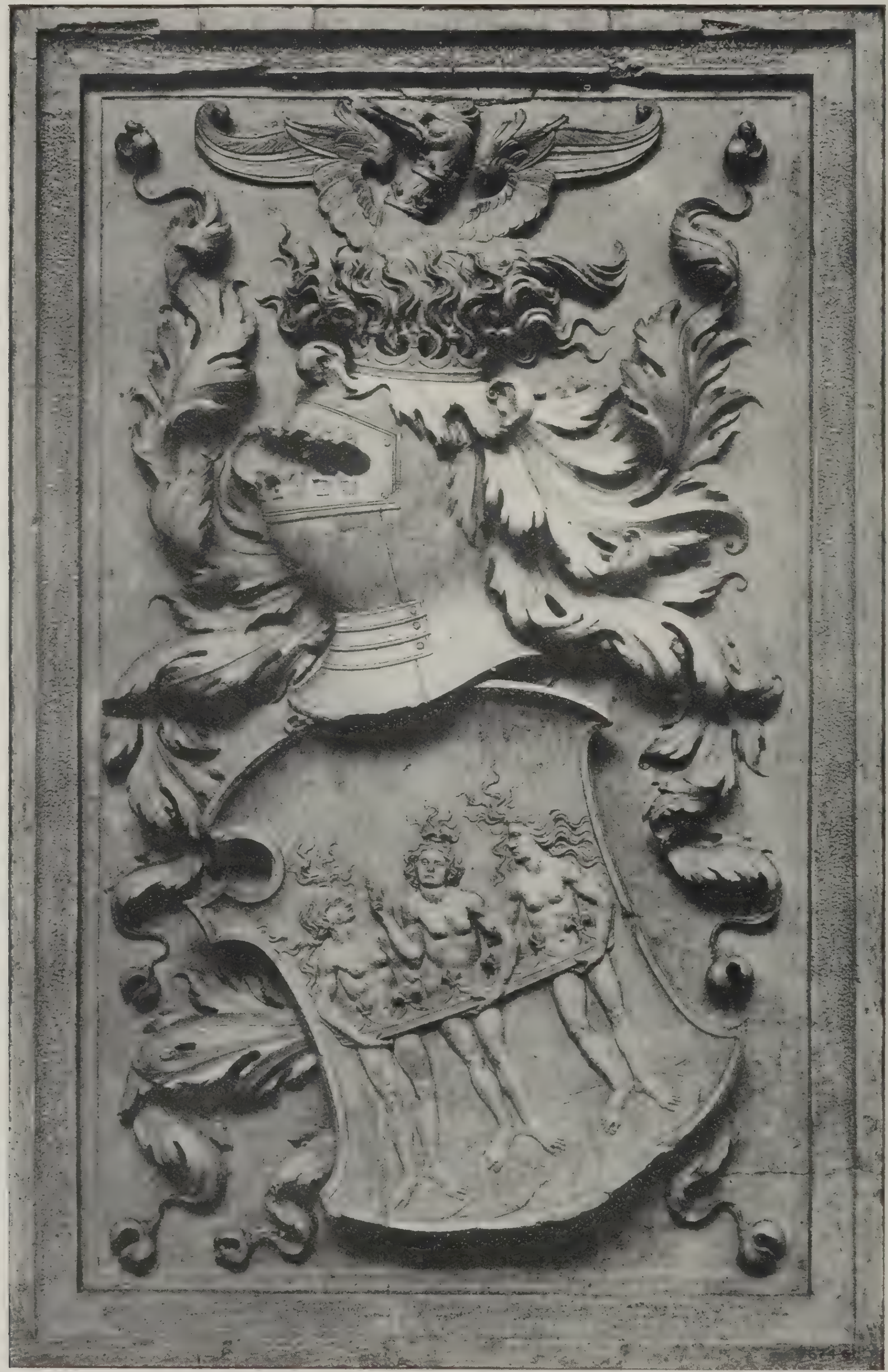
*With which is incorporated "The Builders' Journal."*

FROM AN ORIGINAL ETCHING BY PIRANESI.

*(The A.A. Exhibition of Architectural Phantasies.)*

27-29 Tothill Street, Westminster, S.W.1.

# Details of Craftsmanship. 15.—A Panel from a Palace at Cesena, Italy



This vigorously carved panel (dating from the sixteenth century) originally belonged to a Palace at Cesena. It is of Istrian stone and takes the form of a shield of arms. The original is now in the Victoria and Albert Museum.

THE

ARCHITECTS' JOURNAL

27-29 Tothill Street, Westminster, S.W.1.

Wednesday, January 17, 1923 Volume LVII. No. 1463

# Architecture and the Cinema

MUCH has been written and published in periodicals and the daily press lately to rouse public interest in the arts, and in architecture in particular. It is believed that, had the aims of these able writers been directed more towards the cinema and its possibilities, their efforts would have met with more success in dealing with a twentieth-century public. At a cinema, not long ago, it was refreshing to see a film of a recent addition to London's civic architecture, and appreciative remarks (not strictly architectural) on the outstanding merits of the building were plainly audible. The writer's pulse throbbed with delight and surprise when he felt that the audience were really interested. The picture was part of a "topical film," but there was no "cinema" or "unveiling" crowd present. The building had apparently been filmed just because of its architectural interest and general impressiveness, and was shown in detail, slowly passing from the ground level to the crowning feature, with, in addition, the groups of sculpture full picture size. It is a pity, however, that the name of the architect was not given.

On another occasion a fairly successfully tinted film of one of our great Gothic cathedrals was shown, exhibited to a scale large enough to show jointing, carved details, and expression in the sculpture. The film of the general building and the feeling of life in an interesting foreground, followed by large details showing the great scale of the structure, made it a picture of general interest. Apart from the immense value of such films to students and architects, it is an encouragement to others, to the general community, to be appreciative of additions to civic surroundings—which are generally paid for by the ratepayers—and to take a real live interest in the "public" art of architecture.

The public will not stand forcible education in matters of art, but comfortably seated with a pipe or chocolate between its teeth, a lot could be done to cultivate and foster an interest, by getting our cinema managers to sandwich a really good "sculpture" or "architectural" film between our "Charlie Chaplins" and "Mary Pickfords."

Speaking generally, it is what might be called the "poster" qualities of architecture that appeal to the "man-in-the-street" most directly. There is no real depth in public appreciation or criticism of the mistress art. Great scale, picturesqueness, so-called originality or novelty, takes the place of tradition, good proportion, beautiful expression, and refinement in the arts. With the means at the disposal of film experts and their decided ability to take advantage of the best and often unusual viewpoints, along with grand effects of light and shade, even a small but refined and well-proportioned work of architecture could be served calculated to impress, and palatable to the most commercial taste. For there is a plane of quality where all critics agree and where the architect finds it less difficult to persuade his client that the great work of the past is the correct basis for all work of to-day and of the future.

Children at school are taught drawing and painting, dancing and music; visits to art exhibitions and orchestral concerts are also sometimes included in the curriculum. But what is wrong with architecture that it is not included or a sufficient knowledge of it imparted to enable the young student to appreciate the art of our city streets? Has the subject ever been thought of, or considered by educational authorities? It seems to be a clear duty of citizenship. It would open up new vistas and avenues of thought, and the study of the styles, in a general way, would give additional importance and interest to otherwise dry historical dates and geographical facts of elementary school training. For the purpose of illustrating such art study the cinema could not be put to better service.

Apart from the general educational value, it would be a real treat for any architect to be taken, by film, round the Acropolis at Athens, or even the Pyramids, familiar as they are in shape to all of us; yet few there are who have any real notion of their scale or the size of the stones of which they are built, and their charming surroundings.

The Temples of Luxor and Karnak would form delightful subjects of general interest. A moonlight study is always attractive, and it makes more readily apparent the general architectural mass and proportions of these picturesque temple ruins of "the glory that once was Egypt's." It is the spirit of adventure associated with exploration, the thrill of discovery and the stupendous estimated value in pounds sterling of the finds, resulting from the recent excavations in the Nile Valley, that impress the public most. The forging of another link in the long still uncompleted chain of ancient history and art is an entirely secondary consideration. To see a film record of the locality, the tomb, the excavators at work, and their newly-found treasure, would fire the imagination of the layman and rouse public interest in the "basic" arts of ancient civilization. It is to be hoped that in this twentieth century some such record will be "produced" for the information of posterity, all art lovers, and others interested.

The public has really very little opportunity or facility for obtaining guidance in the general study of our street architecture. Apart from schools of architecture for professional students, public instruction on the subject is never provided. Our universities and corporations arrange free public lectures during the winter months, on subjects of general interest, literature, citizenship, political economy, but architecture is seldom, if ever, included in the programme, and yet, even without the aid of the cinema, the evolution of style in architecture is a story of intense interest and fascination.

In America the services of the cinema are being utilized to promote the welfare of many forms of municipal, public, and private activity, such as town-planning schemes, disposal and lay-out of estates, clearing of slum areas, etc., the idea of the promoters being to carry public opinion with them and so encourage voluntary public subscription. In one particular case, an unusually attractive suburban plot was selected, model houses were constructed and suitably furnished. A five-reel film was produced showing the actual erection of this six-apartment brick house, equipped and furnished complete with a family "living happily ever after." The theory was that any one seeing the construction of such an attractive model would be persuaded to become an owner. The film and descriptive "titles" are said to correct some of the popular misconceptions of the difficulty and cost of building.

All these ideas might be further developed. In picture houses, between films and during the raising and lowering of the lights, slides might be shown of a good painting, an acknowledged piece of sculpture, or an architectural masterpiece, with short descriptive notes, and so give one the opportunity to carry away something in the mind's eye which will be of service in genuinely improving the taste and forming a sounder basis for art judgment.

Silly things can be shown so beautifully on the screen that it is a pity the cinema is not always used to the best advantage. There are great possibilities for the "screened" picture on the lines indicated, and any corporation, enterprising cinema manager, or educational authority who gives these suggestions serious consideration would be doing a real service to the community.

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## The Whitgift Hospital

At a town's meeting last week, the burgesses of Croydon decided by a large majority to oppose the promotion in Parliament of a Bill for a street widening scheme which would involve the demolition of the Whitgift Hospital. This interest of the general public in matters of local architectural amenity is a most encouraging sign of the times. The civic consciousness has been so long in awakening that one had begun to despair of its ever emerging from its age-long slumber. Now it is at last awake, it must be kept awake, and the best way to do it is for every town to have its own civic society. Many have them already—Birmingham is a shining example. It is by constant vigilance on the part of its citizens that a town's amenities may best be safeguarded against vandalism.

## The Building Trade Dispute

It is unfortunate that last week's meeting of the Wages and Conditions Council of the Building Industry should have ended in deadlock. The proposals of the employers that there should be (1) a reduction of 20 per cent. on both time and piece rates; (2) a longer working week; and (3) the introduction by stages of a bonus system of payment by results, were regarded as unreasonable by the men's representatives, who urged that the cost of materials should be reduced before any further demands were made upon labour. What the operatives do not apparently realize is that wages for labour is by far the heaviest charge upon all production, and that until some economy is effected in this respect, no real reduction of costs is possible. Happily there is no immediate prospect of a struggle, as the existing agreement does not expire until the end of February. In the meantime we hope that moderate counsels will prevail so that there may be no impediment to the reopening of negotiations.

## Sir Banister Fletcher and the Bridges

In discussing, a few weeks ago, the project for a new Thames bridge, Sir Banister Fletcher, F.R.I.B.A., made a point that has been too frequently overlooked. "The proposal," he argues, "to throw any bridge over the Thames is not, and cannot be, merely a City matter, but must be a London matter, to be considered in the wider light of its greatest usefulness to the greatest number of Londoners." This view is an expression of the "larger civics," and is one that has been frequently put forward in the pages of this JOURNAL, with reference to other matters besides the design, construction, and maintenance of bridges. In fact, we have always felt, and have lost no appropriate opportunity of reiterating that opinion, that a merely parochial view of the functions of the rulers over a great Empire city is deplorably misconceived. It is a great good-fortune for civic amenity that Sir Banister Fletcher speaks on such questions not only as an architect, but as a City magnate also. The combination is invincible, and Sir Banister always exercises it with wisdom and discretion. Nor does he ever make the mistake of censuring the City Fathers—an absolutely fatal and futile thing to do; but he never fails to remind them of their good deeds. For example: "The generous action of the Court of Common Council in securing Epping Forest and Burnham Beeches, besides providing the Tower Bridge (itself outside the City confines), is an assurance that the Court takes a broad view in administering funds under its control." These are not merely courtly phrases; they are a temperate statement of the strict truth, and in his manner of making it, Sir Banister shows the true method of presenting the case for civic amenity.

## The Chesterfield Spire

Architects will be concerned to learn from the report by Mr. Leslie T. Moore, F.R.I.B.A., which we publish in our present issue, that the famous twisted, lead-covered spire of Chesterfield Parish Church is in so serious a condition that immediate repairs are necessary. There is an inclination of as much as 7 ft. 6 in. in one direction, which is an increase of 12 in. during a period of eighty years, though whether or not this deflection has taken place gradually is difficult to determine. The presence of wet rot and *Xestobium tessellatum*, which must have occurred since 1898–9, when the spire was thoroughly repaired, appears to support the view that the increased inclination is of recent date. We must be thankful that restoration has been undertaken in time, and that it is entrusted to safe hands. The spire's extraordinary twist has been the subject of a good deal of controversy in the past, and various theories have been advanced to account for it. Only one man, so far as we know, has denied that there is any twist at all, and that was John Henry Parker, who wrote: "the lead is so disposed as to give the *appearance* of the spire being twisted." *He* should have consulted an oculist. Others have held that the twist was deliberately designed when the church was rebuilt in 1370, though there is little evidence to support such a supposition. Looking at the illustrations, which we give in this issue, readers will notice that the herringbone arrangement of the lead work gives the spire an appearance that would be represented on plan by a sixteen-sided star. Actually it is octagonal, the apparent intermediate indentation between the ribs being purely an optical illusion.

## Wren's Deficiencies as a Builder

Wren's reputation as a builder received some rather rough handling at the last meeting of the Architectural Association, when Mr. Laurence Turner, after reading a paper on "The Workshop," in which he dwelt upon the value to an architect of a thorough knowledge of materials, pointed the moral of his tale by indicating some of the structural weaknesses of St. Paul's. It is really extraordinary that a man of Wren's scientific genius should have countenanced such a shoddy and empirical method of construction as ashlar facings with rubble filling for the walls of his great building. Granted his difficulty in the matter of securing a sufficient supply of stone, it is still extraordinary that his brilliant inventiveness—shown, for example, in the construction of the dome—should not have enabled him to hit upon a better solution of the problem. The conclusion forced upon us is that even Wren, like Homer, nodded. For the lesser men of earth there is a very human satisfaction in the knowledge that even the great ones have their moments of weakness.

# Misconceptions about St. Paul's

## Some Announcements at the A.A.

MR. LAURENCE A. TURNER addressed a meeting of the Architectural Association last week, the President, Mr. Stanley Hamp, occupying the chair. Previous to the giving of
e address, it was announced that Messrs. Higgs and Hill,
uilders and contractors, had given a donation of one
undred guineas to the Endowment Fund, and the
resident thanked them for "their very generous and
andsome gift."

Mr. Turner took as his subject "The Workshop"—a
bject with a wide scope, he said, though he had to
arrow it from being able to talk about only his own
orkshops.

He strongly recommended that a lad who was to become
architect should spend the first two years with a good
untry builder, so that he might get an all-round know-
dge of how to build. Only in this way could he know
w joinery was conducted, by working at it himself. In
e same way he would gain practical knowledge of masonry
d brickwork, and get first-hand information from the
asterer and painter. Unless the architect had a thorough
owledge of the materials he was handling, and the right
rm of construction applicable to those materials, he could
t be expected to get a right sense of fitness of design.

Dealing with the shops in which architectural work was
rried out, he took first the mason's shop. He said unless
architect had some experience of stone, how could he
dge what was good and what was bad; or what sort of
ctions he should draw for the mason to work in a par-
cular stone or marble? With figured marble it was waste
good labour and material to work anything but the
nplest of mouldings. Many marbles were so hard and
ulty that the only possible way in which mouldings could
produced in them was by wearing the marble away by
bbing and the use of the grub saw. Beer stone and Port-
nd stone required different sections from Bramley Fall
the Chellynch bed of Doulting stone. The natural bed
some stones was very difficult to see; even Portland
one, which was so dense and even that the bed was hardly
scernible, had a right and a wrong way if the stone had
bear any great weight. Sometimes a piece of Portland
one would be condemned and replaced by another which
ould not have a tenth of the lasting quality of the con-
mned piece, for it was not the clean white stone which
d the longest life—some Portland stone would not with-
and the London atmosphere for five years.

In connection with woodwork, he said an architect
ould know more than a smattering about the different
alities and characteristics of wood. All woods did not
ack in the same way; neither did the same wood always
ack alike. Sequoia, for instance, did not crack with the
ain, but in a diagonal direction, and therefore he did not
nsider it a good wood to use for floor boards. He believed
e law which was made many years ago proclaiming that
ks might only be felled in the spring, when the trunk
s so full of sap as to make the tree burst and put forth
ds, was still in existence. Oak never recovered properly
en cut down at such a time; it took years of washing in
stream to get the sap water out of it, whereas if it were
t when the sap was quite down the wood might be used
ter twelve months' seasoning.

All wood should be quartered to exhibit the beauty of
e grain, although there were exceptions in some of the
rd woods, such as figured ebonies. Most hard woods
ich came from hot countries were particularly bad with
gard to shrinkage, which could be attributed to the fact
at they were evergreens and consequently the sap was
ver down. For plain surfaces all such woods should
veneered, and the wood they were veneered on to
uld be veneered on both sides, so that there would
equal tension on both sides. Boarding should never be jointed with dowels unless to butt one piece of end grain to another, for the dowels, being the reverse way of the grain, would not shrink in the same manner as the board.

The great architect, the bicentenary of whose death they were about to commemorate, would have saved those who came after him much anxiety and money if he had had a more thorough knowledge of building. Even Sir Christopher Wren, with all his glory and sound theory for construction, was a bad builder, or he would never have allowed a Norman method of building a wall to be applied to a classic building. If he really knew it was unsound it only made matters worse. They knew he was put into a difficulty for want of stone, so he sanctioned the building of an ashlar wall with a rubble filling, but he could not have realized how wrong it was or he would never have permitted it. Within thirty years of its composition St. Paul's Cathedral had to be closed for repairs, which, again, were disgracefully done. "The tendency nowadays," he concluded, "is to specialize in everything, with the result that the good all-round craftsman is becoming more and more difficult to find. The men I like to get hold of are those who have been brought up in workshops in small country towns where they have to apply themselves to all sorts and conditions of work. These men are invaluable, and during the war their worth was realized."

Mr. Turner subsequently mentioned that the architraves of the three west doors of St. Paul's Cathedral were really marble, though they were indistinguishable from Portland stone until closely examined. The deposits of soot upon the Cathedral, he said, actually preserved the fabric.

In the discussion which followed, Mr. Charles Spooner said that the architect's position to-day was a little out of scale. He was expected to be a specialist in about 500 different ways. Such a position was simply impossible, and he could not help thinking that architects had got to think out a much better scheme of working than that in operation at present. The subject was of great importance, and an endeavour should be made to define the architect's position more clearly than it was defined at present. The architect could not possibly be a specialist in everything. It seemed to him that the architect should be more in the position of the conductor of an orchestra. The architect should be the conductor of an orchestra of craftsmen; he could not be a craftsman in all the crafts but he must have a ready sympathy with all the crafts working with him. He thought it almost essential to fine architecture that architects should have a good knowledge of a craft, and he believed they suffered a good deal from the lack of it. First-hand personal experience of materials and the use of tools and the way a material behaved under the hand of the worker were things which no amount of looking or talking would teach, and he would like to see every architect spend some time in learning and practising a craft. Most modern buildings were extraordinarily dead in texture. The way the stone was worked had taken all the life and interest out of it, and it took fifty years of Nature's workmanship to overcome man's mistakes in using the material. A new building ought not to be a hard, unsympathetic, mechanical-looking thing—there was no need for it to be so. If architects had a knowledge of the mason's craft it would not be difficult to find ways of working the stone to get a more pleasant and interesting effect.

Mr. T. S. Tait said that the best advice he could give was to be continually picking the brains of the artist and craftsmen. Architects realized the value of having craftsmen around them, and should get into touch with them. The young sculptor or painter might become famous by working in his garret and executing his own work, but the architect must rely on the craftsman for the execution of his work.

# "Things Seen in Dreams"

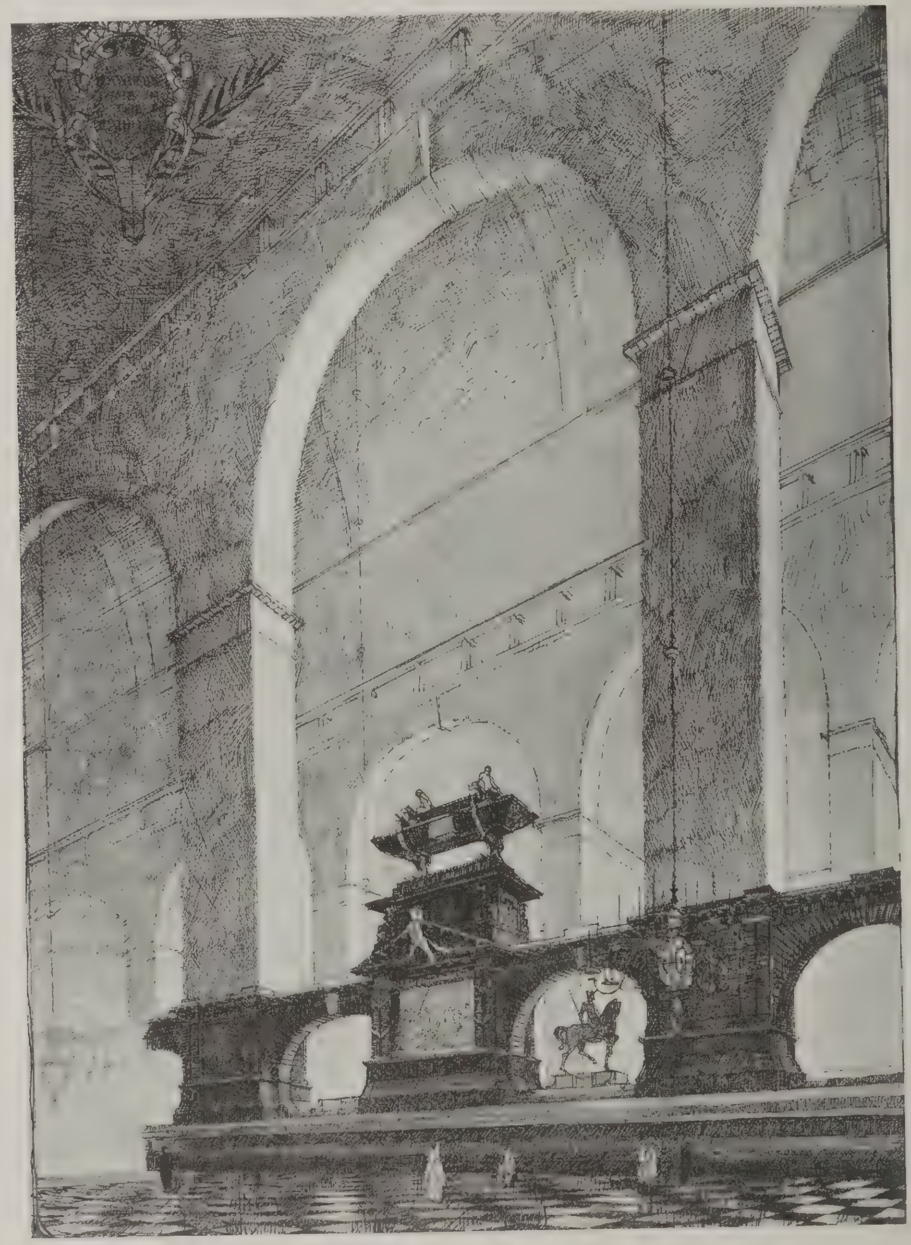
*"In the early stage of my malady, the splendours of my dreams were indeed chiefly architectural: and I beheld such pomp of cities and . palaces as was never yet beheld by the waking eye, unless in the clouds."*—DE QUINCEY.

THE exhibition of architectural phantasies at the Architectural Association shows that architects are given to dreaming. Sometimes their dreams have great dignity, and sometimes they are horrible nightmares. Some of them should have been told at the breakfast table, and then forgotten. But many of the dreamers have been afflicted as was the Ancient Mariner, and at certain times cannot rest until they have delivered themselves of the affair. Having found listeners perhaps they are shrived, and will depart and solicit us no more.

"Many years ago," De Quincey tells us, "when I was looking over Piranesi's Antiquities of Rome, Mr. Coleridge, who was standing by, described to me a set of plates by that artist, called his *Dreams*, and which record the scenery of his own visions during the delirium of a fever. Some of them represented vast Gothic halls; on the floor of which stood all sorts of engines, and machinery, wheels, cables, pulleys, levers, catapults, etc., etc., expressive of enormous power put forth, and resistance overcome."

Obviously, Giambattista Piranesi was something like a dreamer. His visions are bestrewn with grinning death's-heads, tumbled columns, hour-glasses, and the like. He is represented in this exhibition by a number of original etchings lent by Mr. Batsford.

The most ordered of phantasies seem to have come to Mr. Gilbert Scott and Mr. Stanley Hamp. They are, indeed, so ordered as to be outside the category of dreams. Rather more disordered are W. M. Keesey's "Island of the Faun," H. St. John Harrison's conception of Mr. Ching (the A.A.'s housemaster) as "The Administrative Block," and especially E. R. Jarrett's terrible hallucination.



"TOMB IN A CATHEDRAL."

*From a Drawing by Gilbert Scott, R.A., in the Exhibition.*

Mr. Howard Robertson presents "A Departmenta Store," which rises sheer like a cliff from the pavement, wit balconies before the plate-glass windows of each floor P. Hepworth's "Les Marches," "Les Portails," and hi "L'Usine," are splendid dreams. Other exhibitors ar Philip Tilden, L. H. Bucknell, and T. Frank Green.

One comes away disappointed at the orderliness of archi tects' dreams. Had they stared into a red fire for a hal hour they might have seen greater things. Or a littl opium or raw meat taken before going to bed would hav been beneficial.

H. J.

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6

"LES MARCHES."

FROM A DRAWING BY P. HEPWORTH.

*(A.A. Exhibition of Architectural Phantasies.)*

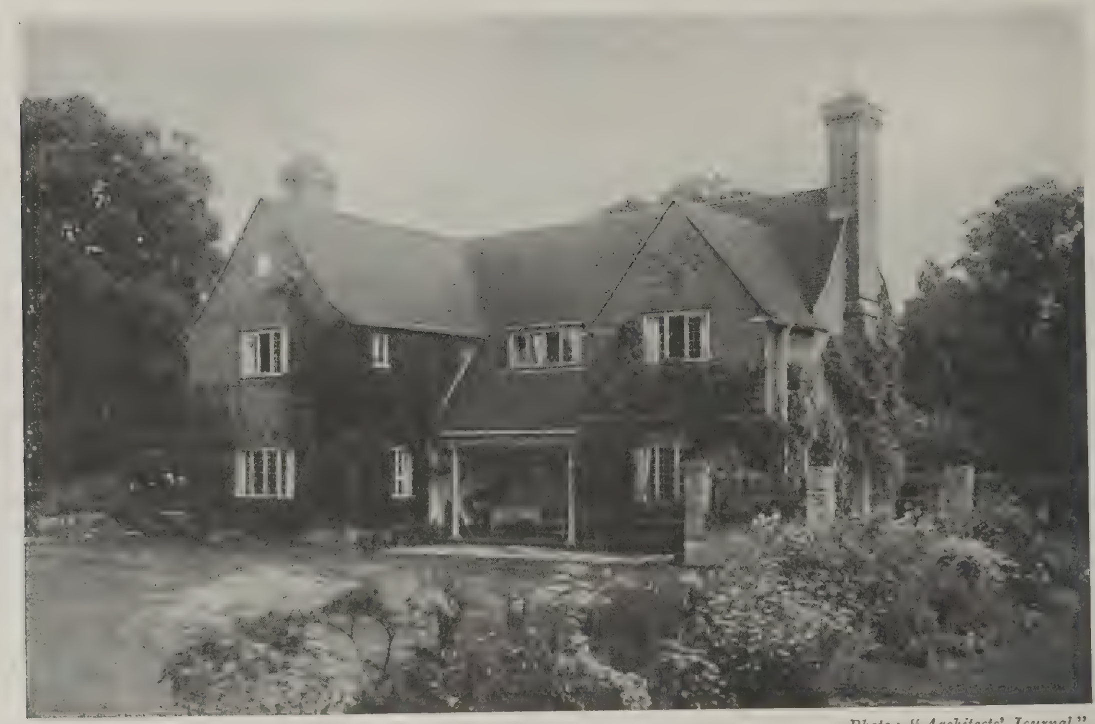


*Photo: "Architects' Journal."*

VIEW FROM GARDEN.

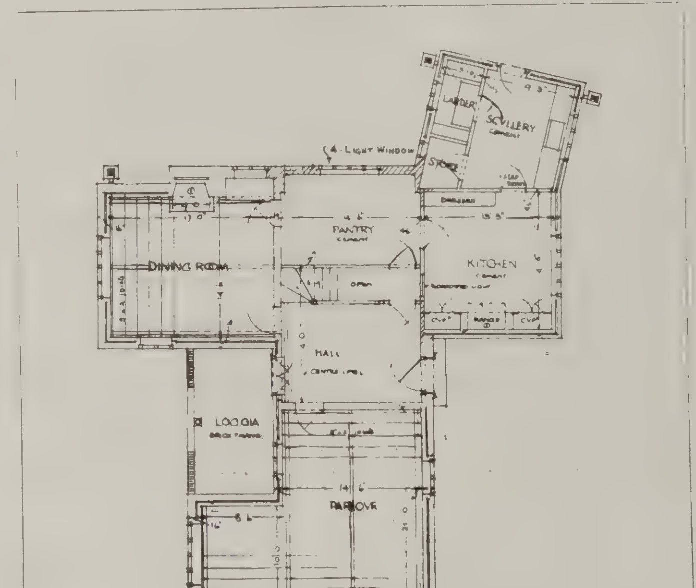
# The Houses of Well-known Architects

## 2. Mr. E. Guy Dawber's Residence at Long Wittenham, Berks

MR. GUY DAWBER'S house at Long Wittenham, near Abingdon, was designed by himself before the war. It is of red brick with a tiled roof. The gardens were all planted and laid out by the architect, and when the photographs were taken in August were well-nigh at their best.

Long Wittenham is a quiet little village in the Thames Valley. It is a mile or two from the nearest railway station, and a mile or two from the nearest town. Journeying by train, you get out at Didcot Junction, an hour's run from Paddington on the Great Western main line. Leaving Didcot—which seems very new and very ugly—you are faced by the generous slopes of the valley, and a white and lonely high road. You feel a long way from London, and begin to wonder why you should go back.

A mile or so, and you turn off the road and take to a narrow path across a wide cornfield, which seems to claim you straightway as does the sea or the desert. Your boots get red with trampled poppies, and then the tiled roofs of a village appear from behind distant trees. The road through the village is very quiet, and there seems no one of whom to ask the way.



GROUND FLOOR PLAN.

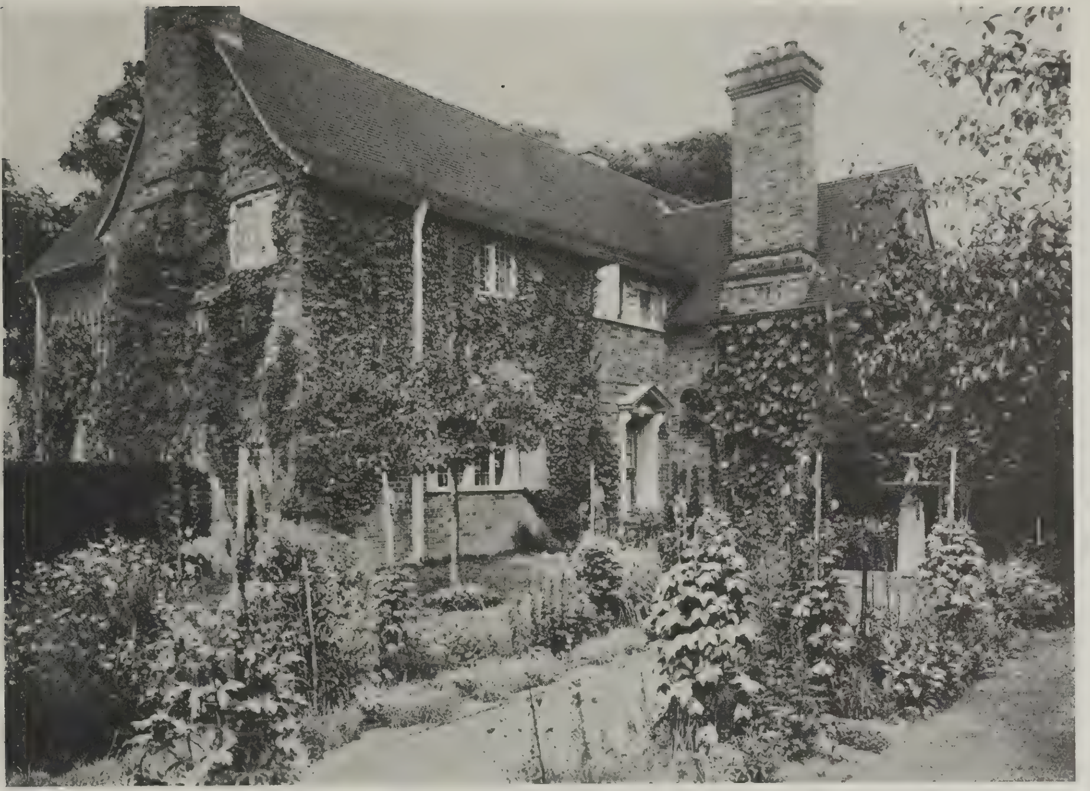
Mr. Dawber's house stands somewhat hidden from the road, and from the garden no other house seems near. The prevailing quietness of the place seems to have entered into its very design. There is nothing special to be said about it. You notice that it has big chimneys, and then again notice that the chimneys are not big after all.

The house is very much part of the garden, and the things of the garden have begun to fasten themselves to it. Walking to the back, you find yourself looking down a level lane of grass, which runs between what is almost an avenue of marguerites and sweet-williams. Big trees—oaks, and elms, and ash—stand around, and at the foot of the garden have taken up an unbroken line. Between them you see green fields stretching away over rolling country.

The deep loggia at the back of the house adds much to its quality. It seems so much a place to sit in during the day and behold that row of giant trees, and to sit in at night and behold those trees knee-deep in mist.

There is other of Mr. Dawber's work in the village—a pair of converted thatched cottages, and the small village hall. These will be illustrated in a later issue. H. J.

[The first article of this series appeared in our issue for Nov. 22, 1922.—EDS.]

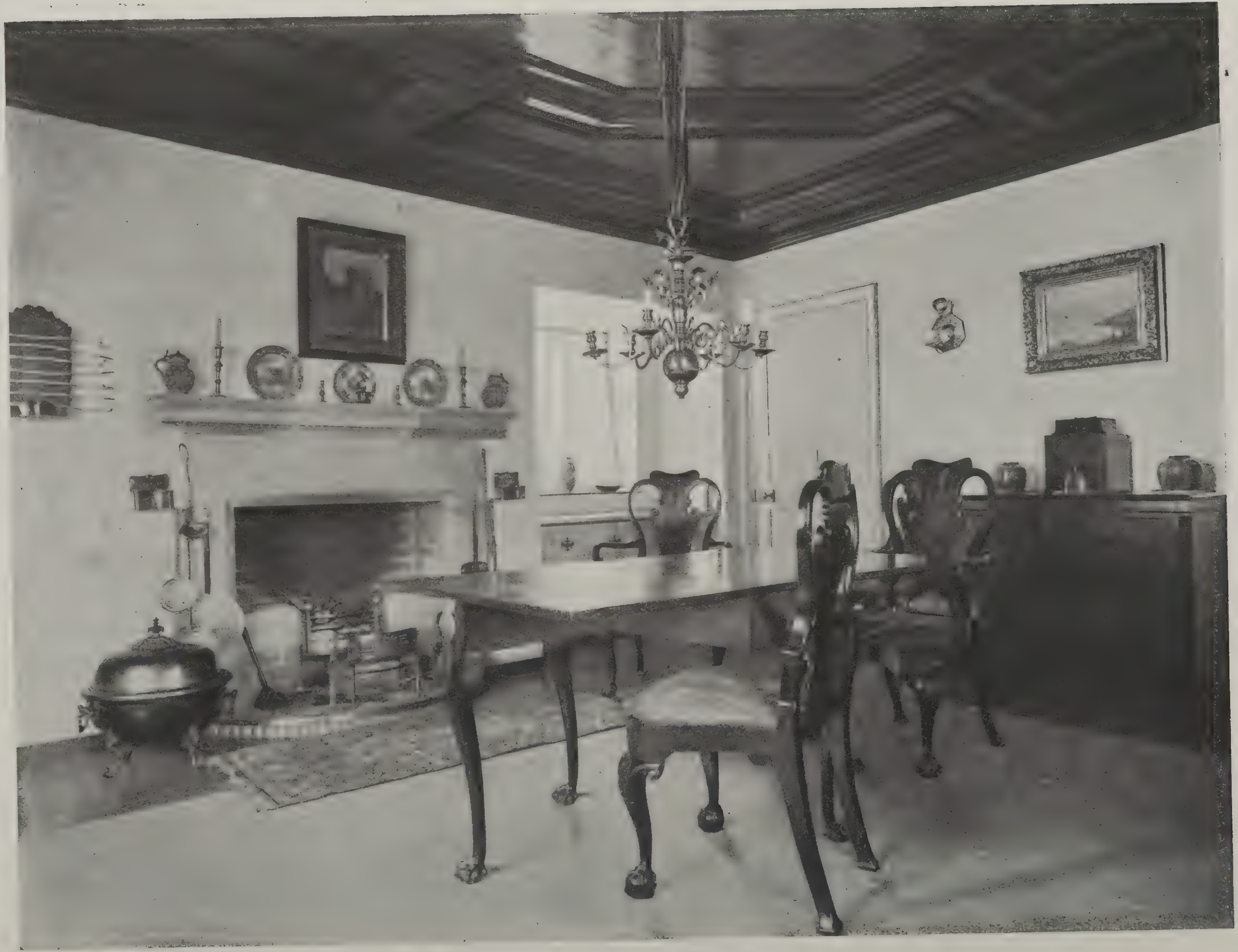


THE ENTRANCE FRONT.

Photos: "Architects' Journal."

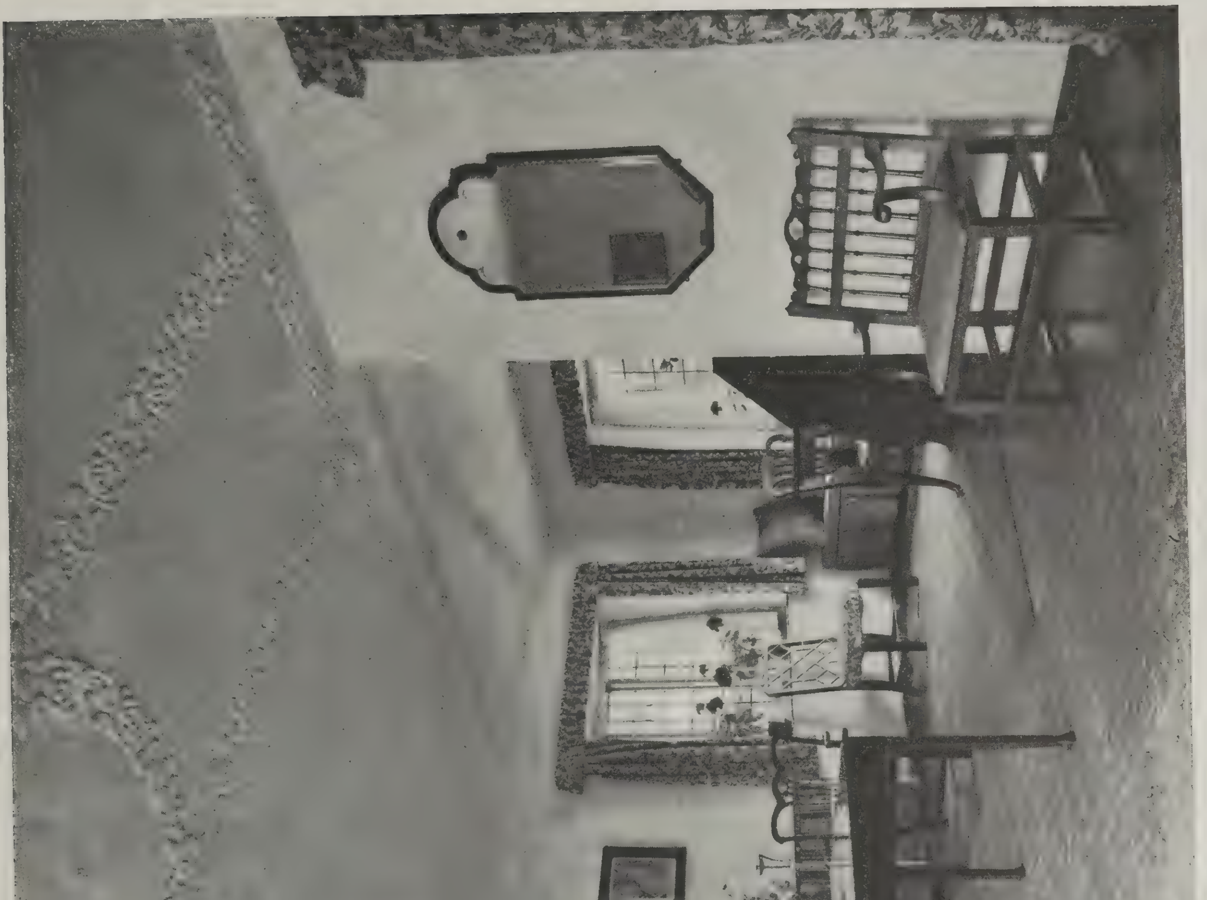
VIEW OF GARDEN SHOWING ITALIAN SUMMER HOUSE.

MR. E. GUY DAWBER'S RESIDENCE AT LONG WITTENHAM, ABINGDON, BERKS.



THE DINING-ROOM.

MR. E. GUY DAWBER'S RESIDENCE AT LONG WITTENHAM, ABINGDON, BERKS.



THE DRAWING-ROOM.

MR. E. GUY DAWBER'S RESIDENCE AT LONG WITTENHAM, ABINGDON, BERKS.

# A Pioneer Survey: The Doncaster Regional Planning Scheme*

THOSE who have a cynical contempt for what the world calls progress, and who wonder if, with all our scientific advancement, the world tends towards better conditions for the majority of mankind, would do well to peruse the report on the Doncaster Regional Planning Scheme, and those who are in any way interested in town planning, either in theory or in practice, would do well to study it.

When industrialism swept over the country in the middle of the last century, with such virulence that it veritably threatened to bring about the extinction of the race (had not Lister discovered by the use of carbolic how to stamp out hospital gangrene which spread alarmingly as accidents grew in factory and on railroad), towns grew up without consideration for communal good, without thought for subsequent requirements, and without precautions to ensure ultimate economy. Two generations have bemoaned and suffered from these mistakes, mistakes which were almost inevitable, and now we are shown what should have been done had not the whole situation developed with such extraordinary rapidity.

AN AEROPLANE VIEW OF THE HIGH STREET.

In the interim, garden cities have grown up, but Letchworth and Welwyn are in no way comparable with the development of an already thickly populated district on comprehensive lines to meet new requirements and conditions. For the development of the first, lessons with similar ideas and aspirations combine for a specific purpose, that purpose being the erection of a town and the organization of a community on certain pre-arranged lines. The development of the second is made difficult by a hundred conflicting human interests, by physical circumstances, and by existing conditions. The problem is indeed a gigantic one, and that it should be undertaken on such lines marks a new era in local government and communal enterprise, and to Doncaster is the honcur of the pioneer. For although there have been other regional surveys, such as the South Wales Regional Survey and the South Lancashire Civic Survey, which was the outcome of work conducted during the war, these have been concerned rather with generalities and emphasis upon the need of joint action amongst contiguous authorities than with the production of a detailed working programme (although the Survey of Road Traffic undertaken by the South Lancashire Civic Survey resulted in some valuable detail work), nevertheless the Doncaster report is the first to present a detailed programme with a definite constructive aim to meet probable immediate requirements.

The report of the Doncaster Joint Town-planning Committee represents nearly two and a half years' work, and may be said broadly to cover every aspect of the subject except, and this would seem to be a matter of some importance, the financial. A regional survey in which several local authorities (in this case no less than seven : one corporation, four urban, and two rural district councils) combine for their mutual benefit is a new departure. A single local authority is a recognized public body spending public money under public control, but a composite regional committee has no recognized position in the hierarchy of public spending departments. It can and does report, but how are its recommendations to be put into effect? With whom does the responsibility of alloting the expenditure amongst the various bodies reside? Already the system by which a local authority bears the cost of maintaining a road, the distinction of which is caused by through traffic, is found to be far from satisfactory. The maintenance of roads is no longer a parochial affair, and occasional grants from superior bodies only tend to complicate the matter without placing it on a satisfactory basis. That this aspect of the problem has difficulties is evidently realized by the authors of the report, for they refer to the possibility of a regional rating scheme, the object of which in this case is to provide funds for "free cultural institutions" in Doncaster, which shall be available for all the satellite towns which the report proposes as the ultimate means of developing the district. There exists, however, at present, no means or authority for levying a regional rate. May it not be that the time is ripe for a

* "The Doncaster Regional Planning Scheme." The report prepared for the Joint Committee by Professor Abercrombie and T. H. Johnson, with an appendix on Coal Subsidence by Joseph Humble. The University Press of Liverpool, Ltd. Hodder and Stoughton, Ltd., London, 1922. 10s. net.

revised method of local government, or at least for local government finance? At all events financial proposals would have added enormously to the interest, and, we think, to the value of the committee's work.

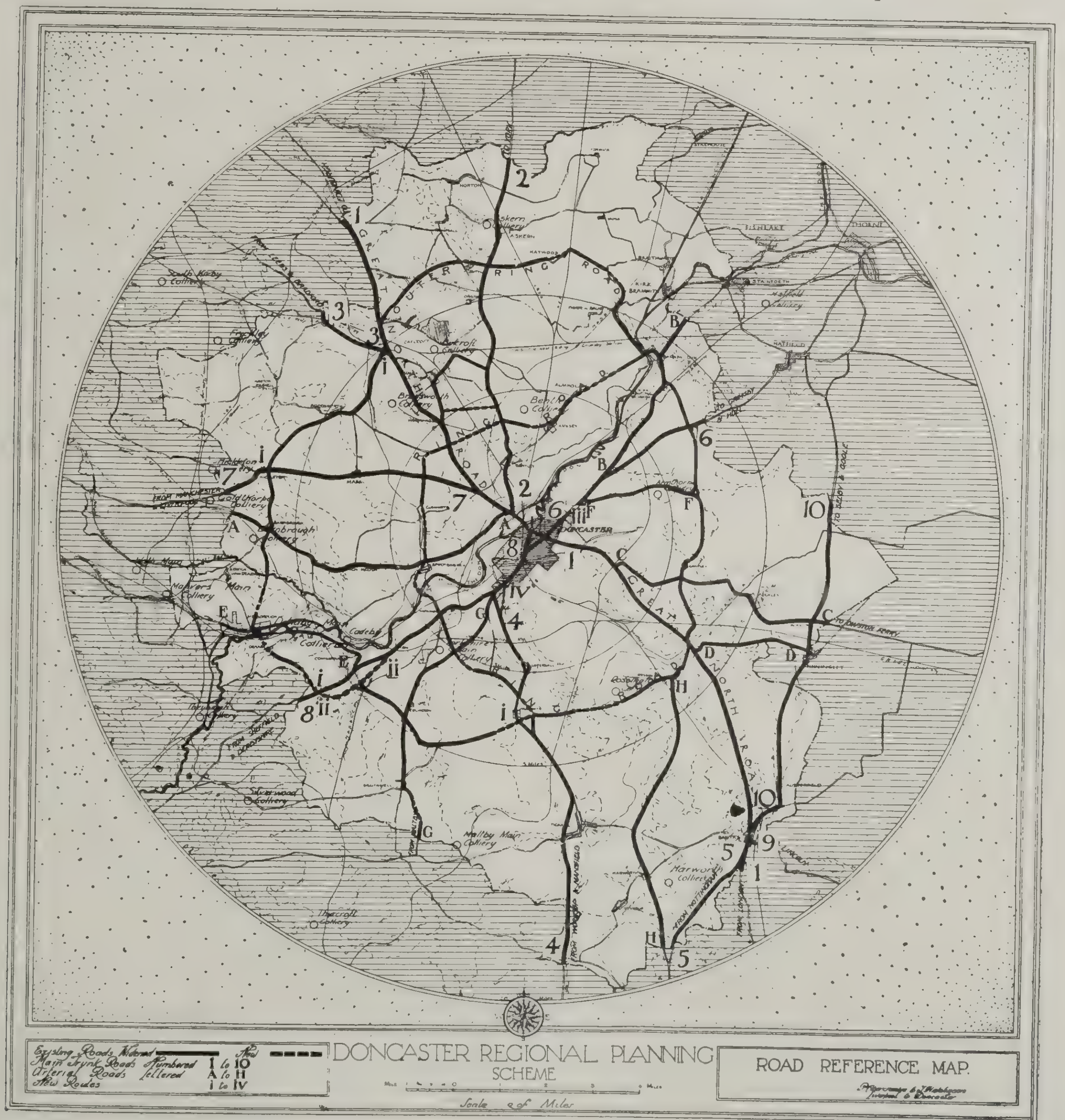
The report itself is the work of Professor Patrick Abercrombie and Mr. T. H. Johnson, an appendix on coal subsidence, by Mr. Joseph Humble, being also included. It is divided into seven parts dealing respectively with: general considerations of the nature of the Region; zoning or regulations for the specific use of areas; communications; the effect upon Doncaster of the general proposals of the report; the West Don Valley development; present condition, suggested improvements, and future growth of existing villages in the Region; the development of new residential centres and their relation to Doncaster. Already in the introduction it is clear why the subject of this survey is one of paramount interest. "Here is a district which has the chance of showing that industrial prosperity can be achieved without loss of amenity or health; and that an indulgence in the simple pleasures of a homely family life may be combined with the enjoyments of the highest flights of art, usually found only in the Great City—'La ville Tentaculaire.'

"The Doncaster Region, equipped by man, without any forethought to its industrial future, with unrivalled roads and railways, possesses in its most difficult feature—the low-lying tracts—the opportunity of grouping new industries in a manner at once fortunate for themselves and fortunate for those who will work in them. Coal, the *primum mobile* of this growth and the cause of its attendant difficulties, is found at such a depth that the worst infirmity of a mining district is absent—surface cracks and frequent pitheads.

"But it is in the grouping of the population that the chief attractiveness of the picture is found. It is no longer, one hopes, possible for a single city of the numbers and density of Leeds or Sheffield to come into existence; and one contemplates with only less horror a town, equal in population, but with its people spread out at the rate of fifty to the acre.

"Instead, there should spring up in this Region ten or more communities—new, or so changed as to rank as new—towns complete in every respect, but of moderate size, manageable in their loose texture. Central to these, but in no sense dominating their individual existence, is to be a city, neither swollen nor tentacular, but, in the truest meaning of the word, metropolitan. For major pleasures, for higher studies, for contact with great Art, dramatic, musical, and visual (which includes architecture, painting, and sculpture), the inhabitants of the surrounding communities would have, within easy reach, this focus of civilization."

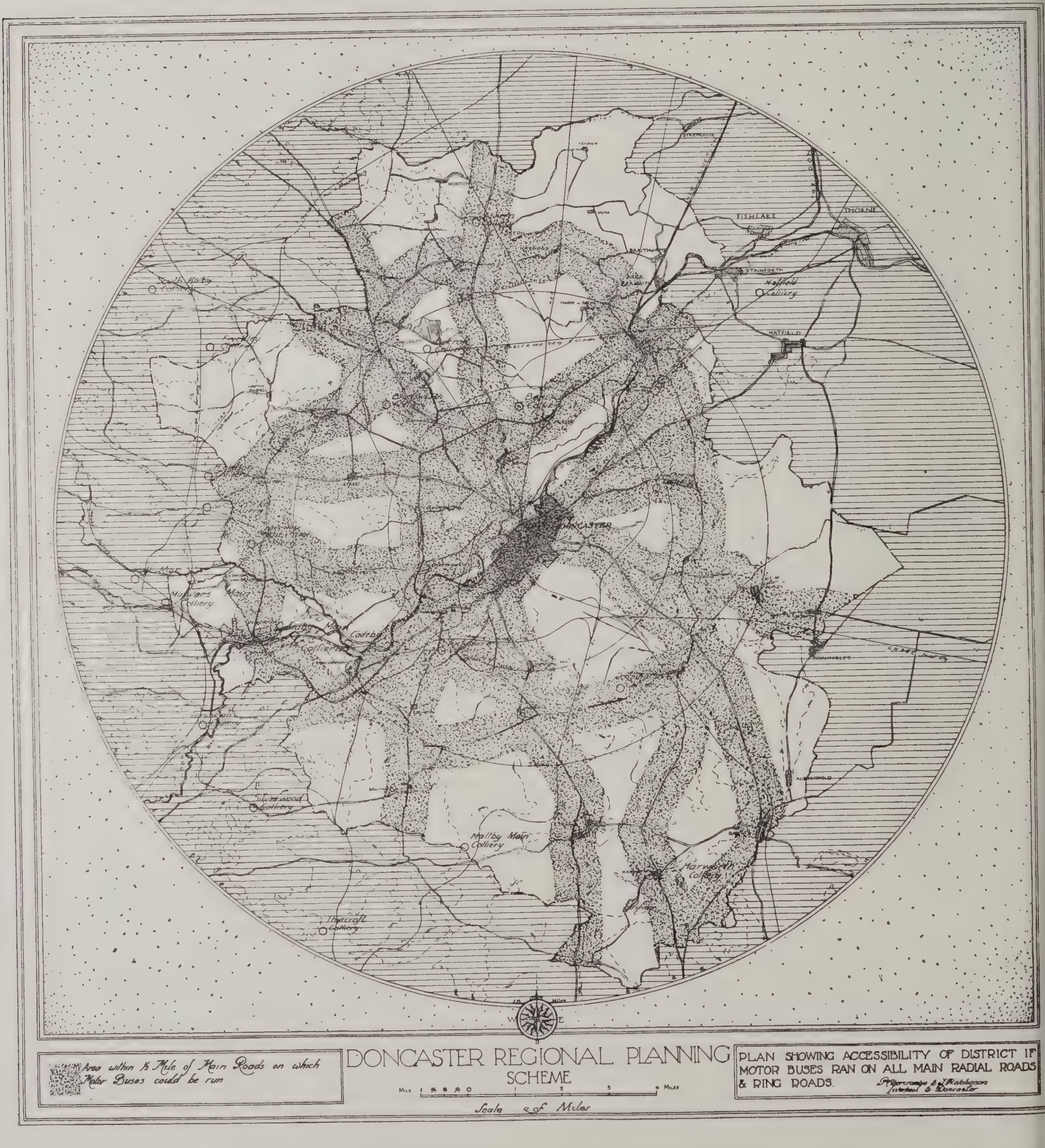
We have quoted these paragraphs *in extenso* because the whole report is but an amplification of their content.



In Part I we find a brief historical account of the growth of Doncaster, which, despite its ancient lineage from Roman times, its favourable position, and the rich mineral deposits in its neighbourhood, was mercifully passed over in the first virulence of the attack of industrialism. Since the establishment of the Great Northern Railway works in 1849, only two pits were opened until 1907, and during the next fourteen years a further ten were opened, so that the exploitation of the area may be said to be scarcely begun. Statistics as to the size and population of the area are then dealt with; 108,165 acres with a population of 139,940 at the last census. The physical characteristics of the area—which is for the most part low-lying, coal working—and prospects regarding power, electricity, and water supply for factories are also included in this first part.

Particular interest attaches to the sections devoted to zoning. The authors of the report have wisely refrained from being over-emphatic in their recommendations, and except where land is definitely allocated for housing and recreational purposes there are no restrictions. Apart from these ear-marked areas there are low-lying tracts of agricultural land which may be used for industrial purposes, but which are unfit for housing, and there are neutral tracts which may be used for housing, for collieries, or for factories of a non-smoke-producing character, but not indiscriminately, for these areas will all be developed in accordance with their local town-planning schemes.

Housing, agricultural, and recreational areas are then discussed; the last includes recommendations for the preservation of certain features of particular natural beauty, such as at Sprotborough, or of particular historical interest, such as Conisborough Castle. Regulations governing the height of buildings are suggested.



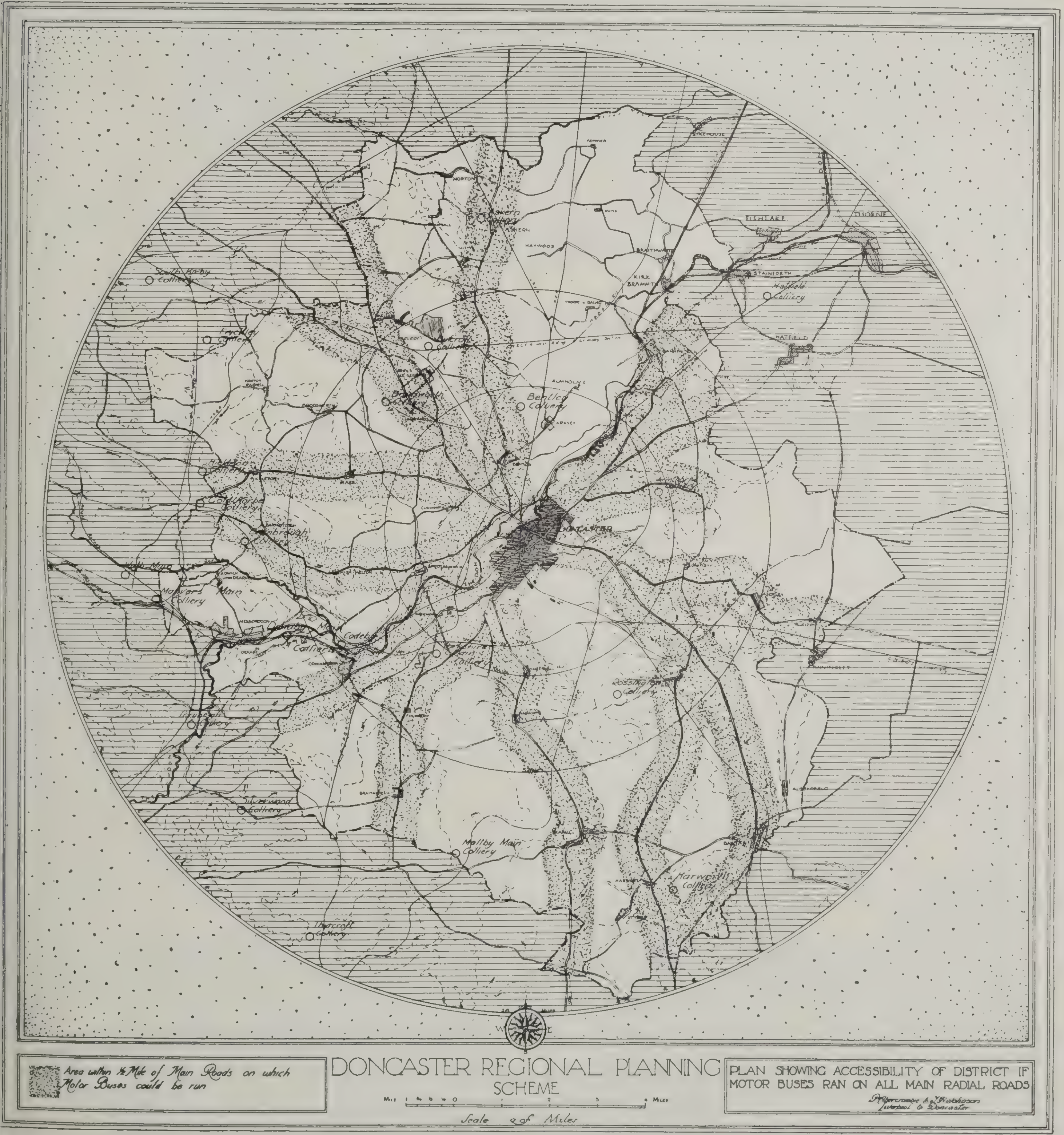
DONCASTER REGIONAL PLANNING SCHEME

PLAN SHOWING ACCESSIBILITY OF DISTRICT IF MOTOR BUSES RAN ON ALL MAIN RADIAL ROADS & RING ROADS.

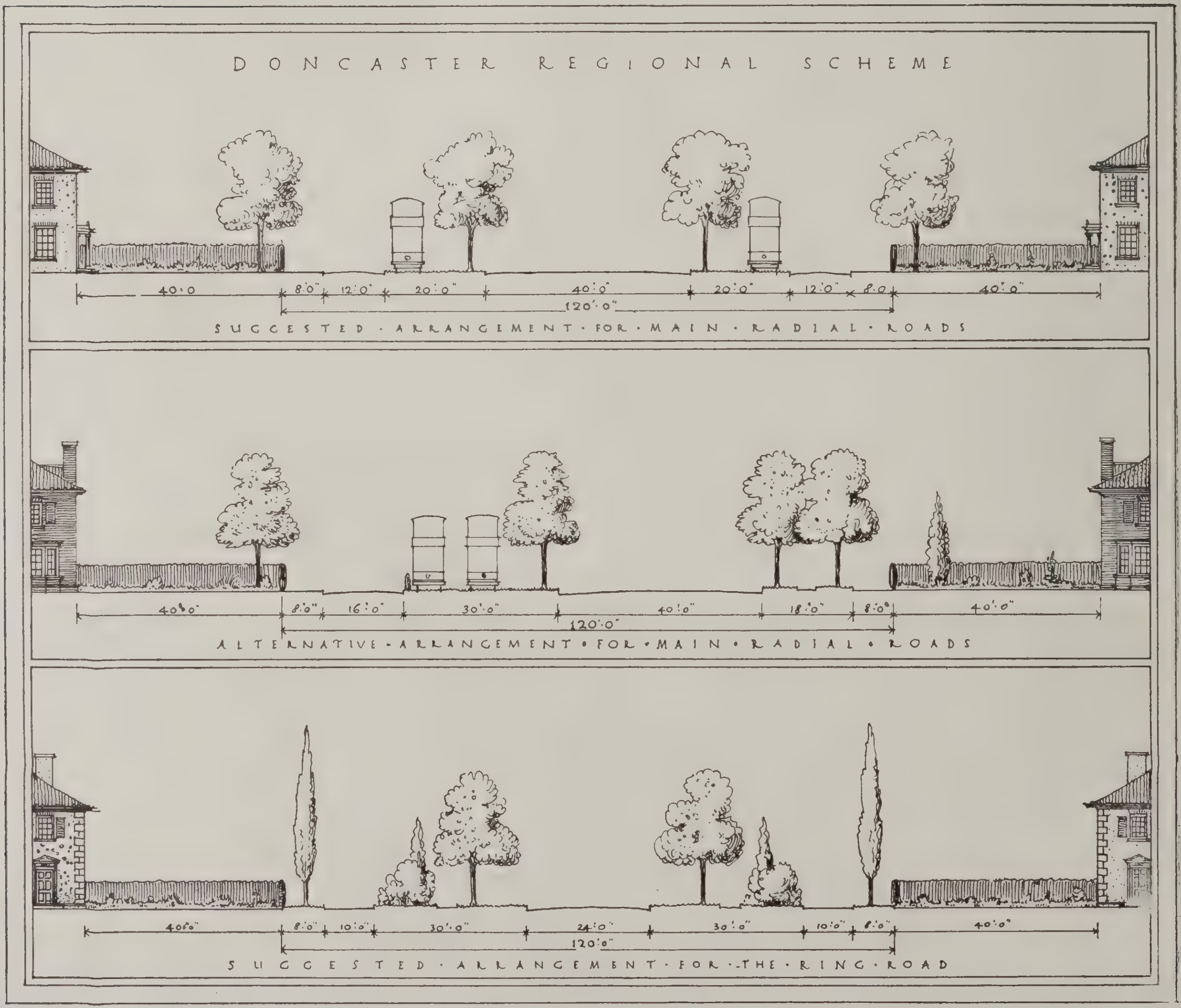
Finally, it is clearly pointed out that no zoning regulations, whether dealing with density, height of buildings, or their character, if considered reasonable by the Minister of Health, can be made matters for compensation. This is a clear statement of the whole principle upon which town or regional planning rests. The proposals are for the general good of the community for which the individual may be compelled to suffer if necessary. It is the reversal of the policy which has led to the growth of those great towns, whose existence we now deplore, in which the community suffered for the good of the individual.

Part III, dealing with communications, is the largest in the report. In our quotation from the introduction, reference was made to the excellence of the communication by road and rail to Doncaster. These roads, however, invaluable as they are for connecting the district with the outside world, leave the region itself comparatively ill-knit. "Thus villages within four miles of the cross-roads of Doncaster find themselves provided with perhaps three or four trains a day and no road conveyance at all." The solution suggested in the report is the construction of circumferential inner and outer ring roads—the eastern portions of the two rings coinciding—and certain switch roads to avoid the villages.

For a great part of its length the ring road will only necessitate widening pieces of existing roads and linking them together. The suggested section shows a 120 ft. road between fences with a 24 ft. carriageway. The ring road within the town itself has much to recommend it, whether, as in Vienna, a thoroughfare of noble buildings, or, as in Frankfurt, a circle of open spaces. It is no less valuable for affording intercommunication in a district and suggesting the position for open spaces when that district tends to develop to its full capacity.



THE ENTRANCE TO THE TOWN FROM THE SOUTH.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SUGGESTED ARRANGEMENT FOR THE RADIAL AND RING ROADS.

DONCASTER REGIONAL TOWN-PLANNING SCHEME.

Beyond a statement that the ideal road surface which will suit both horse and motor traffic has not yet been found, there is no reference to the actual road construction, nor are there any suggestions for regulating the speed of heavy lorry traffic which is the main cause of damage.

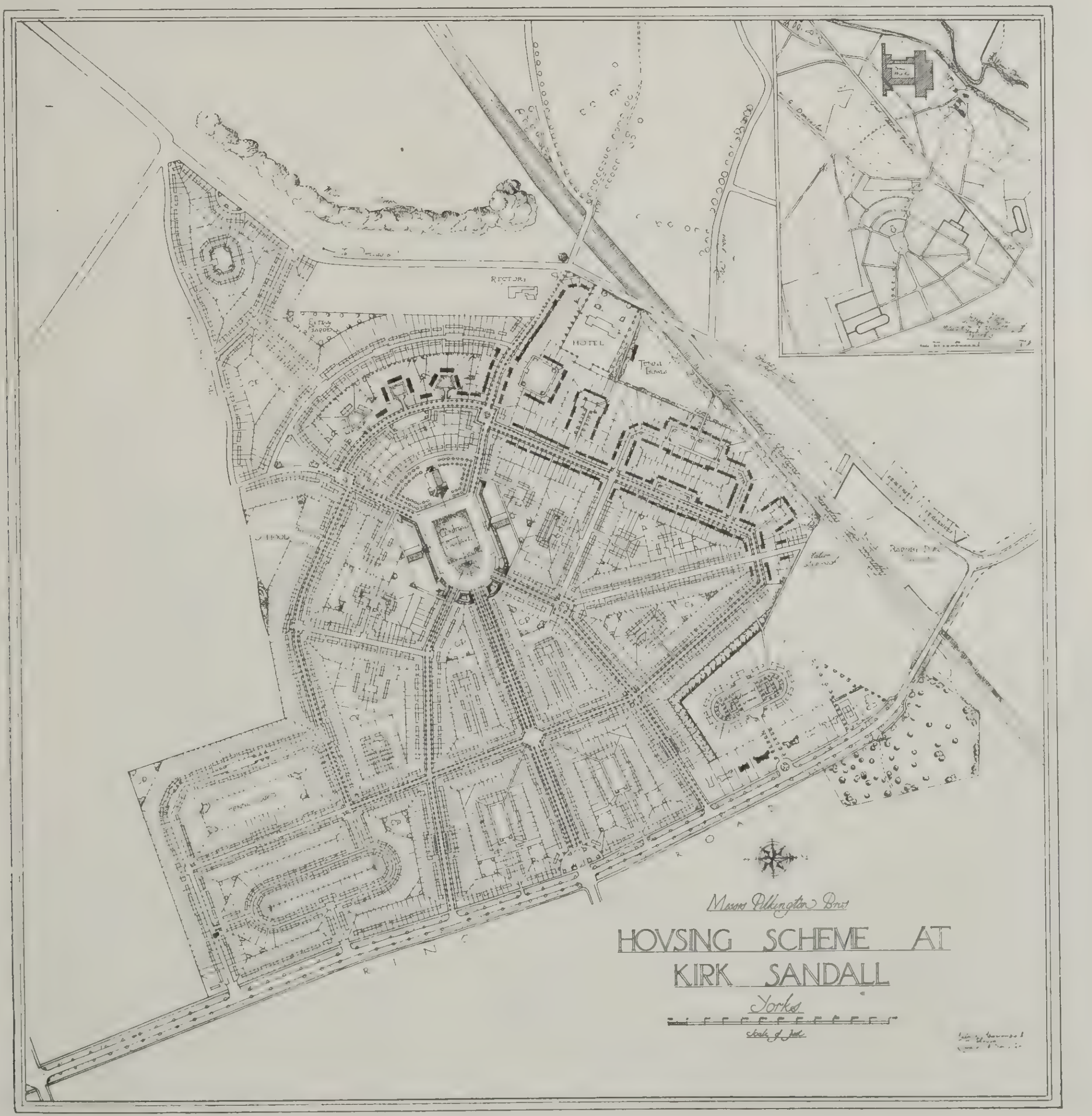
The whole question of traffic and road surface is one that must be faced. Concrete roads would seem on the whole best to withstand the hard wear of motor traffic, but this surface, when wet, is inimical to horses. Meanwhile, until the horse is entirely superseded, it would seem necessary, either that heavy vehicles are pneumatic shod, or that their speed is governed. The report then passes on to the consideration of railways. No fewer than eight companies serve the district, and yet for local passenger traffic the service is inadequate. Suggestions for making good this deficiency are contained in this section, and water transport and passenger transportation are also considered.

The next two parts of the report deal with the subsequent development of the Region. In the first of them each of the fifty-four villages within the district are considered and dealt with according to the purpose for which they are deemed most suitable in the ultimate regional development. Some will form the nucleus of the new satellite towns, others, on account of their low-lying position, should, in accordance with the zoning scheme, not be added to. The Region is fortunate in possessing some excellent housing schemes. One at Kirk Sandall, the work of Professor Abercrombie, is so disposed that its base lies along the route of the proposed new King Road. This, and Mr. Percy Houfton's scheme at Woodlands, are examples from which it is hoped subsequent schemes will benefit. The next and last part of the main report contains a plan—which we are unfortunately unable to reproduce on account of its colour—which shows the suggested lines of future growth, by clearly indicating the position of these satellite towns, the whole forming the Doncaster Industrial Region.

The fact is clearly emphasized that these communities are in no sense to be garden suburbs dependent upon Doncaster, but independent, self-supporting communities looking to Doncaster as a central metropolis supplying certain of the larger commercial, intellectual, and artistic needs in the form of a Chamber of Commerce, well-equipped lending libraries, concerts, drama, and picture exhibitions, such as are only obtainable in really large communities. It is suggested, however, that each of these towns should be based on the garden city type (in strict contradistinction to the garden suburb), with an aggregate density in residential districts of not more than twelve houses to the acre.

We cannot close this review without a word of praise for those responsible for the format of the report. In the simplicity of its binding, the beauty of its type, and the clarity of its diagrams, it is indeed a model of excellence. May this excellence be but an indication of the standard which the realization of the recommendations it contains will achieve.

[We are indebted to the courtesy of the publishers of the report for the loan of the blocks.]



THE LAY-OUT OF THE HOUSING SCHEME AT KIRK SANDALL.

# The Restoration of Chesterfield's Twisted Spire

### LESLIE T. MOORE, F.R.I.B.A., Architect

THE remarkable crooked spire and the tower of the Parish Church of St. Mary and All Saints, Chesterfield, are being restored under the direction of Mr. Leslie T. Moore, of Messrs. Temple Moore and Moore, architects to the Restoration Committee. The spire inclines 7 ft. 10 in. to the south-west, 7 ft. 6 in. to the south, and 3 ft. 2 in. to the west. It is believed that the tower (*circa* 1325–1350) was intended to receive a spire, and it is assumed that this was added *circa* 1375. Numerous spires built of timber and lead were erected in the Middle Ages. Notable examples were Old Saint Paul's, London, constructed in 1315, destroyed by lightning in 1561; Lincoln Cathedral Central Tower finished in 1311, blown down 1548; Hereford, 1320; Rochester, 1343.

Massively built of timber, the octagonal sides of the Chesterfield spire are covered with lead applied in oblong strips meeting chevronwise, giving to each of its eight faces the appearance of being channelled, which is an illusion. But that the spire in 1842 overhung its centre by 6½ ft. to the south, and 2½ ft. to the west, is no illusion. These were the figures given by Sir Gilbert Scott, who, in his restoration of Chesterfield Church in that year (which was his first essay in church restoration), suffered the spire to remain as giving character and quaint antiquity to the building.

Some years before—in 1817—"this singular pile was supposed to be in danger of falling." Expert advice was requisitioned, and a vestry meeting called at which the inhabitants strenuously opposed the idea of depriving them of their peculiar steeple. Other counsel was sought, and after a searching inspection, followed by a more favourable report, it was agreed that the crooked steeple should remain as it then stood. In later days Mr. Temple Moore in a report stated: "the inclination or leaning to the south-west . . . does not appear to have increased," and, acting upon his suggestion, in 1898–9 the spire was thoroughly repaired and strengthened at the cost of £300. One of the timbers then inserted was a piece of Norwegian oak 48 ft. long.

Many wild theories have been advanced regarding the cause of the spire's deformity. It is practically impossible that the spire could have been wholly erected in a perfect manner and warped to such an extent later; its internal construction points rather to intentional eccentricity, intensified by the clinging weight of the lead, combined with the action of the sun—in warping it towards the direction of its strongest rays—and so producing a quaint but unintentional result. Warping and sagging early in its history are undoubtedly the chief reasons of its distortion.

In consequence of the war much necessary work to the spire and tower was unable to be undertaken. Last summer the vicar and churchwardens ordered certain repair work to the lead covering of the spire. The report received from the contractor as to the condition of much of the leadwork and the supporting timbers was of such a character that it was decided to at once call in the architects to the Restoration Committee. A preliminary examination by them revealed the urgency of the case if the safety of the spire was to be assured, and immediate steps were taken to strengthen certain of the interior timbers of the spire which had given way, and at once to repair, and where necessary renew, the outside leadwork.

A complete report made by Mr. Leslie Moore fully bore out the preliminary investigations. This report was laid before the Church Restoration Committee by the vicar and churchwardens, who confirmed their action, and decided to take all necessary steps to preserve the spire. The parochial council, at a special meeting, endorsed the action taken, and authorized the issue of a public appeal for funds.

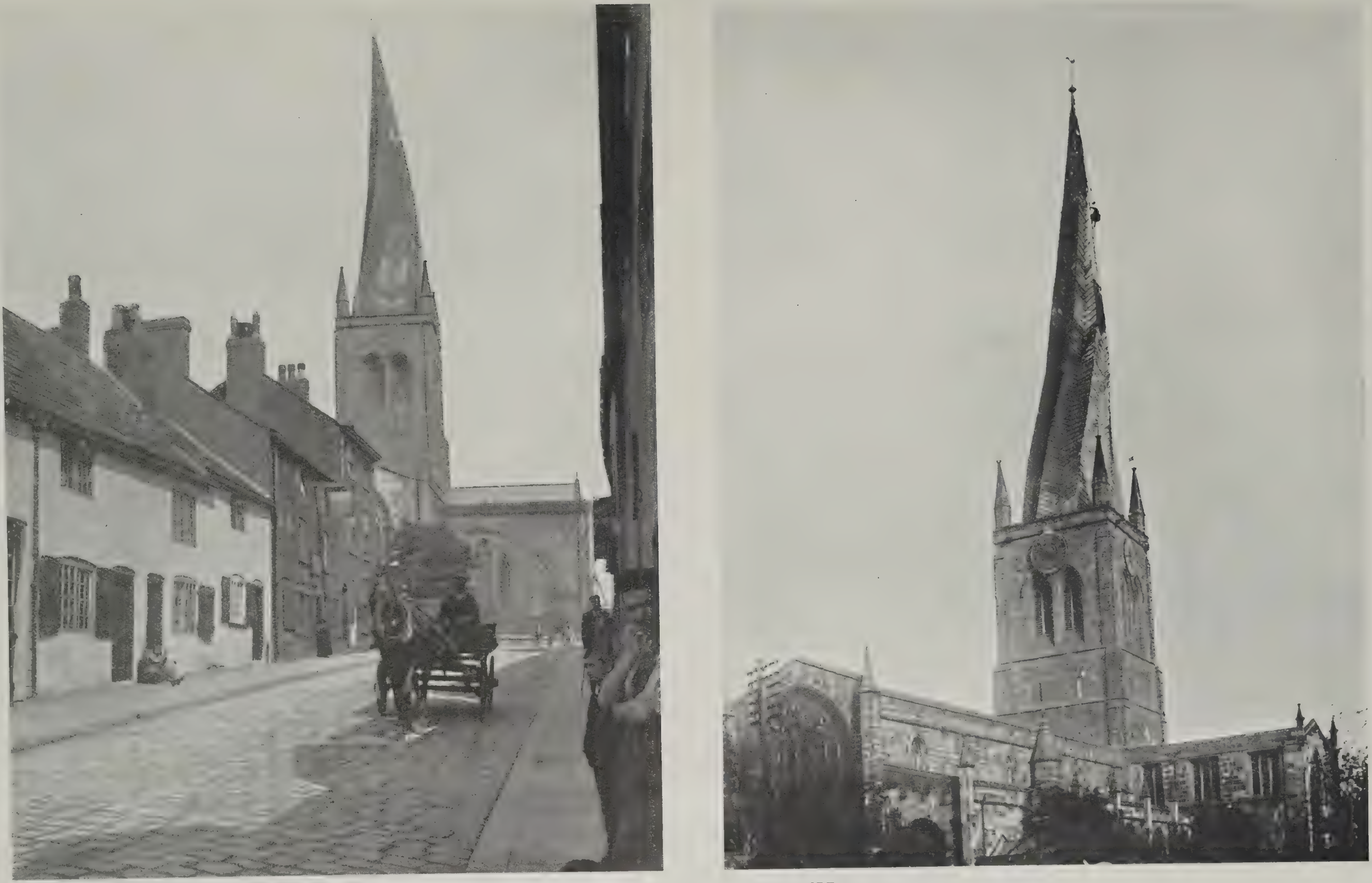
Following is the report of Mr. Leslie Moore :—

*The Spire.*

"In considering the spire, the lead covering forming the protective 'skin' is of primary importance, for the least displacement of the lead results in leakage, and it is the penetration of water and the loose condition of this leadwork that first gave cause for anxiety at the present time.

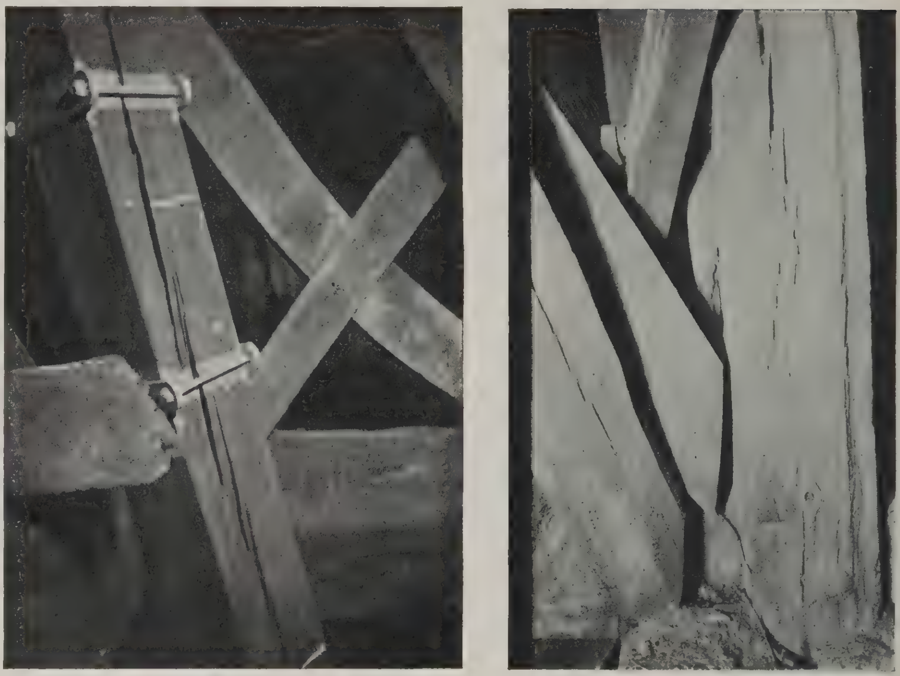
"The lead is laid in a herringbone pattern with welted joints, and has been replaced so often that very little, if any, of the original remains—probably that on the south-east side is the oldest. The

CHESTERFIELD PARISH CHURCH



TWO VIEWS OF THE TWISTED SPIRE.

THE RESTORATION OF THE SPIRE AND TOWER OF CHESTERFIELD PARISH CHURCH.
LESLIE T. MOORE, F.R.I.B.A., ARCHITECT.



The left-hand illustration shows how the 65 ft. long 10 in. × 10 in. beam is split by the weight of the spire. It is also bowed. The iron clamps have been inserted recently. The right-hand illustration shows how the supporting timbers have been forced out of position by the weight of the spire.

repairs have been executed from time to time in patches (one is dated 1735); milled lead has been used in places, and, as can be clearly seen from the ground, the welted joints are very irregular on the different faces of the octagon owing to the difficulty of execution and the joining up of new work to old. This is one source of weakness in the roofing, but the principal cause of the present defective state is that the 'tacks' which fix the lead to the boarding have become loose and ineffective owing to the rusting of the nails by which they are fixed to the boarding, and also to the decay of the latter.

"This method of fixing the lead has been adopted throughout and has practical advantages. The support of the metal is very largely dependent on the nails holding the tacks; they cannot be made secure without stripping the whole of the lead, renewing the boarding, recasting and relaying the metal. This would entail a large expenditure which it is thought would be prohibitive at the present time.

"About 40 ft. super of leadwork on the south-east side must be reinstated, recasting the old lead and relaying. It is proposed to secure the remainder of the lead by means of bolts having a 1½ in. diameter lead-covered head. These will take the place of nails that have been used previously for the same object. The bolts will be more effective, having a greater grip on the lead, and having a nut and washer on the inside of the boarding. Wherever possible the decayed board should be made good with new ¾ in. well-seasoned oak. By this means the leadwork, on which the life of the whole structure depends, will be preserved for many years, thus postponing the work of recasting the whole covering until more economic times.

"It was stated in 1855 'that the stability of the original construction was gone, and that the structure was upheld by the timbers subsequently added.' This is undoubtedly more true to-day than ever it was. The external appearance of the spire is remarkable, but the internal framing is far more so from the constructional point of view.

"The result of a plumbing of the spire taken recently was as follows: Inclination to the south 7 ft. 6 in., to the south-west 7 ft. 10 in., and to the west 3 ft. 2 in., and comparing these figures with those taken in 1842 it appears the deflexion to the south has increased 12 in.; whether the additional inclination has been gradual during the last eighty years, or has taken place recently, can only be conjectured. However, it is clear that the timbers on the south and south-west sides are severely strained, particularly the large vertical timbers inserted about a century ago: old shakes in the timber have developed near the base of that on the western side, and the strain has caused it to bend over to some extent. The long 10 in. by 10 in. strut fixed on the south side at the same time also shows signs of stress from compression at the scarf joint about 25 ft. up. This joint is well bolted with iron plates.

"The general construction of the spire is formed with four main converging stanchions continued the whole height, with horizontal framing in diminishing stages, the lower stage being 19 ft. 6 in. high, and that at the crowhole about 7 ft.; the horizontal members extend to the points of the octagon, supporting the angle hips and purlins of the roofing.

"All the old timber is framed with pinned joints. Iron straps have been added at various times to strengthen the structure, and the inserted timbers have been plated and bolted. All this ironwork is badly corroded, and several of the earlier straps no longer serve their purpose.

"The hip timbers are badly decayed in several places, particularly that at the south-south-west angle, the foot and head at the lower stages having gone.

"The foot of the north-north-west hips has also perished. The horizontal framing to the hips is decayed at the south-south-west angle (first stage) and east-north-east angle (second stage). The rafters in several places have rotted—in some cases where they have already been repaired. On the west and south-west sides the rafters have racked from the torsion, which is considerable. The original pinned scarfed joints of two rafters on the west have broken and sunk 2 in. Cross-struts inserted to strengthen these bays of rafters are fractured. Several rafters on the north and north-east sides have perished, and other struts and wind braces need careful attention. These defects occur at about a third of the height of the spire where the weak framing probably has to withstand the greatest strain. Similar defects occur in the upper stages, but their importance is not so great and enumeration would be confusing.

"The timbers named are vital to the maintenance of the imposed weight, for the deflection to the south-west naturally throws a greater stress on the timbers this side than that they were intended to carry.

"The causes of the defects are mainly due to wet rot and worm (*Xestobium tessellatum*); on inspection some joints were spongy with water. The inherent deflexion is an additional motive to be reckoned with under this heading.

"The main long vertical struts inserted a hundred years ago should be braced with iron straps where strained, the decayed timbers to be removed where possible and reinstated with pre-war felled English oak of scantlings rather larger than the timbers replaced. The perished timber that cannot be removed with safety should have fish-pieces bolted on the side or coach screws used where bolts are not feasible. Additional struts are required in places, and the main stanchions should be further braced at the upper stages. All ironwork should be cleaned and painted to arrest further corrosion.

"The spire has reached that state when the necessity for regular annual inspection is imperative; this should take place in the spring of the year. At present it is exceedingly difficult, not to say dangerous, to examine all parts owing to the condition and darkness. I strongly recommend that gangways be formed at the various levels giving proper access, and that electric light be installed, the wiring being carried up in steel screw tubing with plugs at the gangways, and two hand lamps with stoutly cased flexible wire be supplied; the switch being in the belfry. The cost of such would not be great compared with its value for inspection and the execution of internal repairs. Lanterns are, in my opinion, dangerous.

"The gutter at the base of the spire is laid with milled lead and should be protected with oak gratings similar to those fixed to the gutters of the nave and aisle roofs. In my opinion the public should not, as a general rule, be allowed to this level; the parapet is only 2 ft. 6 in. to 2 ft. 9 in. high now, and with the additional gratings will be less.

"The lightning conductor should be overhauled; the copper tape connecting the spire and four pinnacles has become detached in places, particularly near the ground.

### *The Tower.*

"The stone facing of the tower is much weather-worn, the pointing has washed t, and the north and south faces where e mediæval high-pitched roofs formerly isted should be refaced with better one, matching the other work. The isting soft stone which was originally otected by the roof on the north side is ry badly decayed and a weakness to e tower. The joints of the stonework the four faces of the tower, including e angle buttresses, require to be raked it and thoroughly repointed. The ping to the parapet is loose, the iron amps which were lead covered having rished, bursting the stonework and stening the decay. These should be placed with copper cramps, and the o top courses of the parapet partially built and reset with slate dowels.

"Certain timbers below the bell-frame e displaced, and it appears that some d decayed beams adjoining the main mbers carrying the bells are no longer rving any useful purpose and are liable infect the sound wood.

"The louvres fitted to the belfry win-ows some years ago protect to a large tent the timber framing to the bells, but e tracery of the windows on all sides, cept the south, is open, and being ex-osed to all weathers the wet must pene-ate to the detriment of the wooden ame and the bells themselves. While ppreciating the value of these openings r the exit of the sound, further protec-on seems desirable.

"I have not investigated the effect of e ringing of the bells on the spire; the ng appears to be well disposed, and ough the largest bell swings in the direc-on of the inclination of the spire, its ction is probably counteracted by the thers.

"The central tower is a fine example of e fourteenth century, and the large ire, probably of the same date, is unique r its size and eccentricities, and not nly does it form an interesting mediæval object to Chesterfield, but is a national heirloom, and demands every effort to be made for conservative preservation."

Some general particulars about the church may here be appropriately included.

Within the church is a wealth of original carved oak and other work of far greater interest to the archæologist than is the quaint steeple overhead.

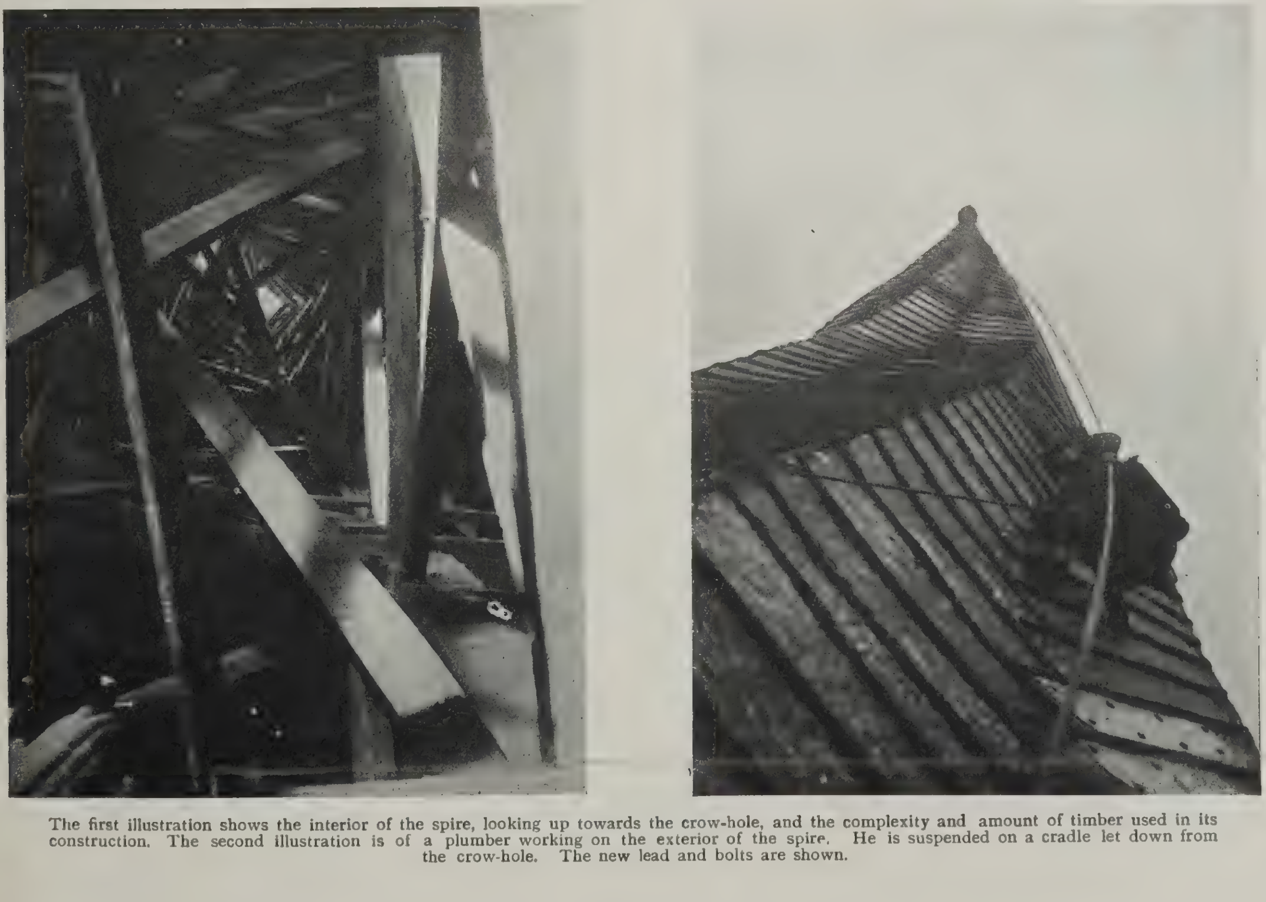
The early history of the parish church is extremely vague. Its records have all disappeared, and it is now only possible to trace its beginnings by reference to existing architectural features, or to historical mention elsewhere. From Saxon days it appears never to have been attached to any monastic body, but always to have been a parish church served by a vicar, chantry priests, and guild chaplains. Godfrey Foljambe, in 1595, endowed a "Lectureship" which is in the patronage of the Archbishop of York; it is usually held by the vicar, whose appointment is by the bishop of the diocese. The present incumbent, the Rev. Edmond Francis Crosse, is the lecturer and also the first Archdeacon of Chesterfield, being appointed thereto in October 1910, when the third archdeaconry of the diocese of Southwell was constituted. The registers date from the first year of Queen Elizabeth's reign, 1558.

The ground-plan in outline is that of a Latin cross, with a tower at the central crossing, a type favoured by the Norman builder. The south chapel has an apse which is polygonal, itself interesting, for it is the only one of the fourteenth-century type in the district. King William II (Rufus) presented the church (together with its several chapelries) to the Dean and Chapter of Lincoln Minster (1087–1100), and for several centuries the Deans of Lincoln were the rectors and patrons of the vicarage.

Of that edifice, erected in the Norman style, or perchance one of ruder Saxon work, only a few stones remain. During restoration they were found embedded in the walls rebuilt during the fourteenth century. Some with characteristic Norman sculpture were obtained from the east end, and when the plaster was removed from the nave walls it was seen that the fourteenth-century masons had worked in a quantity of large squared Romanesque stones from a much older church. A portion of the carved timber ridge-piece from the twelfth-century roof was also recovered, while coeval with these a stone coffin-lid now forms one of the tower newel steps. An ancient incised stone, high up in the internal south wall of the nave, and the time-worn Saxon font point to the more remote building. Further, a copy of an original charter (A.D. 1093–1094), still in the Lincoln chartulary, makes mention of a church at Chesterfield in the reign of King Edward the Confessor. The old shriving bell is still rung every Shrove Tuesday at 11 a.m., and the Angelus bell is tolled three times daily, morning, noon, and night.

That a church was here prior to the Norman Conquest is considered to be proved conclusively. At the least two earlier buildings must have occupied this site before the present one was fashioned. The oldest part extant was raised soon after the grant of King John's Charter (1204). Much work of that period remains; its thirteenth-century characteristics are apparent in the foundation and columns of the south transept, the arches, pillars, and grotesques of the north transept, and in the extensive corbel-table supporting the south parapet of the Foljambe Chapel.

The greater portion was rebuilt, or completed, at several intervals during the fourteenth century, in the successive reigns of the "Three Edwards," A.D. 1272.



The first illustration shows the interior of the spire, looking up towards the crow-hole, and the complexity and amount of timber used in its construction. The second illustration is of a plumber working on the exterior of the spire. He is suspended on a cradle let down from the crow-hole. The new lead and bolts are shown.

1377. Similar "intervals" were caused throughout the land by the dread visitations of the "Black Death" (1348).

During the Middle Ages the great church at Chesterfield was in effect a guild church, in addition to serving as a parochial one. We see this in the five altars—the chantry or guild chapels—situated at the eastern extremity of church, besides others of uncertain site. The guilds were particularly active in Chesterfield towards the close of the fourteenth century, contemporaneous with the erection of the church.

If a close inspection is made of the stonework within the church, it reveals the fact that two interruptions intervened whilst it was being erected by the fourteenth-century masons. There are three distinct and progressive types of their work noticeable in its details. The nave was the latest undertaken (*circa* 1360), its west façade being afterwards renewed in the sixteenth century "perpendicular" when bluff King Hal imperiously dominated this realm (A.D. 1509–1547). A perpendicular re-arrangement of the fifteenth century is also apparent in the chancel.

There is an early-fifteenth-century screen in the north transept, and one of similar perpendicular style, but which approximates to the early sixteenth century, in the south transept.

The Foljambe Chapel contains a collection of table tombs, brasses, and recumbent effigies of no mean order, all dating from the sixteenth century, A.D. 1510–1604.

The Foljambe family came from the Tideswell and Wormhill district, where one of them was an hereditary forester in the Conqueror's day; the present head o the family is the Earl of Liverpool.

Such is the church to-day, with its modern fittings and a few minor alterations, the most regrettable being the partial rebuilding of the north transept (1769), in what was vainly imagined to be Gothic architecture; still, it is an interesting early example of the return to Gothic ideas. In dimensions the greatest length of the church is 170 ft. 11 in., the breadth across the transept arms 109½ ft., and its spire rises to the height of 230 ft.

Funds are urgently needed to carry on the restoration work. Donations should be sent to Mr. H. Ryde, Newbold Road, Chesterfield. Cheques may also be paid in direct to the Chesterfield Parish Church Restoration Fund at the London County Westminster and Parr's Bank, Ltd., Chesterfield.

# New Furniture Workshop at Windermere

## KENNETH M. B. CROSS, M.A., Architect

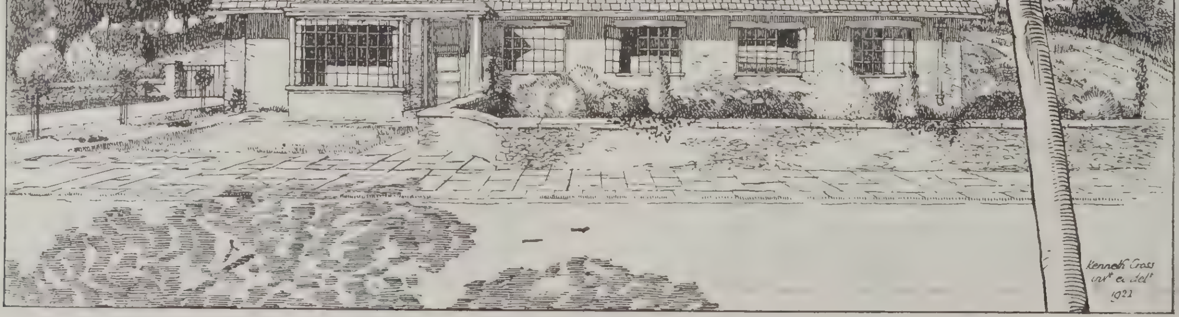
THIS building is now in course of erection from the designs of Mr. Kenneth M. B. Cross, M.A., of Messrs. A. W. S. Cross, F.R.I.B.A., and Kenneth M. B. Cross, M.A., architects. It is situated in New Road, between Windermere and Bowness, and consists of a woodworking shop with a small office and showroom adjoining. The latter overlooks a forecourt laid out with random paving surrounding a lawn, and provides a quiet, yet attractive, vantage ground, public, yet off the beaten track, from which to view the select pieces of hand-made furniture which the building owner, Mr. Stanley Davies, proposes to exhibit. A private roadway, destined ultimately to form a drive to a house at the farther end of the site, leads to a courtyard at the west side of the building. From this courtyard may be obtained a delightful view of the lake, but it is planned for the more practical purpose of providing for the egress of larger pieces of furniture and also to provide access to the various timber storage sheds destined to be grouped around it.

All the stone walling is of random rubble laid in mortar, and the external walls are 1 ft. 6 in. thick. The walling is quarried on the site, with the exception of the limestone quoins, which, owing to the difficulty of working the blue rag stone, are to be used at the corners. The chimney stacks (circular on plan with battered sides), the rough oak lintels over the window openings, the uneven texture of the external wall surfaces, and the long, low lines of the elevational treatment are an attempt to adhere to the old-established building tradition of the Lake District.

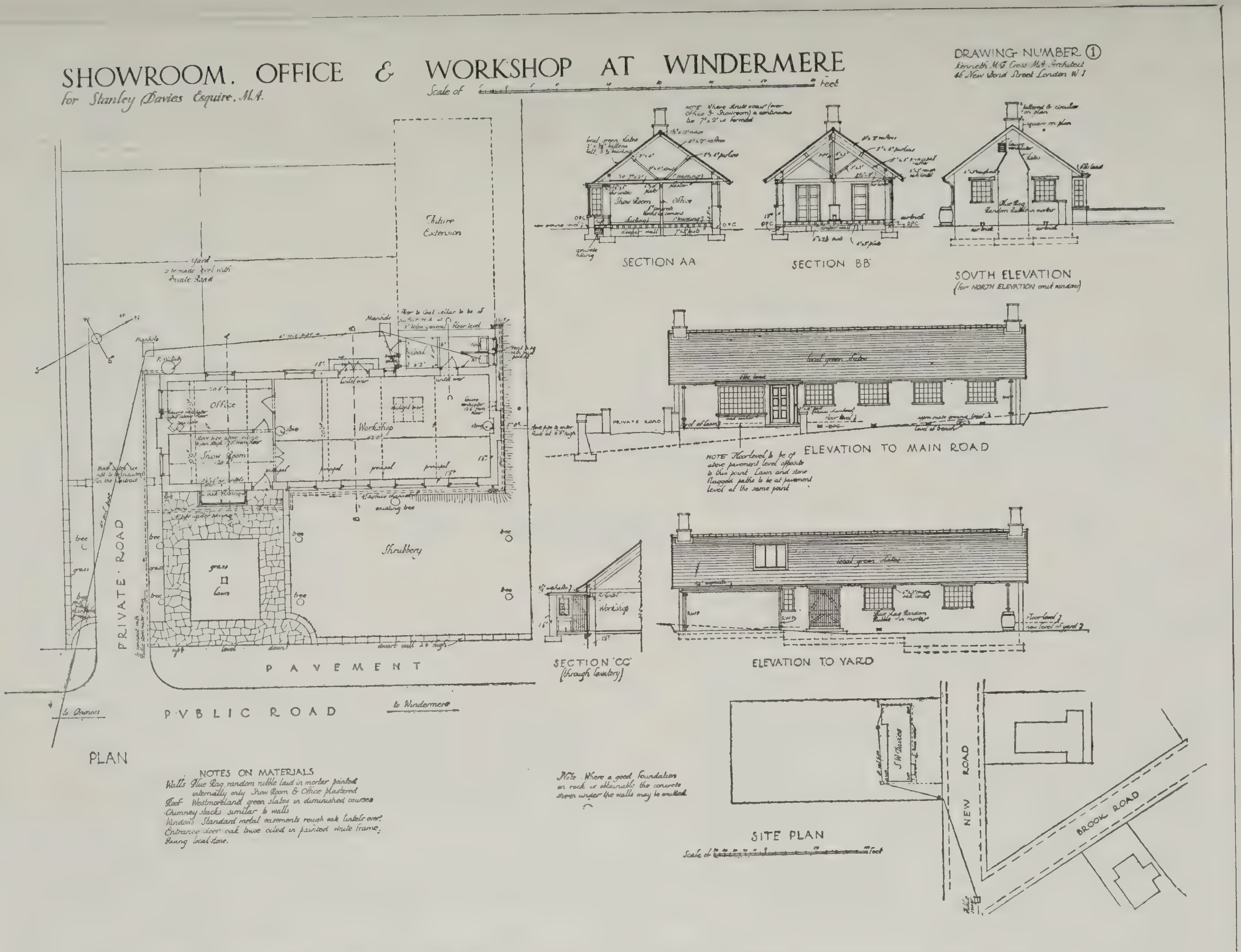
All the external woodwork, including the window frames, the porch, and the front door, is of oak; and metal casements and frames are being used. For the roof local green slates have been laid in diminishing courses over felting and boarding, as heavy rainfall is usual in the district. Internally the showroom and office have plastered walls and ceilings, a storage space being contrived in the roof above these rooms. The workshop has an open timber roof, and the walls are to be left rough and twice whitewashed. The fireplaces are to be formed with rough-hewn stone lintels, chimney breasts, and hearths.

It is the intention of Mr. Stanley Davies to use this workshop as a centre from which to demonstrate to the public that the craft of hand-made furniture following structural forms in design and relying for its æsthetic effect on the quality of its workmanship and on the nature of the materials with which it is made, is still worthy of support in an over-industrialized country.

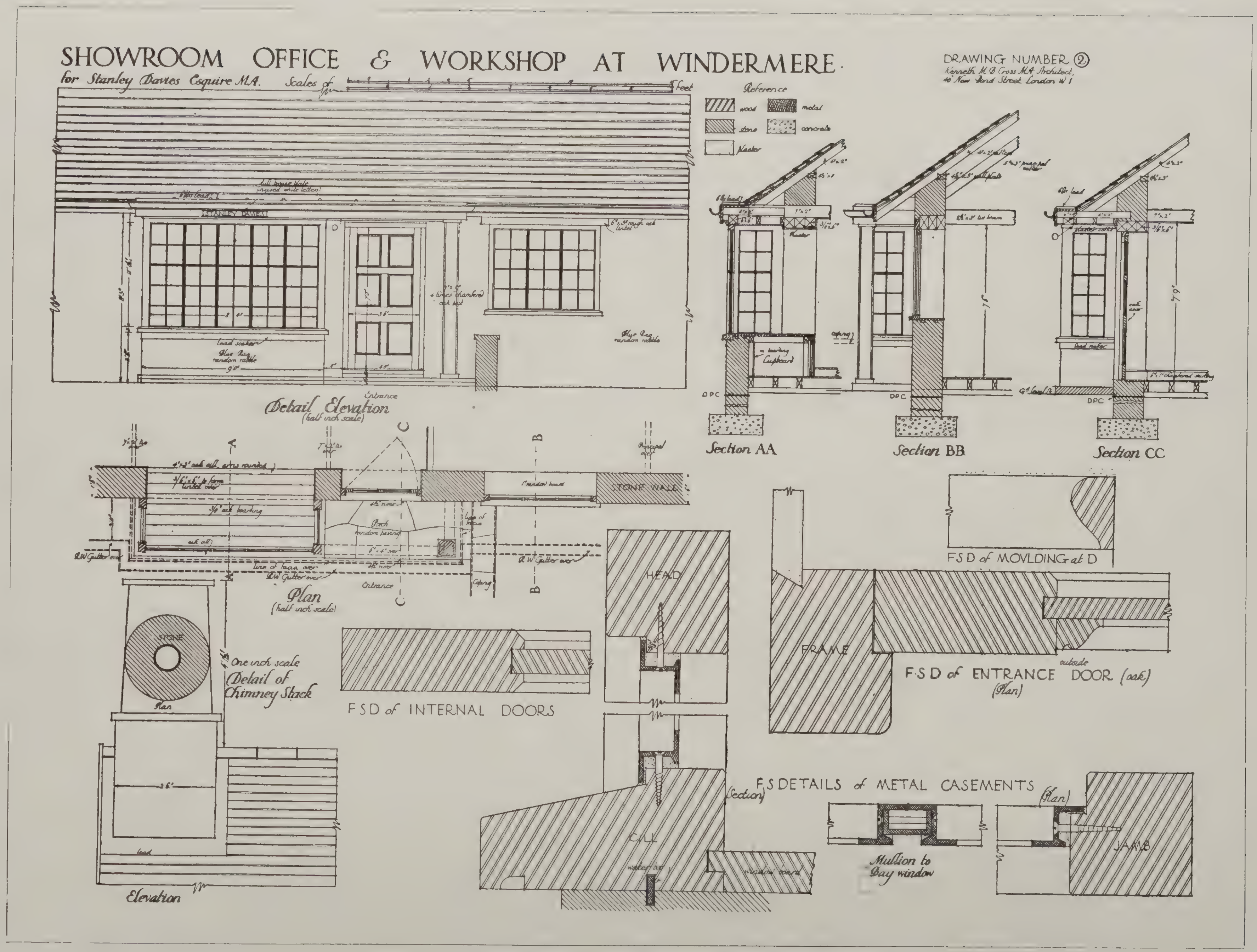
The general contractors are Messrs. J. Braithwaite and Son, of Windermere. Messrs. James N. Gibson and Son, of Windermere, are providing some of the joinery, and the metal casements and frames are supplied by Messrs. Crittall, Ltd.



THE NEW WORKSHOP.


SHOWROOM, OFFICE & WORKSHOP AT WINDERMERE
for Stanley Davies Esquire, M.A.
Scale of Feet
DRAWING NUMBER ①
Kenneth M.B. Cross M.A. Architect
46 New Bond Street London W 1
SECTION AA
SECTION BB
SOUTH ELEVATION
(for NORTH ELEVATION omit windows)
NOTE Where struts occur (over Office & Showroom) a continuous bar 7' x 2' is formed
Show Room
Office
ELEVATION TO MAIN ROAD
NOTE Floor level to be 9" above pavement level opposite to this point. Lawn and stone flagged paths to be at pavement level at the same point
local green slates
PRIVATE ROAD
ELEVATION TO YARD
SECTION 'CC' (through lavatory)
Workshop
Future Extension
Yard to be made level with Private Road
Office
Show Room
Workshop
Shrubbery
grass
Lawn
tree
PRIVATE · ROAD
PAVEMENT
PUBLIC ROAD
to Windermere
to Bowness
PLAN
NOTES ON MATERIALS
Walls Blue Rag random rubble laid in mortar pointed internally only Show Room & Office plastered
Roof Westmoreland green slates in diminished courses
Chimney stacks similar to walls
Windows Standard metal casements rough oak lintels over.
Entrance door oak twice oiled in painted white frame.
Paving local stone.
Note Where a good foundation on rock is obtainable the concrete shown under the walls may be omitted
SITE PLAN
Scale of Feet
NEW ROAD
BROOK ROAD
S W Davies

NEW FURNITURE WORKSHOP AT WINDERMERE: PLANS AND ELEVATIONS.
KENNETH M. B. CROSS, M.A., ARCHITECT.



DETAILS OF NEW FURNITURE WORKSHOP AT WINDERMERE.
KENNETH M. B. CROSS, M.A., ARCHITECT.

# The Acoustics of Buildings

## By W. H. THORPE

THOUGH much has been written lately upon this subject, it may not be unacceptable to give a summary of what information has been available during the last 200 years. It is not surprising to find that Sir Christopher Wren, who was well-informed on many matters, had his ideas on this subject, though rather in connection with the carrying power of the human voice within buildings, than with the effect of the building upon the voice. For churches Wren considered that a moderate voice might be heard 50 ft. in front of the preacher; 30 ft. on each side; and 20 ft. behind him, and says: "A Frenchman is heard further than an Englishman, because he raises his voice, and sinks not his last words." Evidently Wren had closely pondered over the question, and drew the conclusion that the best size for certain new churches to be built would be 60 ft. broad, by 90 ft. long, with a chancel at one end, though St. James's, Piccadilly, somewhat exceeds these dimensions. He very wisely adds: "To build more than that every person may conveniently hear and see is to create noise and confusion." This last passage strongly suggests that Wren was alive to the reverberations liable to occur in over-large buildings. Having regard to the avoidance in Wren's churches of large flat surfaces, his preference for forms of ceiling arched or slightly domed, and other features, it is probable that he had ideas other than those concerning size only. His methods generally were precise where, with the then existing state of knowledge they could be, but his judgment was well trained and excellent, and this on occasion he did not disdain to use for no better reason than that it could not be expressed as a formula.

For more than 100 years after Wren's death there does not seem to have been any pronouncement upon questions of building acoustics other than occasional appeals to precedent by writers on architectural subjects. About 1831 fresh interest seems to have been aroused by an inquiry into the acoustical qualities of the old House of Commons, and evidence was taken by a select committee of the House. The evidence shows that by this time the materials of the inner surface of a building were understood to have an important bearing on the matter, but no very definite conclusions were reached.

Later, in 1835, the old Houses having been destroyed by fire, a further inquiry was held relating to the new chambers. At this inquiry Dr. Reid, F.R.S.E., made statements which, perhaps, mark advanced thought on the subject at that date. He affirmed that for a debating chamber the shape should be "about square," the walls as low as practicable and arranged to avoid reflection from side to side, the seats rising from a central space, the roof to be low-pitched, rising from the sides at a flat angle (about 25 deg.) to a centre ridge line so that the direct voice should be strengthened by a single reflection from the roof, when it should be destroyed upon a sound-absorbing floor. He insisted that acoustic difficulties in public buildings were due less to want of power in the voice, than to the interruption of prolonged reverberations, and that the cubic contents of a chamber should be as small as possible. He appreciated the difference in the sound-absorbing qualities of different materials, but gave no values.

Prof. Tyndall, giving evidence much later in 1868, favoured the speedy extinction of reflected sound, noted the quenching effect of an audience, and affirmed that high ceilings caused the original sound to be confused by late following echoes. He considered clear definition in speech more important than loudness.

Herschell, in a profound treatise upon "Sound" in the "Encyclopædia Metropolitana" for 1849, had hardly touched the subject, but said truly: "In small buildings the velocity of sound is such that the dimensions of the building are traversed by the reflected sound in a time too small to admit of the echo being distinguished from the principal sound. In great ones, on the other hand, the echo is heard after the principal sound has ceased." He states, being in this curiously at variance with other investigators, that open windows, deep recesses, hangings or carpeting and a numerous audience are inimical to good hearing. Herschell seems, indeed, to have regarded the acoustics of buildings more particularly with regard to musical renderings, and considered absorption of sound an evil.

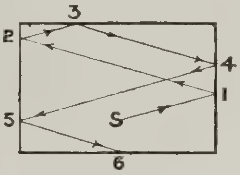


FIG. 1.

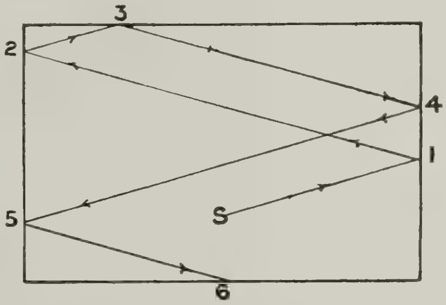


FIG. 2.

Diagrams showing that with increased size of building the distance travelled by a sound (S), and the time required to extinguish it, are proportionately greater.

Rodolphe Rodan, a Frenchman, writing some time before 1870, seems to have shared Herschell's objection to deep recesses as "strangling sound." He considered the chief defect of buildings to be an "excessive resonance" (i.e., continued reverberation). Writing of the deadening effect of some materials, he quotes the case of St. Paul's Church, Boston, where the preacher's voice is heard but once a year—on Christmas Day—when "it is decorated in such a way that the arches are less sonorous."

A paper read before the R.I.B.A. in 1860 by T. Roger Smith, architect, which was somewhat discursive in character, was bettered by the same authority in a little treatise published about 1872 upon "Acoustics in relation to Architecture and Building." In this book, indicating the kind of surfaces which absorb sound, he says: "The same surfaces which would most effectually destroy, and least reflect the motion of any solid body, such as a ball, propelled forcibly against them, will also most thoroughly absorb sound. . . ." This statement though not perhaps universally true, is broadly correct, and appears to be the first indication of any classification of sound-absorbing materials. He regards the information then available as being insufficient to enable an architect to forecast results with any precision, but useful as indicating what expedients to adopt in an endeavour to meet acoustical troubles. This book, though written fifty years since, is not yet out of date, is not at variance with what has later been ascertained, and may still be studied with advantage.

Lord Rayleigh's monumental work of 1,000 pages on "The Theory of Sound," published nearly fifty years since, contained much matter bearing indirectly upon the question, but its extremely mathematical character makes it a closed book to most. Indeed, an expert is needed to derive from it any conclusions useful to an architect. The following quotation, however, is much to the point: "In large spaces bounded by non-porous walls, roof, and floor, and with few windows, a prolonged resonance seems inevitable. The mitigating influence of thick carpets in such cases is well known. The application of similar material to the walls and to the roof, appears to offer the best chance of further improvement." This, and more than this, was well known, but left the practical application of the knowledge largely a matter of guesswork, and it was not till Prof. W. C. Sabine, of Harvard University, established certain fundamental principles, and by experiment determined the precise sound-absorbing values of various kinds of surface, that any definite calculation became possible of the time during which troublesome reverberation would persist, giving thus a means of forecasting or controlling results.

A sound produced in any hall will ultimately die out, to be no longer heard. That which destroys sound, as sound, is its absorption or transmission by wall and other surfaces under repeated blows of the sound wave. If the chamber is small, the number of blows necessary for extinction—a little of each blow—may be given in a short time, there being but a small distance to be travelled between blows. If, on the other hand, the building be large, but of similar form (see

Figs. 1 and 2), the total distance traversed for a sound wave to make the same number of blows will be proportionately greater, and reverberation may be objectionably long.

For strictly similar buildings the time during which reverberation may be heard will thus be proportional to the linear dimensions. Strict similarity must include similarity of surface materials, for material largely influences results. It is quite possible so to vary the materials that greatly divergent effects may be secured, so that no useful deductions may be drawn without strict knowledge of the sound-absorbing power of materials. Sabine, as a result of his studies, established a formula for the duration of reverberation for any case in which the necessary particulars were known, which is (corrected from metric to British units) :

$$\text{Time in secs.} = \frac{\cdot 050 \times \text{volume in cu. ft.}}{\text{Absorption power of surfaces.}}$$

the absorption power of surfaces being the area in sq. ft. of each particular variety, multiplied by the proper experimental value. This value is, for surfaces, always less than unity—unity being the absorption value of an open window.

Typical values are :—

| | |
|---|---|
| Open window .. .. .. | 1·000 |
| Glass, plaster on tile, brick .. | ·025 |
| Plaster on lath .. .. .. | ·033 |
| Wood-work (hard pine) .. .. | ·061 |
| Heavy rugs, curtains .. .. | ·250 |
| ½ in. hair-felt .. .. .. | ·470 |
| 1 in. hair-felt .. .. .. | ·750 |
| Audience (close, reckoned on floor area) .. .. .. .. | ·960 |
| Audience, at per person .. .. | 4·700 |

For instance, in a hall having 250,000 cu. ft. capacity, a floor of 5,000 sq. ft. with full audience, and walls and ceiling of plaster (mean value, say, ·030) of 20,000 sq. ft., there should be reverberation lasting :—

$$\frac{\cdot 050 \times 250{,}000}{5{,}000 \times \cdot 96 + 20\cdot 000 \times \cdot 030} = 2\cdot 31 \text{ secs.}$$

An informing series of articles upon the subject by Prof. Sabine may be found in "Engineering Record," 1900.

But reverberation is not the only effect which may by long continuance produce disagreeable effects of confusion. Echoes of marked character may occur in large buildings due to concentration or focusing of sound at particular points. Such concentrations (as in Fig. 3) are due to the geometrical form of roof (or of walls), and may easily be avoided in design. For small buildings having the same form distinct echoes are not noticeable, because though existent, they follow too close upon the originating sound to be distinguished.

The auditorium of the University of Illinois, not having justified its name, became the occasion of further inquiry by which finally the principles enunciated by Prof. Sabine were triumphantly vindicated, and much further information of value was secured. The investigation was carried out by Paul Sabine, and was further developed by F. R. Watson and I. M. White, for particulars of which the University of Illinois Bulletins Nos. 73, 87, and 127 may be consulted. It is to be noted that both the earlier and the later inquiries had their origin in the unsatisfactory character of buildings already constructed.

The Illinois auditorium, of 100 ft. diameter, when first built, was quite impossible acoustically, having pronounced echoes and a period of reverberation of six seconds when full. A careful study of echo effects was first undertaken, and measures adopted to eliminate these, and reduce the time of reverberation by the application of hair-felt to convenient surfaces. The ultimate result was a reverberation period of 1·9 secs., with no definite echoes, which, as the building was to be used for music as well as speaking, was considered satisfactory.

In connection with the question of time limit, in 1906 M. Marage submitted to the Academy of Sciences a paper giving a useful account of results obtained in six lecture theatres in Paris, varying in capacity from 2,200,000 cu. ft. to 22,600 cu. ft. The difference of duration for these chambers, full or empty, was very marked, being commonly twice as great for the empty condition. M. Marage's conclusion was that for good hearing of the speaking voice the "duration" should be between ·5 and 1·0 sec.

This, though somewhat less, is not at variance with Prof. Sabine's conclusions, he having indicated a period of from 1·0 to 1·5 secs. as suitable for buildings to be used both for speaking and for music, while approving a yet longer period for music alone, the ideal requirement for the two cases being somewhat dissimilar. The measurement of "duration" by M. Marage may not, however, have been strictly in conformity with that of Prof. Sabine.

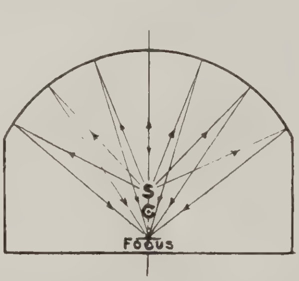


Fig. 3.—Illustrating the fault of concentration of sound (echo) at level of audience.

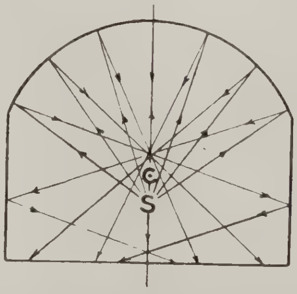


Fig. 4.—Showing dispersed reflection of sound (S) from arched ceiling having its centre of curvature (C) well *above* the speaker and audience.

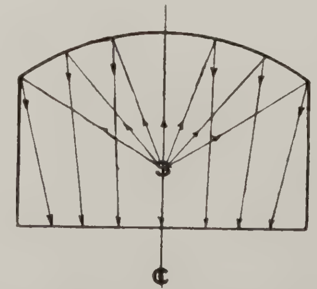


Fig. 5.—Showing dispersed reflection of sound (S) from arched ceiling having its centre of curvature (C) well *below* the speaker and audience.

The position with respect to the acoustics of buildings is now so far improved that it need no longer be a matter of grave doubt what the acoustic character of a building will prove to be, and further, cases which have hitherto been regarded as hopeless in this respect may be taken in hand with a reasonable prospect of improvement. The work carried out by Prof. Sabine, and those continuing his labours, leaves but little now to do, but there is one particular in which further investigation will be useful, that is, in determining the precise sound-absorbing values of different kinds of plaster surface, which may differ greatly for different varieties, according to porosity, weight, and rigidity, and may or may not be conformable to the plasters considered by Prof. Sabine. A standard method of determining "duration" should also be established.

The conclusions following, submitted by the present writer, may be of some service :—

For chambers not exceeding 25,000 cu. ft. capacity the walls and ceiling may be flat, and of any usual material without ill effects.

For chambers exceeding 25,000 cu. ft., but not exceeding 175,000, marble, heavy glass, and smooth hard plasters should be sparingly used, and the ceiling arched or deeply coved. Alternatively, with flat ceilings, a considerable area of the walls should be made sound-absorbing, to give, as the major limit of size is approached, a mean sound-absorbing value per sq. ft. of ·25, equivalent to the use of ¼ in. hair-felt on the whole wall surface. For a scant audience the floor should be mat covered in either case.

Chambers of more than 175,000 cu. ft. capacity may well be made the subject of special study, having regard to the precise data now available.

Any arched ceiling should have its centre of curvature well above or well below the level of the audience, or of the speaker, to avoid objectionable concentrations of sound (see Figs. 4 and 5). The useful effect of an arched ceiling so formed is that sounds reflected from it are thrown down, without serious concentrations, to be quickly damped out on the audience, whereas with a flat ceiling, and more of upper wall surface exposed, there will be continuing reflections, and in the case of large halls prolonged reverberation, rendering imperative the use of sound-absorbing material; great height is objectionable.

The application of these rules alone will, except as to the special case of very large halls, ensure that there shall be no serious disappointment in the acoustical character of any building.

The theory that reflecting surfaces by reinforcing the speaker's voice are to the hearer's advantage may be good so far as it goes, but it does not go far enough. Reflection in aid is followed by reflection producing confusion; volume is secured, but enunciation is blurred. There is more loss than gain. In no building of ordinary size does the voice need help; it is best left to reach the hearer direct, and die if it will.

In conclusion it may be said that Roger Smith's little treatise, and the work done by Prof. Sabine together give all that the practising architect needs in dealing with problems of acoustics.

# Reinforced Concrete Calculations for Beginners. VI

## By Professor HENRY ADAMS, M.Inst.C.E.

*(Continued from last issue, page 129.)*

IN ordinary reinforced concrete building construction the beams are continuous over intermediate supports. This gives a special bending moment diagram which includes negative bending moments over the supports, and over the ends also when they are securely fixed. When a beam under load bends hollow on the top, the upper layers are in compression, and the bending moments are positive, but when as in a loaded cantilever the bending is rounded on top the upper layers are in tension and the bending moments are negative. When a beam is fixed firmly at the ends it is in the same condition as if it were continuous over several supports, there will be negative bending moments at the ends and positive in the middle portion. This is more fully shown in Fig. 14, where a beam with fixed ends is shown continuous over two spans and the tendency to bend will be as indicated in Fig. 13. Where the curvature changes the points are known as "points of contraflexure," the thickened lines showing the parts in compression.

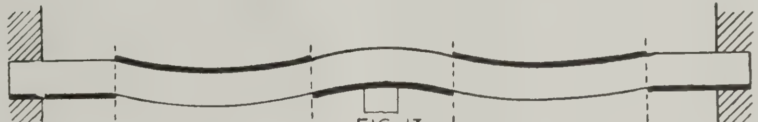


FIG 13

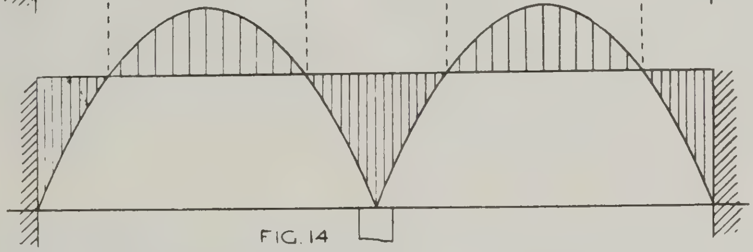


FIG. 14

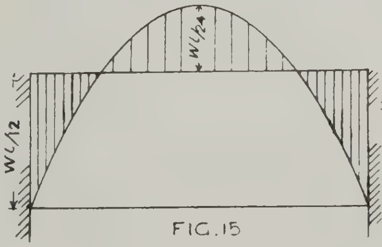


FIG. 15

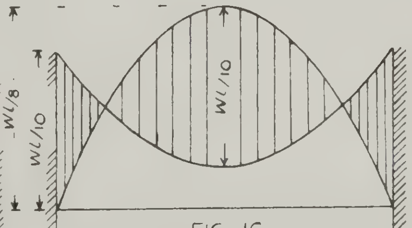


FIG. 16

A beam with properly fixed ends over a single span will be like one span of the continuous girder and the theoretical bending moments will be as in Fig. 15, but to provide against any deficiency in fixing the ends the present L.C.C. regulations specify the bending moments to be allowed for as in Fig. 16.

Taking the same loading as before, six tons on a span of 20 ft., with both ends fixed and four ¾ in. rods, but reducing the total depth to 18 in.,

then, $\frac{A_s}{A_c} = p = \frac{\cdot 4417 \times 4}{16\cdot 625 \times 12} = \cdot 00885,$

$m = 15,$

$$k = \sqrt{(p^2m^2 + 2.p.m.)} - p.m.$$
$$= \sqrt{(\cdot 00885^2 \times 15^2 + 2 \times \cdot 00885 \times 15)} - \cdot 00885 \times 15$$
$$= \sqrt{(\cdot 0000783 \times 225 + 2 \times 15 \times \cdot 00885)} - \cdot 00885 \times 15$$
$$= \sqrt{(\cdot 0176 + \cdot 2655)} - \cdot 1328 = \sqrt{\cdot 2831} - \cdot 1328 = \cdot 532 - \cdot 1328$$
$$= \cdot 3992.$$

The weight of beam will be 20 × 12 × 18 = 4,320 lb., the superimposed load six tons = 13,440 lb., and the total load 4,320 + 13,440 = 17,760 lb. The maximum bending moments by L.C.C. regulations

$$= \frac{WL}{10} = \frac{17760 \times 12 \times 20}{10} = 426{,}240 \text{ lb. in.}$$

The maximum tensile stress,

$$t = \frac{B}{p.b.d^2\,(1 - \frac{1}{3}k)}$$
$$= \frac{426{,}240}{\cdot 00885 \times 12 \times 16\cdot 625^2\,(1 - \frac{1}{3} \times \cdot 3992)}$$
$$= \frac{426{,}240}{\cdot 1062 \times 276\cdot 39 \times \cdot 867}$$
$$= \frac{426{,}240}{25\cdot 449} = 16{,}709 \text{ lb. sq. in.}$$

The maximum compressive stress,

$$c = \frac{2.B}{k.b.d^2\,(1 - \frac{1}{3}k)}$$
$$= \frac{2 \times 426{,}240}{\cdot 3992 \times 12 \times 276\cdot 39 \times \cdot 867}$$
$$= \frac{852{,}480}{1137\cdot 5} = 749 \text{ lb. sq. in.}$$

These figures are rather higher than they should be under the present regulations, but the difficulty may probably be overcome by making the beam ½ in. deeper.

We found before that we might have obtained an approximately correct section for a simple beam by making 95.*b*.*d*² equal to the bending moment, in a similar manner we can find the approximate section for a continuous beam by making 120.*b*.*d*² = bending moment. Say we have to provide for 426,240 lb. in., then 120.*b*.*d*² = 426,240, or with 12 in. width of beam the effective depth will be

$$\sqrt{\frac{426{,}240}{120 \times 12}} = \sqrt{296} = 17\cdot 2 \text{ in.}$$

We assumed an effective depth of 16·625, and found it was not sufficient, and suggested another ½ in., making it 17·125, showing that we should have been much nearer the proper size to start with if we had used the above rule to estimate it.

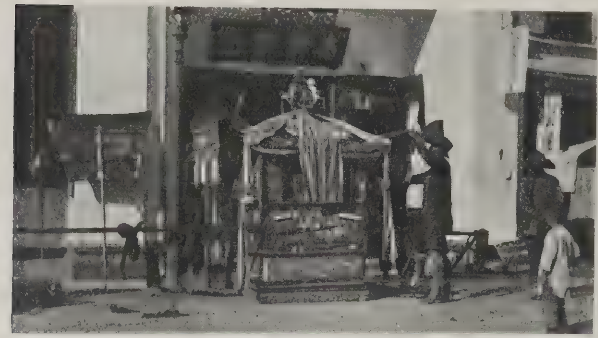
All the remarks made upon beams apply with equal force to floor slabs, 12 in. being taken as the width in the direction of the cross beams or secondary beams, and the calculations are identical with those shown above. If the end bays of slabs or beams are not "fixed" as firmly as if they were continuous, they must be calculated as if only supported at the ends, but top reinforcement must be provided at the inner ends as for continuous beams.

*(To be continued.)*

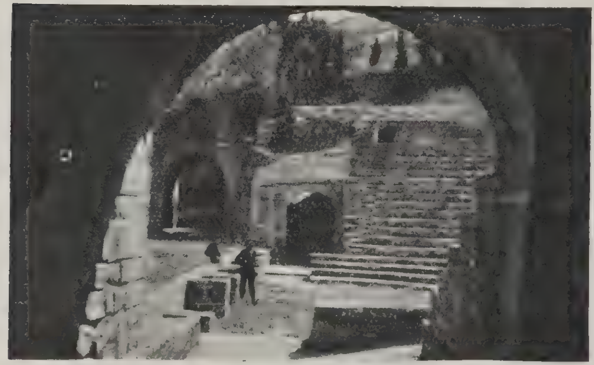
# A Pictorial Review

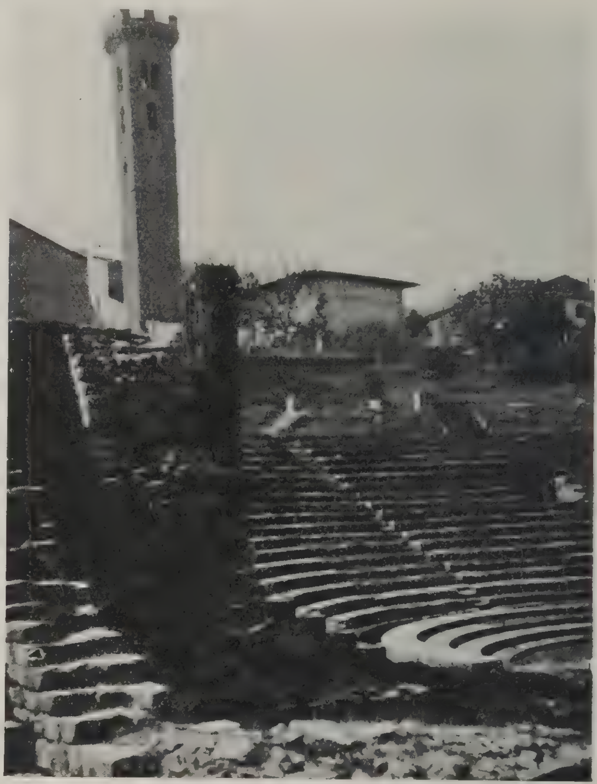
## Illustrations of Topical, Practical, or Curious Interest

*Readers are invited to send in sketches and photographs for publication in these pages. A fee of 2s. 6d. will be paid for each illustration accepted. Contributions should be accompanied by short explanatory notes.*

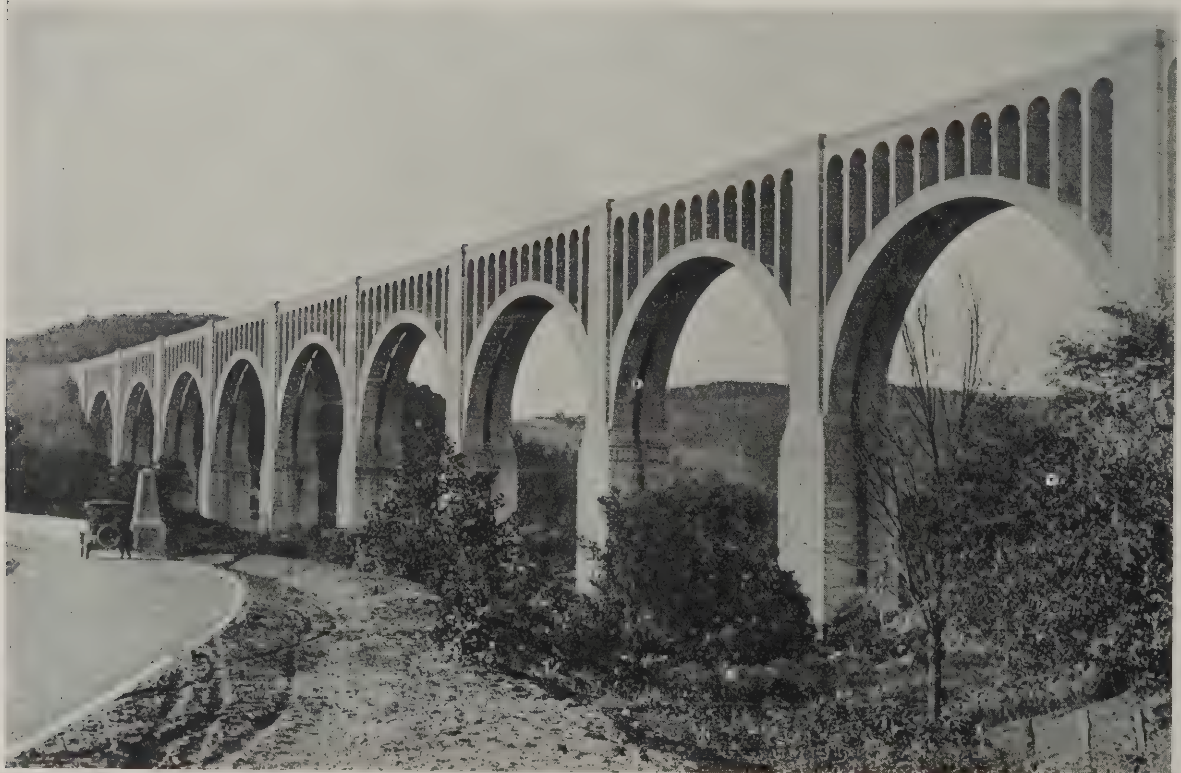


This street scene in Singapore reveals the picturesque in one or two utilitarian objects. The intricate ornament and admirable composition of the funeral bier, the Chinese signs, and even the Western lamp-post, are all works of art common to the Eastern street.—F. C.

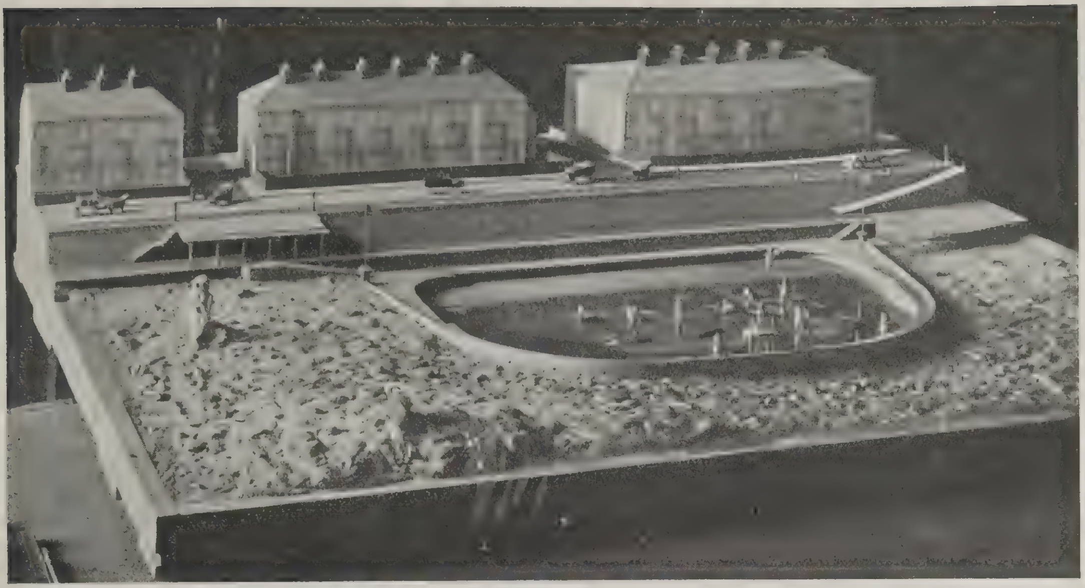




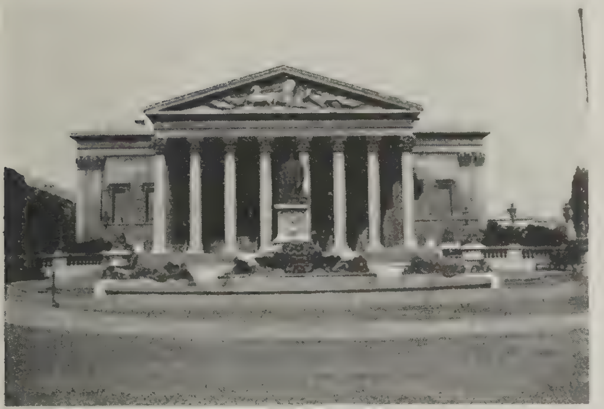
These two views of a Roman theatre at Fiesole are specially interesting in view of the articles appearing in THE JOURNAL on Architectural Acoustics. Plays are still produced in the theatre, and the acoustics are excellent—R E.E.



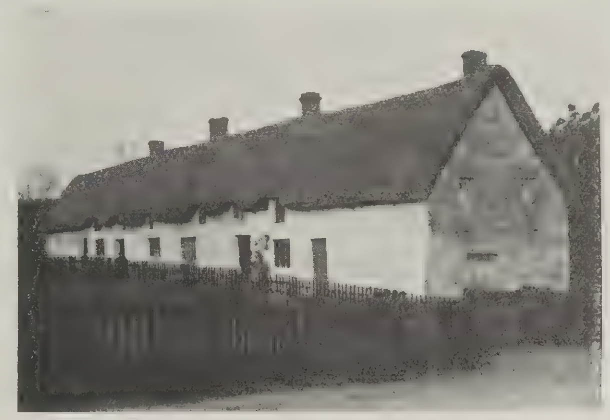
The Nickolson Viaduct, Pennsylvania, is the largest concrete viaduct in the world, and the foundations go down in the stream 90 ft. and 75 ft. on dry land. It is on the Lackawana Railway, and its construction shortened the line by thirty-eight miles. The old track now used for an automobile road, can be seen on the left of the picture.—R.



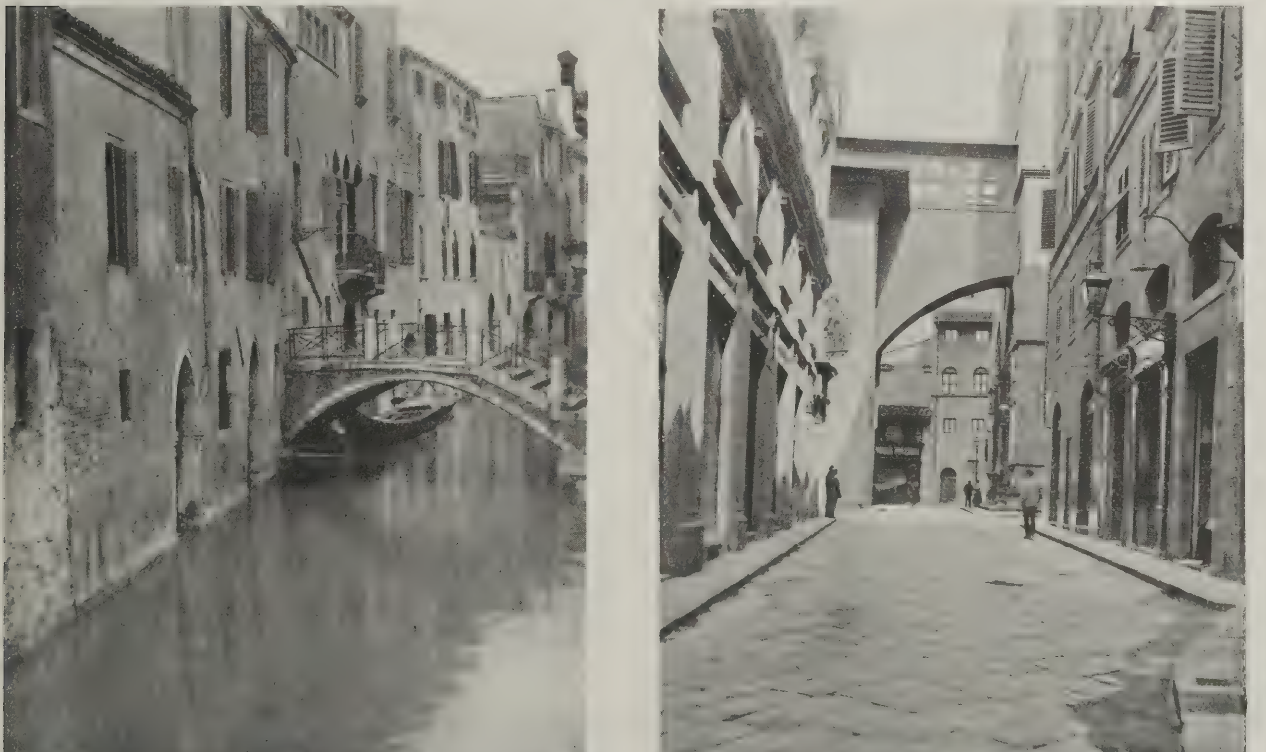
This model shows the general lay-out of the open-air bathing pool, one of the schemes to be begun shortly by the Hartlepool Corporation for the relief of the unemployed. The promenade and the new concrete road in the background are rapidly nearing completion.—E. E. O.



According to Latimer (the Bristol historian) the foundation stone of this building, the Victoria Rooms, Bristol, was laid on May 24 (Queen Victoria's birthday), 1838, and opened May 24, 1842. It cost approximately £23,000. The architect was Charles Dyer, and his name is cut in the frieze over the left-hand column.—H.



Ancient mud cottages at Naseby in Northants. Until about 1850 nearly all the smaller houses and farm buildings in this town were built of a mixture of mud and straw. The walls of the cottages are some two feet thick.—J. B. T.



These two snapshots show (left) a view on one of the smaller canals in Venice and (right) a street in Florence. The bridge in the former shows the characteristic Venetian curve. The bridge in the background of the Florence street, with its "half arch" treatment, is common in many Italian towns, and suggests the double purpose of flying buttress and means of communication.—J. V. D.

# R.I.B.A. Final Examinations

## Alternative Problems in Design

*Instructions to Candidates.*

1. The drawings, which should preferably be on uniform sheets of paper of not less than Imperial size, must be sent to the Secretary of the Board of Architectural Education, R.I.B.A., 9 Conduit Street, W., on or before the dates specified below.

2. Each set of drawings must be signed by the author, and his full name and address, and the name of the school, if any, in which the drawings have been prepared, must be attached thereto.

3. All designs, whether done in a school or not, must be accompanied by a declaration from the student that the design is his own work and that the drawings have been wholly executed by him. In the preparation of the design the student may profit by advice.

4. Drawings for subjects (*a*) are to have the shadows projected at an angle of 45 deg. in line, monochrome, or colour. Drawings in subjects (*b*) are to be finished as working drawings. Lettering on all drawings must be of a clear, scholarly, and unaffected character.

*Subject LXVII.*

(*a*) A COVERED WAY BETWEEN TWO GOVERNMENT BUILDINGS.—This covered way connects the first floors of two Government office buildings and spans a semi-private roadway which separates these buildings.

Its face would be set back 15–20 ft. from the line of the main façades of these buildings which are of the same architectural character. The covered way will provide a corridor with an internal width of 8 ft.

The distance between buildings is 50 ft. A pavement for foot passengers must be left on each side of the roadway.

The height from pavement to first-floor level of the buildings is 18 ft.

*Drawings :* ¼-in. scale. Half-plan at corridor level. Half-plan at ground-floor level. Elevation and cross section.

(*b*) Working drawings including ½-in. scale section and elevation of any previously approved design; the approved design to be submitted together with the new working drawings.

*Subject LXVIII.*

(*a*) Design for a SEASIDE HOUSE WITH GARAGE.—The area of land to be covered by buildings not to exceed 1,500 feet super. The accommodation to be provided on two floors.

*Drawings :* Two plans, four elevations, and one section to ⅛-in. scale.

(*b*) Working drawings, including ½-in. scale section and elevation of any previously approved design; the approved design to be submitted together with the new working drawings.

*Subject LXIX.*

(*a*) DESIGN FOR A SCHOOL LIBRARY.—The library is to be a double cube, measuring 55 ft. by 27 ft. 6 in. by 27 ft. 6 in. It is connected to the other school buildings by a covered way or cloister. One entrance will be from the cloister, and another from the playing fields. The arrangements of the book-cases are to be shown. A gallery, with convenient access thereto, is to run right round the room.

*Drawings :* Two plans, two elevations, and two sections to ⅛-in. scale.

(*b*) Working drawings to ½-in. scale of design Subject No. LXVII (*a*) (A Covered Way between two Government Buildings), if this design has been approved. The design to be submitted together with the new working drawings.

*Subject LXX.*

(*a*) AN ARCHITECTURAL TREATMENT AT THE HEAD OF A LAKE.—A large piece of ornamental water forming a lake, such as the Serpentine in Hyde Park, is supplied with water from a source situated at one end of the lake.

It is desired to treat a portion of the ground adjoining the lake's edge in a decorative manner, to include some feature symbolizing the supply of water to the lake.

The area available is 100 ft. by 200 ft., 200 ft. being the frontage to the lake.

*Drawings :* Plan at $\frac{1}{32}$-in. Main architectural features at ⅛-in. Details at ½ in.

(*b*) Working drawings of Design No. LXVIII (*a*) (Seaside House), provided that the design has been approved.

The drawings submitted under (*a*) to be submitted together with a new ground-floor plan showing drains, one section and one elevation all to ½-in. scale.

*Subject LXXI.*

*a*) A CEMETERY CHAPEL to seat sixty people.

Provide for ample porch, easy access for carriages, small vestries, and bell.

*Drawings :* ⅛-in. scale. Ground plan, east, west and south elevations, longitudinal and cross sections.

(*b*) Working drawings of Design Subject No. LXIX (A School Library). The design for the school library may, after it has been approved, be re-submitted with the addition of one ½-in. scale elevation and two ½-in. scales finished as working drawings.

The section to show the book-case fittings.

*Subject LXXII.*

(*a*) TEA HOUSE IN A PUBLIC PARK, consisting of a tea-room with open loggia on three or four sides, kitchen, offices, and retiring rooms for both sexes. The tea-room and loggia together accommodate 250 people at small tables.

The arrangement of the kitchen equipment is to be shown on the plan. Only light refreshments are to be served. Gas, water and electricity are laid on. Provision should be made for the washing and storage of crockery, glass, etc.

*Drawings :* ⅛-in. scale. Ground plan, roof plan, one elevation, one section.

(*b*) Working drawings for Design No. LXX (*a*) (An Architectural Treatment at the Head of a Lake), provided the design has been approved. The working drawings are to be to ½-in. scale, and are to be submitted together with the approved design.

*Dates for Submission of Designs in* 1923.

Subject LXVII, February 28.
Subject LXVIII, April 30.
Subject LXIX, June 30.
Subject LXX, August 31.
Subject LXXI, October 31.
Subject LXXII, December 31.

# Societies and Institutions

*R.I.B.A. New Members.*

At a general meeting of the Royal Institute of British Architects held last week, the following members were elected :—

As Fellows.—W. M. Epps, J. L. Fouracre, D. L. Solomon, B.Sc.Lond., C. W. W. Thompson, and T. Walker.

As Associates.—W. A. Devereux, A. S. Dunn, I. A. Moodie, and G. B. Scotland.

The Special War Examination of the Royal Institute of British Architects was recently held in London, Liverpool, and Leeds. Of the 197 candidates admitted, forty-one passed, and 156 failed to satisfy the examiners. The names of the successful candidates are as follows :—

F. J. Barton, F. E. Bennett, K. E. Black, R. Blain, S. V. Bradford, D. L. Bridgwater, R. W. Briggs, C. Button, H. S. Clark, H. A. Clist, A. Crombie, W. J. T. Godwin, W. L. Haile, F. Higginson, G. G. Howard, S. G. W. Hunt, I. R. Jones, W. King, C. J. W. Lindley, J. S. McKay, F. W. Marshall, C. E. Mee, H. C. Morton, A. J. Norcliffe, J. P. Nunn, N. R. Paxton, A. R. D. Pictor, F. K. Pope, T. R. Radford, C. H. Roberts, H. G. Simms, S. Simpson, I. G. Smith, J. E. Sterrett, T. Stott, E. J. Symcox, B. G. Warr, E. B. Webber, J. C. Williams, W. S. Wort, H. T. Wright.

*The Society of Architects' Annual Report.*

The thirty-eighth annual report of the Council of the Society of Architects tends to show that the forecast made last year of further progress and development was justified and that the Society was never in a stronger position than it is at present. This is particularly noticeable in regard to its finances. During a session of ten months some sixty-eight Ordinary, Council and Standing Committee meetings have been held as well as those of many Sub-Committees. In addition the Society's delegates have taken an active part in the deliberations of the various Joint Committees and conferences convened by the kindred institutions on which the Society is represented. The Society is represented on the following institutions and committees : R.I.B.A. Unification and Registration Committee; R.I.B.A. Board of Education; R.I.B.A. Conditions of Contract Conference and Drafting Committee; R.I.B.A. Building Code Committee; R.I.B.A. Competitions Sub-Committee; R.I.B.A. Joint Committee on Civic Surveys; R.I.B.A. Sub-Committee on Professional Charges; R.I.B.A. R.E. Headquarter's Mess Committee; R.I.B.A. Sir Christopher Wren Bicentenary Committee; Architects' Benevolent Society Council; Building Trades Parliament; Assistants' Welfare Committee; Architects' and Surveyors' Approved Society; Professional Classes' Aid Council; Beaux Arts Committee; Royal Academy Ateliers' Council; British Engineering Standards Association Committee on Sand Lime Bricks; Architects' Welcome Club, Olympia; Demarcation Conference (Plumbers and Heating Operatives).

The Council at its first meeting in November 1921 appointed the following Standing Committees and Boards: Art and Literature, Examination, Finance, Practice, General Purposes, Board of Examiners and Board of Professional Defence, whose reports are included in the report of the Council. It is stated that "The loyal support which the Council receives from the general body of members of the Society, gives it that sense of confidence which enables it to decide and act promptly in what it conceives to be the best interests of the members and of the profession in any matters which it is called upon to deal with."

### *Royal Institute of the Architects of Ireland.*

At the annual general meeting of the Royal Institute of the Architects of Ireland, held in Dublin, the president declared the election of Mr. G. P. Sheridan as president of the Institute for the coming three years.

The new Council is as follows: Messrs. H. Allberry, J. H. Webb, F. G. Hicks, F. Hayes, T. J. Byrne, R. M. Butler, R. H. Byrne, A. G. C. Millar, and J. J. Robinson. Mr. Sheridan has been a member of the Institute since 1896, and has been for many years a member of the Council, filling the office of treasurer during the years 1919-21.

### *The Grand Manner in Architecture.*

A lecture on "The Grand Manner in Architecture" was given by Professor T. Harold Hughes to the Glasgow Institute of Architects in the Engineers' Institute, Elmbank Crescent, Glasgow, last week. Mr. James Lochhead, president of the Institute, presided. Professor Hughes defined "The Grand Manner" as a building or group of buildings with the setting and relation to site and other buildings conveying the sense of an architectural scheme nobly conceived as a whole, and in which the accessory parts and details are subordinate to one fine idea.

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# Architect and Engineer

## The Need for Collaboration

THE provinces of the architect and engineer touch at so many points that it is very desirable that there should be sympathetic collaboration between them. Let us consider a few instances.

In the past, towns, especially in this country, were usually laid out in the most haphazard fashion and, generally, the interests of the landlord and tenant were allowed to take precedence of those of the community. To-day the planning of new towns and the alterations to the old ones are considered more and more in their relationship to the advantages of the town as a whole; in short, the interests of the siteholder are regarded as subsidiary to the general welfare.

The picturesque appearance and the amenities of a town depend, of course, in the first place, on the ground contours and on the system of streets and roads, and the street system is the framework of the whole plan. The engineer always endeavours, *ceteris paribus*, to construct straight roads with easy gradients—it is an instinct with him—but the amenities of a town may not always be best served by this simple and straightforward method.

The electricity, gas, water, and sewage systems all fall within the province of the engineer; and the most economical layout of mains to meet the present and probable future requirements of the town must be left to him.

Where the collecting reservoirs or other sources of water supply are at such a level or pressure that pumping must be resorted to, with all the outlay in machinery, waterworks buildings, and power which it entails, collaboration between architect and engineer, when the town is being planned, may effect a diminution in initial outlay on pumping plant and buildings and a reduction in pumping costs later, which will be reflected in a lower water rate. Again, where a town is built on the top or on the side of a steep hill, and it is necessary to construct a water-tower at the summit to provide the necessary pressure-head and reservoir of water for the higher levels, this tower is such a prominent feature in the landscape and can make or mar the appearance of the town, that, although an engineering expedient, it ought, for æsthetic reasons, to be designed by an architect and not an engineer.

While electric power stations, gas, water, and sewage works all fall to the lot of the engineer, nevertheless, the architect has a right to expect that he shall be consulted when the choice of locations for these public works is under consideration. How many towns in this country are disfigured unnecessarily by carelessness and indifference in this respect?

Moreover, the architect should be consulted in regard to the allocation of sites for all factories within the area of the town plan, as well as for the buildings composing the factories, so that the amenities of the district need not suffer.

It is obvious that the sewage and drainage system is so closely related to the contours, gradients, and street system of the town plan, that economic sewage disposal necessitates close collaboration between architect and engineer.

Bridges or aqueducts, whether of stone, brick, reinforced concrete or steel, clearly belong to the province of the engineer, but the decorative treatment of the approaches, roads, and parapets, ought, without exception, to be left to the architect.

Indeed, we should like to think that in future the architect's advice will be generally sought in regard to the treatment of the whole of the exterior surfaces of all bridges in towns, and that he will also have an opportunity of expressing his opinion when the locations of these bridges are being considered.

Where the bridges are viaducts, and hence form definite links in road and street system, this should present no difficulty, but when the bridges carry railways and canals, it is desirable in the interests of the town that the engineer and architect should confer.

A river (and in some cases a canal) flowing through a town usually provides one of the greatest opportunities for decorative landscape treatment in respect of the embankments and boulevards, which can be laid out along its sides. And, if for no other reason, the railway tracks in a town should not run by the sides of rivers.

When the town plan is being prepared, it is desirable to allocate the sites for electric power stations, gas, water, and sewage works, and to indicate the routes for railway tracks. For the capital sunk in these undertakings is so considerable that if they have been laid down haphazard at the beginning, it is very difficult, owing to the great cost involved, to obtain powers to have them removed to more suitable locations at a later date.

There are many materials employed by both engineers and architects; we may instance: varieties of building stones, timbers, cast-iron columns, rolled steel joists, concrete, and reinforced concrete, etc., etc. Scientific research and testing of these materials are carried on constantly for the purpose of preparing specifications suitable for the most general practical applications.

The British Engineering Standards Association carries out work of this kind on some of these materials, and it is certain that an enormous amount of scientific research remains to be done, especially on building stones and timbers.

And there seems to be no good reason why architects and engineers should not combine in this work for their mutual benefit and to prevent overlapping and waste of labour and expense in research. The architectural and engineering institutions could do very much to bring about a closer working union between these two professions. By means of joint meetings at which papers are read by architects and engineers it should be possible to show that in the interests of the community at large a fresh demarcation of work, combined with closer collaboration, is necessary to provide full opportunities for town planning.

T. W. MACALPINE.

## List of Competitions Open

| Date of Delivery. | COMPETITION. |
|---|---|
| Feb. 1 | War Memorial to be erected in the Public Park, Brechin, adjacent to the Gleneadam Railway Bridge. Cost not to exceed £1,200. Apply Mr. F. A. Ferguson, Town Clerk, Brechin. |
| Feb. 28 | Scheme for the distribution of drinking water for the town of Mantes-sur-Seine. Apply Mairie, Mantes, or at the offices of La Renaissance des Cités, 23 Rue Louis le Grand (11c). Premiums: 4,000, 3,000, and 2,000 francs. |
| March 31 | War Memorial for Port Said, Egypt, to the memory of the soldiers of the Australian and New Zealand Forces who fell in Egypt, Palestine, and Syria during 1916, 1917, and 1918. Premiums: 250 guineas, 100 guineas, and 50 guineas. Apply High Commissioner for Australia, Australia House, Strand, W.C. |
| March 31 | War Memorial in Crow Nest Park, Dewsbury. Assessor, Professor C. H. Reilly, O.B.E., M.A., F.R.I.B.A. A copy of the conditions together with plans of the site may be obtained on application to Mr. H. Dearden, A.R.I.B.A., Borough Surveyor, Town Hall, Dewsbury, on payment of one shilling. |
| No date | New Town Hall for Cork. Limited to Architects living or practising in Ireland. |

## Competition News

*Bournemouth Pavilion Competition.*

The President of the R.I.B.A. has nominated Sir Edwin Cooper, F.R.I.B.A., as assessor in this competition.

*Tunbridge Wells Pavilion Competition.*

The President of the R.I.B.A. has nominated Mr. E. Guy Dawber, F.S.A., F.R.I.B.A., as assessor in the above competition.

*Castleford Cottage Hospital Competition.*

Members of the Society of Architects are requested not to take part in the Castleford Cottage Hospital Competition without first ascertaining that the conditions have been approved by the Council of the Society.

## Builders' Hours and Wages

The building operatives under an agreement of last May have been receiving 1s. 8d. an hour for a forty-four-hour week. As the agreement expires in March the National Wages and Conditions Council met last week to consider the question of a revision. Nearly 800,000 men are affected.

Prior to this meeting the Joint Industrial Council for the Building Trades, which comprises a large number of employers' and workers' representatives from all parts of the country, met at the Ministry of Labour to consider questions affecting the industry generally. Decision on the hours question was reserved for the conference of the Wages and Conditions Council, which sat in London later.

The agreed official report was as follows:—"Upon the invitation of the National Wages and Conditions Council for the building industry, a meeting of the executives of the various organizations affiliated to the council was held to-day under the chairmanship of Mr. S. Easten, at Montagu House, Whitehall, for the purpose of securing a better understanding of the position by those whose province it is to secure the application of the council's awards, as to which difficulties have been experienced from time to time.

"As this was the first meeting of the kind since the Wages and Conditions Council was established, some review of its work took place, and some of the difficult questions about to be considered by the council were referred to. Eventually a vote of confidence in the council was carried unanimously, and the meeting adjourned."

The National Wages and Conditions Council for the building industry met for the consideration of the proposals, and upon adjourning it was stated by the representatives of the operatives that a "serious situation" had arisen. Matters, it was added, had reached a deadlock, and the conference had broken down.

## Lancs and Yorks Railway Company's Memorial

This war memorial is placed in the booking hall at Victoria Station, Manchester. It is 30 ft. long and 5 ft. high, and is executed, in high relief, of cast bronze, weighing over two tons. The general conception of this tablet was due to Mr. Henry Shelmerdine, who was at the time architect to the Lancashire and Yorkshire Railway, and the design and execution of the work was placed in the hands of Messrs. George Wragge, Ltd., of Salford, in whose works many ex-service men assisted in its production. The tablets, of which there are seven, contain the names of 1,470 men who gave their lives in the Great War, each tablet being framed in enriched laurel borders, and over each one the arms of the principal towns of the Lancashire and Yorkshire Railway service—Liverpool, Bolton, Preston, Halifax, Huddersfield, and Bradford. A base of green marble completes the memorial. At each end of the tablets are finely modelled figures depicting St. Michael and St. George, each framed with pilasters, on which are the torches of Unity, Courage, Sacrifice, and Strength.

## Coming Events

*Wednesday, January 17.*

Northern Architectural Association.—"The Rise and Fall of English House Design." By Mr. Nathaniel Lloyd.

Royal Society of Arts.—"Hygienic Methods in Painting—the Damp Rubbing Down Process." By Mr. C. A. Klein.

Royal Academy.—"Architecture and Decoration." By Sir Reginald Blomfield, R.A. 3.30.

*Thursday, January 18.*

Edinburgh Architectural Association.—"The Work of the Mediæval Builder." By Professor G. Baldwin Brown, M.A.

Birmingham University.—Lecture on "Town-planning." By Mr. H. H. Humphries, M.Inst.C.E.

Institute of Structural Engineers.—Finance and General Purposes Committee. 5.30.

*Friday, January 19.*

Art Workers' Guild.—"Pastels."

Institute of Mechanical Engineers.—Symposium of Papers on "Indicators."

*Monday, January 22.*

R.I.B.A.—"The London County Hall." By Messrs. Ralph Knott and W. E. Riley. Award of Prizes and Studentships.

Institute of Structural Engineers.—Membership Committee.

Institute of Mechanical Engineers.—Graduates' Section. Informal Discussion: "The Value of College Training to Engineers."

Stillness Road Commercial Evening Institute.—Lecture on "Salesmanship." By Captain Oliver A. Minns.

*Tuesday, January 23.*

Liverpool Architectural Society.—"Some Notes on the Details of Theatre Construction." By Mr. T. R. Milburn, F.R.I.B.A.

The following other lectures will be given in the Royal Academy Galleries on Wednesdays, at 3.30:—

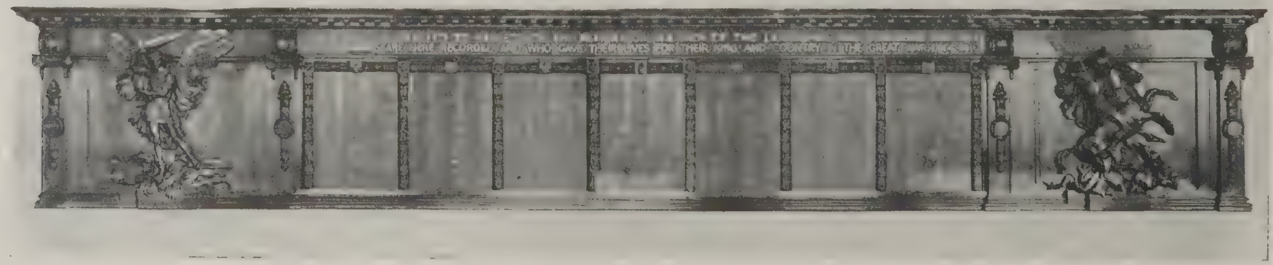
January 24.—"Decorative Painting," Mr. George Clausen, R.A. Chairman, Mr. Charles Sims, R.A.

January 31.—"The Rise, Aims, and Early Days of the Arts and Crafts Movement," Mr. Selwyn Image. Chairman, Mr. Sydney C. Cockerell.

February 7.—"The Influence of the Arts and Crafts Movement on Architecture," Mr. A. R. Powys. Chairman, Mr. Emery Walker.

February 14.—"The Crafts and Life," Lord Ferrers. Chairman, Mr. R. Anning Bell, R.A.

February 21.—"The Everyday Crafts," Mr. Henry Wilson. Chairman, Mr. W. R. Lethaby.



WAR MEMORIAL TABLET AT VICTORIA STATION, MANCHESTER.

# The Week's News

### *New Bells for Eastrington Church.*

A peal of bells is being installed in Eastrington Church.

### *Howden and a Smallpox Hospital.*

Howden Rural District Council are onsidering the question of providing a mallpox hospital.

### *Resignation of North Riding Architect.*

Mr. W. H. Brierlay, F.R.I.B.A., F.S.I., of York, has tendered his resignation as county architect to the North Riding County Council.

### *The late Colonel J. B. Wilson.*

The death has taken place in Glasgow of Colonel J. B. Wilson, architect. He had been for very many years connected with the 3rd Lanark Volunteers, afterwards 7th Battn. Scottish Rifles.

### *Mansion as Hospital.*

Lord Tredegar has given to the King Edward VII Welsh National Memorial Association a country mansion known as Cefr Mably, situate between Newport and Cardiff, to be used as a hospital for tubercular patients. The cost of conversion is estimated at £41,000.

### *New Partnership.*

Mr. H. Austen Hall, F.R.I.B.A., has entered into a partnership with Mr. T. B. Whinney, F.R.I.B.A. The name of the firm will be Whinney, Son, and Austen Hall, and the practice will be carried on from 8 Old Jewry, E.C., and 6 New Burlington Street, W.1.

### *Grosvenor Galleries.*

Early in February the following exhibitions will be opened at the Grosvenor Galleries: Landscapes by Sir John Lavery, R.A.; Still Life and other Pictures by E. Q. Henriques; London and other Landscapes by H. J. Gunn; Portrait Drawings and Landscapes by William Rothenstein.

### *Roman Remains at Bath.*

The Bath City Council have decided to demolish the derelict buildings at the east end of the Roman Baths and excavate the site, with a view to opening up any Roman remains found. It is known that part of the original Roman Thermæ occupied this site, and it is hoped that some interesting discoveries will be made.

### *Arterial Roads in Surrey.*

The Surrey County Council have decided to co-operate with the Ministry of Transport and the London County Council in the construction of two new arterial roads in Surrey, and the work is to be put in hand at the earliest possible moment. The total estimated cost is £490,000.

### *Alabaster Figures in the Victoria and Albert Museum.*

The National Art Collections Fund has purchased and presented to the Victoria and Albert Museum a complete set of alabaster figures in relief of the Twelve Apostles, English work of the fifteenth century. Although isolated figures of the Apostles exist in public and private collections, no other complete set is at present known.

### *The late Mr. G. T. Brown.*

The death has taken place of a well-known Sunderland architect, Mr. George T. Brown. Mr. Brown was at one time president of the Northern Architectural Association, and it was principally through his interest that the School of Architecture was founded in connection with the Armstrong College at Newcastle.

### *Aberdeen Art Gallery.*

Instructions have been given to Mr. A. Marshall Mackenzie, R.S.A., LL.D., architect, to prepare specifications for the new hall and additional accommodation in the Art Gallery, Aberdeen, and for a war memorial court. The expenditure represents over £66,000. A sum of £20,000 is being provided by Lord Cowdray.

### *Changes of Addresses.*

Messrs. Newman and Jacques, architects and surveyors, have moved from 2 Fen Court, E.C.3, to 61 West Ham Lane, Stratford, E.15.

Mr. Frank Windsor, F.R.I.B.A., M.S.A., has moved to new offices at 56 High Street (Scarbrook Chambers), Croydon. He commenced practice in 1899.

### *Building Work at York.*

The Ministry of Health have sanctioned the raising of the following loans by the York Corporation: Alterations at Fairfield Sanatorium, including nurses' quarters and stockman's cottage, £2,902; furnishings and ambulance, £836. Married men's quarters are to be completed in connection with the fire station. The York Housing Committee are recommending the Corporation to advertise for tenders for thirty additional houses of the parlour type, to be built on the Tang Hall Estate, and to sell some building sites at Acomb.

### *£500,000 Building Sale.*

The Manchester Corporation Improvements and Buildings Committee have accepted the offer of a United States syndicate to purchase Victoria Buildings, which include the Victoria Hotel, leased to Messrs. Spiers and Pond, scores of offices, and an arcade. The work of demolition will begin almost at once and an imposing hotel, containing about 700 bedrooms, will be built on the site, which covers an area of 5,600 square yards. In addition to the hotel an up-to-date arcade will be built. The purchase price is understood to be £500,000.

### *Slum Clearance in Scotland.*

Scottish cities have the clearance of slum dwellings under contemplation. At Greenock the area scheduled includes 1,400 houses, besides workshops and offices. A total outlay of £300,000 is contemplated. For Dundee the cost of the complete scheme would be £792,066. A report is being sent by the Town Council to the Scottish Board of Health. The Housing Committee of Aberdeen Town Council are also placing a report before the Board of Health. The scheme provides for the clearance of a large area, and the demolition of 1,099 houses, and the erection of 1,120 new houses at an estimated cost of £587,500.

### *Rates of Interest for Housing.*

The Ministry of Health in "The Ministry of Health (Rates of Interest) Amendment Order (No. 2), 1922," just issued state: "Subject as hereinafter provided the Ministry of Health (Rates of Interest) Amendment Order, 1922, (*a*) and all Orders made before the date of this Order fixing special rates of interest in respect of particular local authorities are hereby revoked. As from the date of this Order the Ministry of Health (Rates of Interest) Order, 1921, (*b*) shall have effect as if the words "five-and-a-half per cent." were substituted for the words "six-and-a-half per cent." and the words "five per cent." for the words "six per cent." in the Schedule to the said Order: Provided that nothing in this Order shall affect the rate of interest on any advance made or any expenses incurred by a local authority before the date of this Order."

### *The Government and Housing.*

The Cabinet Committee which, under the chairmanship of the Minister of Health, Sir A. Griffith-Boscawen, is considering the whole housing situation has not yet completed its inquiries, but its report will be ready in ample time to be made the basis of the housing proposals which the Government will lay before Parliament in the coming session. These proposals will, in the main, states "The Times," be devised to encourage private enterprise to develop again its great resources in the provision of houses which enabled it to supply 95 per cent. of the dwellings built for the working classes in the years before the war.

### *Glasgow School of Architecture.*

The first exhibition and "criticism" of the session has been held in the School of Architecture of the Glasgow School of Art. Professor R. S. Rait, LL.D., gave a short lecture on college chapels, and Mr. G. Paterson, F.R.I.B.A., Vice-President of the Glasgow Chapter of the Incorporation of Scottish Architects, gave a criticism of the designs prepared as the first part of the session's work. At the conclusion of the criticism a lecture was given to the School of Architecture Club by Mr. Allan D. Mainds on "Æsthetics."

The following designs were placed first in order of merit:—

First year, Mr. F. R. Wylie.
Second year, Mr. P. McNeil.
Third year, Mr. L. G. Farquhar.

### *Scotland's War Memorial.*

The proposal to place the National War Memorial within the precincts of Edinburgh Castle has caused a good deal of discussion in Scotland, especially in regard to its effect on the existing Edinburgh Castle buildings. A second report by the Ancient Monuments Board of Scotland to the First Commissioner of Works has been issued objecting to anything that will effect a marked change in the outline of the castle, an outline which has remained substantially the same for nearly 600 years. The proposed shrine, adds the report, "as viewed from the streets on the north and east or from any aspect outside the city, would form an isolated and dominant feature foreign to the traditional character of the castle buildings and decidedly superseding the Crown Square block as the centre of interest."

# Zoning in the Control of Large Cities

MR. FRANK HUNT, a member of the Council of the Surveyors' Institution, in reading a paper before that Institution on "Zoning in the Control of Large Cities," said that the term "zoning" as used for the purpose of his paper came from America, and was there defined as being, in relation to city planning—

> "action by the State, or by the city under the authority of the State, to control, under the police power,
> (*a*) the heights to which buildings may be erected;
> (*b*) the area of lots that must be left unbuilt upon; and
> (*c*) the uses to which buildings may be put."

Like so many of the words that had passed into current use on the other side of the Atlantic, "zoning" was not a strictly correct word to use in this connection. With us the standard definition of the word "zone" was "a belt or girdle; any well-marked band or strip running round an object"; but perhaps it was unnecessary for one to be a purist in this matter as long as it was clear what was the exact meaning attached to the word in our use of it, and so long as it served a useful purpose.

Americans themselves had felt the inadequacy of the word, and frequently the term "districting" was used as an alternative. This was perhaps a little closer to the real meaning although it still left something to be desired.

It will have been noticed that in the definition of "zoning" emphasis was apparently attached to the fact that the regulations were made under the "police power." It did not mean that it had any relation to police as the word was understood in this country, but rather to one of two separate doctrines arising out of the American Constitution. A power to make regulations and laws for the comfort and protection of the subject and the good government of the community fell within that section of American jurisprudence known as "police power," and not under the doctrine of "eminent domain." When property was taken under the power of "eminent domain," compensation must be paid to the owner if he could prove damage, but no such compensation was paid for limitations imposed upon the use of a property if those were imposed under the "police power." It appeared that in America various State Courts, as well as the United States Supreme Court, had decided conclusively that zoning regulations as adopted in the United States did fall under the "police power." The regulations dealt not only with limitations as to the height of and space about buildings, but also as to user, and, it had been stated, they broadly extend to public health, safety, and morals, the public convenience, and the general prosperity of the community. This extension to general convenience had apparently been needed because it was felt that if "police power" extended only to public health, safety, and morals, it might be difficult in certain circumstances to show by conclusive evidence that every detail of a zoning scheme came within a competent exercise of the "police power"; but with the scope so extended, it was hoped that every feature of it could be shown to be a legitimate exercise of the "police power."

With regard to the question of the application of town-planning provisions to built-up areas, Mr. Hunt said that this was an important matter for consideration. Proceeding, he said: Two important reports—that of the Royal Commission on Housing in Scotland, 1917, and of the Departmental Committee on Unhealthy Areas, 1921—have recommended such an extension of the Act. The Royal Commission on Housing in Scotland in their report say:—

"1874. The powers of the local authority to ensure proper development of their presently unbuilt-upon areas by operations under the town-planning section of the 1909 Act are so far an advance upon those previously possessed, and are capable of being exercised without undue payment of compensation, that we have considered whether the areas already built upon should be brought into line with the unbuilt-upon areas which are controlled by suitable town-planning regulations. We have concluded that there are such obvious advantages in an extension of the principles of the town-planning section of the 1909 Act, as applied to an undeveloped area, to a congested area, that those principles should be extended to the town-planning of built-up areas in order that future developments in such areas may be suitably regulated.

"1875. It should be competent to effect the replanning without the owners of slum and other property being permitted to benefit by the improvement at the public expense. The amended legislation should provide that no new building should be erected within the built-up area, and no alteration to an existing building should be made, unless such new building or such alteration conforms with the new town plan; that is to say, no new interest should be permitted to be created that would ultimately need to be bought out at the public expense. Where an owner desires to demolish or rebuild, the local authority should have power to purchase, under special safeguards for the public purse; that is, on the basis of compensation recommended in chapter xxiv. The local authority should have power of compulsory excambion as amongst the various owners, and should have vested in them the ownership of the solum of streets that may be closed under the town-planning scheme."

The basis of compensation in chapter xxiv, referred to in the extract, has been, in its main particulars, given effect to by the Acquisition of Land (Assessment of Compensation) Act, 1919.

The Departmental Committee presided over by Mr. Neville Chamberlain to consider slum areas endeavoured to follow this line of thought, and apply it to slum areas and the immediate neighbourhood which was likely to develop into slums, and their recommendations on this point are as follows:—

"(1) That the town-planning powers should be extended to enable local authorities to prescribe the lines of main traffic routes and to arrange for 'zoning' built-up areas;

"(2) That reconstruction schemes under Parts I and II of the 1890 Act should conform to a plan of the whole town concerned, together with its surrounding area, such plan to provide for the ultimate distribution of dwelling-houses, commercial and business premises in the area."

With regard to the town-planning of built-up lands they say:—

"*Town-Planning Built-upon Lands.*—We believe that interest in the subject would be greatly stimulated if town-planning powers were extended to land already built upon, as is the case in Canada, and to some extent in the United States. It is not necessary to introduce any complex conditions or procedure, but local authorities should have the power in the public interest to prescribe the lines of main traffic routes, and also to arrange for 'zoning' in a built-up area. In this connection we should like to call attention to the evidence of Mr. Lawrence Veiller, Secretary to the National Housing Association of the United States. Mr. Veiller informed us that the practice of 'zoning'—that is of dividing a town into a number of districts and then prescribing for each district certain restrictions upon the user and height of buildings as well as the proportion of site to be occupied by them—had been adopted in some fifteen cities, of which the most important is New York, and that it had proved a popular and practical innovation. It is significant that where zoning has been adopted after careful preparation of public opinion no compensation has been paid, and no complaints have been made public. It has, in fact, been found that values have been stabilized instead of being disturbed by the process."

The first purpose of town-planning of built-up areas recommended by the committee is in order to prescribe the main traffic routes. The object would be to secure by town-planning such new streets as are now constructed as street improvements, and it is an important question as to how far such town-planning would be economical and efficient for the purpose. As examples, in London, Charing Cross Road and Shaftesbury Avenue may be taken, in order to consider how far the conditions would involve difficulties in such circumstances in case a town-planning scheme were put into effect to secure such main traffic thoroughfares. These were constructed by the Metropolitan Board of Works some considerable time ago, but they, no doubt, are typical of the conditions still existing in London in districts of a similar character.

Information as to the ownership of property at the time when the streets were constructed is available, and it reveals an extraordinary complexity in the number of interests involved. In some cases the new streets absorbed the whole, or practically the whole, of a property, whilst in other cases little or no part was taken by the actual street sites.

The plots, according to the existing ownership, on the frontages to the new street would be, as a rule, inadequate for the development for premises of character suitable to such streets. addition to the number of interests at would have to be dealt with, there the difficulty of synchronizing suffi ntly the work of re-development to oid great loss. While it would be easy lay down a plan to which all building ould conform, the practical difficulties giving it effect in conditions of such mplexity would be great, and it may doubted whether a new street would be ured more cheaply, or anything like expeditiously, by town-planning as mpared with the present method of rchasing outright the property that is considered necessary to acquire, and ling or letting the surplus land not quired for the site of the street.

It is probable that the difficulties which uld have militated against the success carrying out of a scheme of town anning in the West End would equally ply in connection with slum clearance eas, as experience has always shown e number of separate owners to be great, d the holdings to vary considerably size. The reconstruction would in lve very complicated legal proceedings, ich, under the present condition of our nveyancing law, render it impracticable the score of cost alone to effect any heme of rearrangement of holdings.

As already explained, the American hemes are based upon the exercise of e "police power," which involves the yment of no compensation. The glish code has proceeded on different es in town-planning an unbuilt-upon ea; the interests concerned are much s complicated than those met in dealing th a developed district, and in a large oportion of the land covered by a town anning scheme the building element is rdly apparent. Town-planning hemes, therefore, under English legis ion present the simplest phase of this oblem, and yet the Legislature had ovided that, if damage can be shown by owner arising from the making of the eme, compensation is payable by the thority. It is true that claims for com nsation cannot be made in respect of y restrictions imposed similar to those ich existing legislation or by-laws uld demand; and it is specifically pro ded that compensation cannot be arded if the provisions of a scheme pre ribe, with a view to securing the ameni s of the area, the space about buildings, limit the number of buildings to be ected, or prescribe the height and aracter of the buildings, such pro sions being considered by the confirm g authority to be reasonable.

The general attitude of the legislation this question of compensation was cidentally considered in the Court of ppeal in 1920 on a case arising under the wn-Planning Scheme for the Ruislip rthwood area. Under the scheme a ilding line was defined for the High reet, which had the effect of seriously d injuriously affecting a long, shallow ot of land which the owner considered e for the erection of shops, and after oceedings before the Arbitrator and e High Court, the case ultimately ached the Court of Appeal. In the urse of the judgment of Lord Justice ve he discusses the question of the right an owner under the Town-Planning t to compensation. For this purpose e following extract is illuminating, not ly as representing his view, but by reason of the fact that he quotes decisions of eminent judges in times past with approval, but by reason also of the fact that those have been the judgments of other courts on similar questions on previous occasions :—

"In connection with this and the next question it must be borne in mind that we are here considering an Act which expressly and in terms recognizes the right to compensation in respect of property injuriously affected by the scheme, and that, in examining these parts of the Act which create exceptions, the canon of construction applicable is that they must not be deemed to take away or extinguish the right unless it appear by express words or by plain implication that it was the intention of the Legislature so to do. *Western Counties Railway Company* v. *Windsor and Annapolis Railway Company* (1). Brett, M.R., in *Attorney-General* v. *Horner* (2) states the rule in these terms : 'It is a proper rule of construction not to construe an Act of Parliament as interfering with or injuring persons' rights without compensation unless one is obliged to so construe it. If it is clear and obvious that Parliament has so ordered, and there is no other way of construing the words of the Act, then one is bound to so construe them; but if one can give a reasonable construction to the words without producing such an effect, to my mind one ought to do so.' Lord Davy, in *Commissioner of Public Works* (*Cape Colony*) v. *Logan* (1) says : 'Such an intention,' i.e., an intention to take away property without any compensation, 'should not be imputed to the Legislature unless it be expressed in unequivocal terms. This principle has frequently been recognized by the courts of this country as a canon of construction.' And finally, Bowen, L.J., in *London and North Western Railway Company* v. *Evans* (2) sums up the matter thus : 'The Legislature cannot fairly be supposed to intend, in the absence of clear words showing such intention, that one man's property shall be confiscated for the benefit of others or of the public without any compensation being provided for him in respect of what is taken compulsorily from him'; and a little further on he adds that this maxim and another are 'doctrines of sound sense and obvious justice, to be borne in mind in dealing with legislation which cannot be supposed, unless it so explicitly states, to neglect what is . . . natural justice.'"

In the light of the practice of Parliament and the judicial interpretations of the general attitude on the subject, it is almost certain that a zoning proposal would almost certainly carry with it, in contradistinction to the American system, compensation to a large extent.

With regard to the application, in its simplest form, of the principles of user-zoning to substantial built-up areas, it might safely, I think, be stated that in London, as well as in other large towns, there are considerable areas practically limited to residential purposes, with premises, of course, for the necessary ancillary purposes, in the interests of which it would be desirable that the present unrestricted right of user should be controlled. This is, perhaps, eminently desirable just now when large estates are being broken up and numbers of owners substituted for one. I could quote a recent example where about 70 acres in London, almost entirely residential property, was offered for sale. The lessees or occupiers of the houses were given the first opportunity of purchase, and about two-thirds of the property was disposed of in that way. The result was that where there was one ground-owner, able to exercise control of user in the interests of the general estate, there are now some hundreds of owners, each free to use his particular property for the purpose he finds most advantageous, regardless of the effect on other property.

An examination of the prices obtained indicates that even in a comparatively central estate of this kind a town-planning scheme limiting user might have been made without compensation. The estate was originally built between 1840 and 1847; the leases of the existing houses had from eighteen to twenty-five years to run; and, generally, the prices obtained only represented the value of the property according to present use.

Since the date of the development of that estate a large part of the county of London has been built. In 1851 the population of the county was 2,363,341, or slightly more than one-half the present population of 4,484,523, while in area the proportion developed since 1851 is greater than one-half. It therefore seems probable that a large part of the built-up area of the county, perhaps much greater than one-half, could be zoned for user without involving payment of compensation.

In the rest of built-up areas, where the property has obtained a potential value for other purposes, restriction of user would be the subject for compensation, and if carried out extensively would involve considerable cost. On the other hand, such limitation of user would have some effect in increasing the value of other property; so that, while the town-planning authority would bear all the loss in respect of the injury inflicted, the private owners would reap the profit from the operation of the scheme without a very extensive scheme of betterment. In such areas it would therefore be necessary to proceed with caution.

It may be concluded from this that the possibilities of zoning in the control of even the built-up portions of large cities in this country are considerable, particularly in regard to user-zoning.

For user-zoning it is necessary to have full information of the present use of property, and for this purpose careful surveys are necessary to be made. In reading the American papers on the subject one is struck by the thoroughness with which the survey is carried out, and the completeness of the maps and studies which are prepared for the purpose of zoning ordinances.

In 1904 a user-survey of the central parts of London was made by the London County Council at the request of the Royal Commission on London traffic. This was before the question of zoning and town-planning came to be the subject of general discussion, and the categories of user under which the information was prepared were as follow :—

(1) Commercial and industrial (including private buildings);

(2) Residential;

(3) Commercial and residential mixed (including houses and shops and similar property);

(4) Railways and canals;

(5) Public open spaces;

(6) Land not built upon (including private squares, vacant building sites, etc.);

(7) Streets.

The information was condensed and indicated on a 6 in. map, which is shown on Plate CVI, sheets 1 and 2, in Volume 6 of the Report of the Royal Commission, while interesting statistics of the proportion of each class of property in the wards and parishes of the area dealt with and statistics under other heads are given on pages 758–779 of Volume 3 of the Report of the Royal Commission.

It is on the advantages of user-zoning that the American reports lay the greatest emphasis. They point to the disadvantages of uncontrolled development and to the results of the intrusion into choice residential districts of the "apartment house," the public garage, and even of industrial premises, possibly carrying on some noisy, dusty, or offensive process. By user-zoning this condition is obviated, and, it is claimed, great advantage is secured in the stabilization of property values, the protection of health and comfort, and the avoidance of waste by the scrapping of buildings in "blighted districts."

Our experience of uncontrolled development, subject to existing legislation as to height of buildings, width of way, etc., has resulted, in the case of London, in a dense mass of building intermixed without any regard to character, user, or suitability of position for the various purposes, extending over a distance of nearly 25 miles north and south and east and west, with inadequate provision for open spaces, recreation, or general amenities. Under a well-considered zoning scheme sites most suitable for industry would have been restricted for that purpose, the best sites for residences would have been used mainly for such purposes, and the creation of slums due to bad arrangements, narrowness and over-crowding of buildings on sites, would have been rendered impossible. All restrictions in the past to prohibit the growth of a town have failed, as witness the ineptitude of the attempts in the time of Elizabeth and Cromwell; and it would appear that the only hope of controlling the development of big cities in the future would be the careful and systematic town-planning and zoning of undeveloped areas and the application of the same procedure, as far as practicable, to built-up land, with the view of controlling its present use and its re-development in the future when it comes to be rebuilt.

## Northampton Polytechnic Institute

The annual distribution of prizes has taken place at the Northampton Polytechnic Institute before a large number of visitors. Dr. S. Z. de Ferranti, past-president of the Institution of Electrical Engineers, who gave a most stimulating address, presented the prizes and certificates. A vote of thanks to Dr. Ferranti was moved by Mr. Frank Gill, president of the Institution of Electrical Engineers, and seconded by the Mayor of the Borough of Finsbury. The vote of thanks to the chairman, Mr. L. B. Sebastian, the chairman of the Governing Body, was moved by Sir Frank Dyson, the Astronomer Royal.

## Town-Planning and Ideal Cities

Mr. William Haywood, F.R.I.B.A., in the course of a lecture on "Town-Planning and Public Opinion," at the Birmingham University, said: Town development tends to foster civic consciousness, but where the reverse of this obtains, and consciousness is precedent, better results in town development will usually be achieved. Where initiative lies with the local authority, as in England, the support of a keenly interested public will obviously add great strength to municipal enterprise, and on the sociological side the value of private effort is still more obvious.

Communities in other countries show more civic activity than we have yet exhibited. Dusseldorf is an example of great civic progress made largely upon the initiative of business men. Chicago is the best illustration of civic enterprise inspired by a community. America has passed no Town-Planning Act which resembles the English model, and she remains of opinion that the work is best dealt with in its early stages by private effort. The city plan (in its widest sense) is regarded as a business proposition, and best developed under the direction and control of business people. Political administration, whether by the city or the State, is felt to be subject to too frequent a change of personnel and policy, conditions which are largely discounted where the public itself can be brought to demand reforms with which they have been made familiar, and which have been effectively worked up to the point of acceptance.

Chicago has not been moved to civic consciousness without much disinterested labour and a considerable outlay of private money, but it is worthy of notice that those who have put forward her civic dreams as profitable possibilities, are men who are usually regarded as exclusively devoted to the acquisition of dollars. The cost of preparing her colossal schemes of improvement has been largely met by members of the Commercial Club, who have invested their money in these projects because they felt them to be for the good of their city. They have said that the improvement schemes put forward (and now largely realized) mean a practical city, and that dirt, grime, and sordid conditions are not a necessary part of industrial and commercial success; rather are they evidence of a failure to grasp the fundamental truth, that men whose lives are cast in pleasant places, who are clean of mind and body, are the men who best do things.

Mr. William Haywood, in another lecture, dealt with "Ideal Cities." He said: Ideas of this class are not new. Even omitting those of the ancient world, we have More and Campanella in the sixteenth century, Andreae and Swift in the seventeenth and eighteenth centuries, Bellamy, Butler, and Morris in the nineteenth, all writing of Utopias.

Robert Owen in 1818 bought 1,200 acres of land and actually began an ideal village, but accomplished little of importance, and in 1848 James S. Buckingham published a remarkable scheme for a small model city, which is curiously like that for an imaginary "Christianopolis" published in 1619 by Andreae, except for certain natural differences due to two centuries of change.

Sir Titus Salt carried to completion a notable experiment when he built Saltaire in 1853, but it is with the work of practical idealists like the late Mr. George Cadbury and Lord Leverhulme (whose ideas materialized in 1887-8) that we get the first practical results of earlier speculations and trials carried to a really convincing conclusion.

This is especially true of Bournville, which avoids the somewhat institutional character of Port Sunlight, and displays the free and untrammelled conditions under which it was conceived, conditions happily embodied in the design of the buildings and in the method of their arrangement.

These and similar "garden suburbs" are often described as "Garden Cities" or as of a "garden city" character, but it is important to remember that such suburbs are essentially unlike the fully detached and self-sustaining town of Letchworth, or that of Welwyn now building, to which communities alone the term "garden city" is properly applied.

The Letchworth type of town differs from all others by its adoption of Mr. Ebenezer Howard's teaching: (1) That all communities should own the land upon which they stand, in order to avoid the exploitation of land values; (2) that the size of a city should be strictly limited to something under 50,000 (Letchworth is to be 30,000); and (3) that it should be surrounded in perpetuity by a belt of agricultural land for health purposes, and for the mutual convenience of the grower and buyer of market produce. Letchworth, which was commenced in 1903, makes no special contribution to town-planning knowledge, but in policy and administration it is unique as the first experiment in a new form of town control.

## London County Westminster and Parr's Bank, Ltd.

The net profits of the London County Westminster and Parr's Bank, Ltd., for the past year, after providing for bad and doubtful debts, and all expenses, amount to £1,888,021. This sum, added to £519,708 brought forward from 1921, leaves available the sum of £2,407,729. The dividend of 10 per cent. paid in August last on the £20 shares and 6¼ per cent. on the £1 shares absorbs £600,224. A further dividend of 10 per cent. is now declared in respect of the £20 shares, making 20 per cent. for the year; and a further dividend of 6¼ per cent. on the £1 shares will be paid, making the maximum of 12½ per cent. for the year; £200,000 has been transferred to the bank premises account, £150,000 to the rebuilding account, and £300,000 has been placed to the contingent fund, leaving a balance of £536,585 to be carried forward.

Following are some interesting figures concerning the activities of the bank :—

| | 31 Dec. 1922. | 31 Dec. 1921. | 31 Dec. 1920. |
|---|---|---|---|
| Net Profit .. .. | £1,888,021 | £2,167,846 | £2,915,708 |
| Brought forward .. | 519,708 | 460,914 | 414,226 |
| Total available .. | 2,407,729 | 2,628,760 | 3,329,934 |
| Dividends .. .. | 1,221,144 | 1,159,052 | 1,115,302 |
| £20 shares .. | 20% | 20% | 20% |
| £1 shares .. | 12½% | 12½% | 12½% |
| Investment depreciation .. .. | Nil | Nil | 1,300,000 |
| Premises .. .. | 200,000 | 250,000 | 200,000 |
| Rebuilding account .. | 150,000 | 200,000 | Nil |
| Contingent fund .. | 300,000 | 500,000 | Nil |
| Reserve fund .. | Nil | Nil | 253,718 |
| Carried forward .. | 536,585 | 519,708 | 460,914 |

dnesday, January 24, 1923

Vol. LVII. No. 1464

# THE ARCHITECTS' JOURNAL & Architectural Engineer

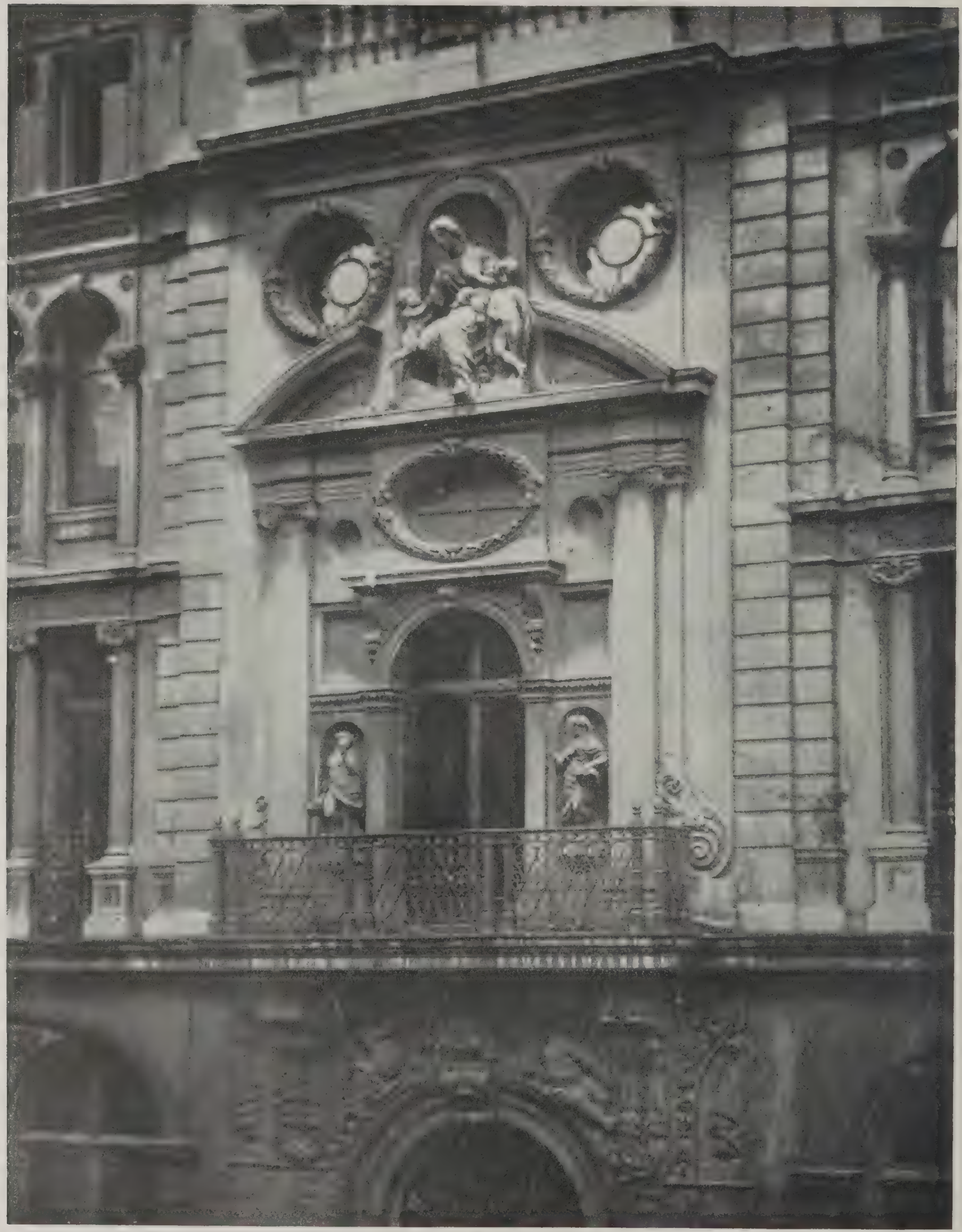
*With which is incorporated "The Builders' Journal."*

A PANEL IN THE ASSEMBLY ROOMS, BATH.
S. D. ADSHEAD, F.R.I.B.A., ARCHITECT.
ALFRED HAYWOOD, PAINTER.

27-29 Tothill Street, Westminster, S.W.1.

# Modern Architecture. 6.—Detail of the Entrance Front of the Mercers' Hall, Cheapside, London

The Late J. D. Crace, Architect



Among the myriad miles of undistinguished and smoke-grimed street façades of London an architectural feature will frequently arrest the attention by the quality of its design. A case in point is the entrance front of the Mercers' Hall in Cheapside, which in general character and in detail has much in common with modern French work. The building was actually erected in 1880 from the designs of the late J. D. Crace.

THE

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# The R.I.B.A. Registration Bill

THE Council of the R.I.B.A. have now published their draft proposals of a Bill to provide for the registration, and to regulate the qualification, of architects. It will be remembered that the last Institute elections were practically decided upon the political issue as to whether unification should precede or follow registration, and the present Council of the Institute was returned on the ticket of "registration first and unification second."

For the result of the elections the old Council had no one but themselves to thank. They had a strong case—in our opinion an unanswerable case—but they never put it before the electors, and it was not until Major Harry Barnes made his famous speech at Cardiff that we knew what the Institute really meant by its registration policy, and then, alas! it was too late.

The present Council were much more adroit in their manœuvres; they not only conducted a strong Press campaign, but they also circularized the members of the Institute—a course which the old Council, in its aloofness, disdained to follow. Had they even at the eleventh hour put their case properly before the members of the Institute, we believe the result of the elections would have been very different.

We have always regarded the results of the last elections as against the best interests of the profession as a whole, and we quite sympathize with the old Council in its desire to fight these elections on a "personal" rather than on a "political" issue. By "personal," of course, we mean that the names of those gentlemen standing for election for the Council and the Committees should be judged on their status as architects, rather than as to whether they would or would not support some one political move. That is, of course, the ideal way in which elections to a professional body such as the Institute should be made; but there may be from time to time political questions of such paramount importance as to swamp all other considerations, and it is then, in our opinion, essential that the case for and against any proposed measure should be put clearly and fairly before the members of the Institute.

We can hardly believe that the present Council are really serious in putting forward their Bill. We must, in all fairness, say that in their election propaganda they stated that they were in favour of registration, but not in favour of unification—at any rate, not in favour of unification as proposed by the old Council. But can they, or any reasonable body of men, really believe that they can force such a contentious measure through Parliament without in some manner preparing the way and conciliating the strong interests which will undoubtedly be opposed to them?

The strongest opposition of all will, in all probability, come from the Society of Architects, which society, it would appear, the present Institute Council have done all in their power to antagonize rather than to conciliate.

The Bill proposes that the Board which shall control the working of registration shall consist, as far as the members of the Institute and the members of the Society of Architects are concerned, of the President and fourteen members of the Council of the R.I.B.A., as compared with the President and two members of the Council of the Society of Architects—a proposal which it is not surprising to find has not been welcomed with acclamation by the Society of Architects!

There are, in addition, to be ten members of the Board of Architectural Education of the R.I.B.A., so that, in effect, the R.I.B.A. claims to determine and govern the conditions of all architects practising in this country.

With regard to the general conditions of the Bill, there is nothing which calls for any particular comment once admitting the claim that the R.I.B.A. shall be the controlling factor in the constitution of the Board to govern the architectural profession. The general clauses provided for the registration and the discipline of members seem, on the whole, to be fair and reasonable, though they will no doubt receive a good deal of critical scrutiny when they are laid before the general meeting of the Institute.

In the "Observer" for January 14 there was a very well-considered letter from a correspondent, which put the case very clearly for and against the Registration Bill as proposed by the Institute, and as these views are substantially our views, there is no need to elaborate them at greater length. (See article reproduced on page 190.)

As our readers know, we have always been in favour of registration, and for the fullest measure of registration possible; and, further, we feel that the Institute, as representing the largest and most important number of architects of any society in Great Britain, should have a corresponding representation on any Board which may be formed to control the profession. Should registration pass, we do not feel that the present Bill sufficiently provides for those professional interests outside the Institute, which it should do. In fact, the Bill as proposed is purely an Institute measure, and if every reputable architect practising in Great Britain were a member of the Institute we should have nothing to say against it and, in fact, should wish it all success; but it is no use refusing to face facts which are obvious to everyone and which will become more obvious during the progress of this Bill. Not only are there many architects of repute outside the fold of the Institute, but it is impossible to ignore the view of so important a society as the Society of Architects and to hope for the Bill's successful passage through Parliament in face of their opposition. If the whole profession, inside and outside the Institute, were solid for the measure, there would be a far greater chance of its success, in spite of the many important interests whose opposition it is in some measure bound to arouse; but with a divided profession, what chance can there possibly be of its success?

We hope we may be wrong in our views, and that, in spite of everything, the Society of Architects and the other professional societies outside the Institute will be sufficiently broad-minded and far-sighted to help this measure through, trusting to Parliament and to their own efforts to remedy the unfairness of the numerical representation on the Board. But this is asking rather much of human nature.

The present Institute Council immediately after its election did all in its power to destroy the careful spade work of years of hard and difficult toil in preparing the profession to accept some general measure of registration, and we cannot really believe that any of them has the slightest hope or belief that the proposed Bill will ever become part of the law of the land.

In conclusion, we should like to say one word to those members of the Institute who really believe in registration, and that is, that at the forthcoming elections they should not leave it to their opponents to do all the canvassing, but should have their own plan of campaign marked out and vigorously pursued.

The old lordly policy of "Wait and see," and "Leave it in our hands," is out of date. Whether one believes in registration or not, it is quite clear that in the future private members of the Institute intend to take a very much greater and more direct part in the control of the affairs of the Institute than in the past, and it is probably a feeling of resentment at the autocratic and dictatorial methods of the old Council that has led to the present *impasse.*

## Wage Rates and Industry

In a thoughtful letter to "The Times," Lord Weir draws attention to the danger to our national prosperity through the haphazard relativity of wage rates in different industries. "My firm," he writes, "have been anxious, for some time, to build a considerable number of new houses near their engineering works. They have allocated the necessary capital, but they have not placed the contracts for the following reasons: If the houses were gone on with, the bricklayers would start working in full view of the engineering workers. They would receive 72s. 6d. per week for forty-four hours' work, while the skilled engineering tradesmen would only receive 57s. for forty-seven hours' work. The bricklayer's labourer, carrying mortar, would receive 55s. 6d. for a forty-four hours week, a rate very little less than that paid to the skilled tradesman." Jealousy and friction must inevitably result from such a condition of things, with the probability of unsatisfactory output all round. It is no part of the architect's business to put the industrial house in order, but, seeing that building work is held up, and that the situation is full of dangerous possibilities, he cannot afford to remain aloof; as an interested third party he must take his share in the consideration and settlement of industrial affairs. The subject is too large to be dealt with in a note, and we propose to return to it in a leading article.

## The Building Guild Failure

The moral of the Building Guild failure is that an idealistic experiment must inevitably fail under adverse conditions. To carry on a great business successfully in these competitive days it is necessary to have not only a band of skilled and enthusiastic workers, but ample capital and an efficient organization. That the Guild has done amazingly well, notwithstanding its failure, is, however, shown by the fact that it secured contracts to the value of two million pounds, and this on a capital of £100, only £19 of which has been issued! There is some irony in the fact that the Guild business may possibly be saved by a capitalist, Mr. McTaggart, a successful Glasgow builder, having put forward a plan to run the Guild on accepted modern lines at his own risk. On this suggestion, we are glad to note, the winding-up application at Manchester has been adjourned.

## "Build Your Own House"

Much has appeared in the daily Press during the past few days on the intriguing subject of "Every Man his own House-builder." To build one's own house is apparently such an extremely simple thing, that to call in either architect or builder were an absurd extravagance; there is, of course, a pride, if not a pleasure, in doing for yourself something that is commonly done for you by others—sewing on a button, for example, or frying a steak; but it is most unwise for the amateur to attempt to go beyond these comparatively simple operations. House building is one of the things that is definitely beyond the capacity of anyone except an extremely practical man, and your practical man invariably has but the vaguest notion of design. "Build Your Own House" may be a profitable cry for the "stunt" Press, but to put the exhortation into effect is a difficult matter. The attempt must in most cases result in disillusion and financial loss.

## Decorative Art at Burlington House

The Winter Exhibition of the Royal Academy, which is noticed elsewhere in this issue, is remarkable inasmuch as it marks the first occasion upon which the Academy has held an exhibition of decorative and applied art on its own initiative, though it must not be forgotten that the Arts and Crafts Society were allowed to hold their exhibition at Burlington House in 1916. The purpose of the decorative art section is "to draw attention to the important part which the arts of painting and sculpture should take in architectural schemes . . . and to suggest to younger artists and students the great possibilities of decorative art." These purposes are, on the whole, well enough served, though it is doubtful whether the general public, upon whom the success of the exhibition mainly depends, will be able to appreciate the significance of these acreages of painted canvas. If small scale models showing the settings of these huge decorations could have been provided in every case, the exhibition would have been far more intelligible to the layman. The Arts and Crafts section will, we imagine, make a more intimate appeal to the general public. Here are some most delightful examples of modern craftsmanship—in furniture, fabrics, pottery, glassware, bookbindings, printing, and jewellery. But how expensive they all must be! The wealthy connoisseur will make a note of names and addresses for future purchases, while the man of small means notes only that the exhibits are completely beyond his purse. When shall we have an exhibition of good things capable of being provided at a reasonable cost?

## The Architecture Club Exhibition

If exhibitions can awake in the public a consciousness of the intimate relation of art, especially architectural art, to life, then one cherished aim of all well-disposed architects and other workers is well on towards achievement. Quite recently we have had the very successful exhibition of British architecture at the R.I.B.A.; at the present moment an exhibition of decorative art is being held at the Royal Academy; and now we are promised a "Twenty Years of British Architecture" exhibition by the Architecture Club. This is to be held at Grosvenor House (kindly lent by the Duke of Westminster), and will be open to the public from March 6 to 24 inclusive. The exhibits will consist of photographs and models of executed works, and a rather novel feature for an exhibition of this kind will be the projection of views of buildings by means of lantern slides. There will be a collection of models illustrating the development of the British house from the earliest times to the present day, and it is hoped to hold a series of lectures on architectural subjects. The exhibition promises to help considerably in the work of "Educating the Public."

# Architecture and Decoration

## Sir Reginald Blomfield at the Royal Academy

THE first of the public lectures in connection with the Exhibition of Decorative Art was held last Wednesday, when Sir Reginald Blomfield addressed a crowded audience on "Architecture and Decoration." He said:

I have been asked to address you on architecture and decoration, but I am not quite sure that I am the right man to say anything on this subject, because, in defence of architecture, I have sometimes found it necessary to maintain that it is an art complete in itself, not dependent for its impact on the emotions or anything external to itself, and that its highest appeal is made through the abstract qualities of rhythm and proportion, mass, and silhouette, and what the French call "Ordonnance."

The history of art shows that however content an architect may be with the completeness of his own art, mankind in general wants something more. When the cave man had found his cave, he decorated its surfaces with admirable drawings of the animals that he hunted; all the stages by which man has worked his way out of barbarism into civilization are marked by advances in the decorative arts, and we must take it as an axiom that, whether we want it or not, man will decorate his buildings somehow. The problem for the artist is, not only to draw well and paint or model or carve, but to use his brains in co-ordinating this with architecture, so that the two or more arts all pull together towards one pre-ordained end. The Parthenon in its completed state was probably the most perfect example that has ever existed of architecture and decoration, because the architect, the sculptor, and the painter worked with complete understanding of each other's resources and limitations.

Architecture, of course, touches every form of permanent decoration, the sculptor, the painter, the worker in metal, in stone, in marble, in wood, in glass, in mosaic, almost every art and craft; but I am going to limit my few remarks to the sculptor, the glass painter, and the painter proper. And first, of sculpture.

The first rule that comes to my mind is one of Aldrich, the famous Dean of Christchurch, who wrote a manual of civil architecture about 130 years ago. Aldrich's advice in regard to sculpture was, not to have too much of it. "Too much ornament crowds out beauty"; and this was what happened in the earlier Renaissance, when the sense of architecture was lost under the embroideries of the ornamentalist, and was not recovered till really competent architects took charge. Those interminable arabesques, panels, and pilasters, covered with ornament skilfully executed but destitute of meaning in relation to the organic structure of the building façades, such as the Cortosa at Pavia, or the Madonna dei Miracoli at Brescia, are not architecture at all, and few things have done more to retard the art than this misconception of ornament as architecture.

If sculpture is used at all on a building, it should be used with a definite meaning. If you look back on the history of architecture, you will find that the great periods of the art are precisely those in which sculpture has been most under restraint—Egypt and Assyria, for example, with their direct religious purpose; the Greek Temples of the finest period in which the sculpture was confined to the pediments and the metopes of the frieze, and did not invade structural members; thirteenth-century Gothic in a less degree, and in the architecture of the middle of the eighteenth century in France and England; the work for example of Chambers or the younger Gabriel. It is in the weaker and immature periods that sculpture got out of hand, breaking all measure, and degenerating into vulgarity and even nonsense.

This matter of the placing of ornament is of the first importance. Good ornament in the wrong place is worse than no ornament at all; and the architect is directly responsible for this. It is no use placing sculpture where it cannot be seen, or is seen under conditions which reverse its values, or where the space is so contracted that the sculptor has no room to let himself go. For example, the sculptor will not thank the architect if he finds the recess provided for his figure is too small, or the pedestal impossibly bad, as happened at Perpignan the other day.

Again, though it rests with the architect to allocate the work, he ought not to impose tasks on the sculptor which are wrong in principle, such as terminal figures clearly unequal to the work, or sculpture which stultifies the original intention of the architecture. The columns of the Third Temple of Artemis at Ephesus are a familiar example of fine sculpture in the wrong place, and the twisted columns of Bernini's Baldachino in S. Peter's are another instance of misapplied skill. In this matter of the determination of ornament the architect and the sculptor ought to pull together from the first, and having come to a working agreement, they have next to consider the purpose of the building and the all-important matter of scale. It is obvious that the purpose of a building, whether, for instance, it is a church or a gymnasium, must determine the general character of its decoration, and ordinary commonsense can deal with this, but the question of scale is far more difficult, and, indeed, it is in this matter of scale, more than anything else, that we are apt to go wrong. However great an artist's natural endowment, the sense of scale has to be painfully acquired by much study of buildings, and meditation on sculpture in relation to buildings; and no amount of designing on paper will build up this sense in the architect, nor will modelling in the studio, however accomplished, take its place for the sculptor. It is here that we are all so seriously handicapped by the want of tradition. Down to the end of the eighteenth century artists were saved from glaring faults by a well-recognized standard of technique and by accepted principles of design. All this was lost in the general upset of tradition, which finally crystallized in the rise of the Romantic school and the artistic anarchy that has prevailed ever since. Moreover, the training of architects, two or three generations back, had much to answer for. As a consequence of the unfortunate misconception of architecture generally known as the Gothic Revival, our attention used to be concentrated on detail, mouldings, capitals, and carvings. Nowadays the training in our schools seems to have gone to the opposite extreme, and to have become academic in the wrong sense, and, owing to a variety of reasons, there has grown up, in the last hundred years, an unfortunate division in the arts. The painter paints his easel picture, the sculptor models his figure or his bust, and the architect designs his building, each of them working in his own corner without thought or care of the other. We have among us excellent sculptors, and, may I say it, some not incompetent architects, but in our schools of art, and elsewhere the two arts are out of touch with each other, and they ought to be brought into much closer relationship than has been the case for many years. It was a fatal thing for sculpture when it left the builder's scaffold and retired into the studio, and when the architects forgot the heroic precedent of Greece. And in saying this I am not thinking of mediæval sculpture with all its rare beauty, because we at any rate can never get back to the emotional and intellectual standpoint of the Middle Ages; I have in my mind the example of two famous men, Bernini and Alfred Stevens. Bernini, both as a sculptor and as an architect, was a man of undoubted genius and profound knowledge, to whom modern sculpture, through French art, is indebted for some of its best, as well as some of its worst, qualities—its best in its freedom and revolt against pedantry, its worst in its failure in selection and constant tendency to bathos, on the one hand, and excessive emphasis on the other. Bernini prided himself on imparting the quality of painting to sculpture. In music, one has seen the disastrous result of this mixing up of the arts, and Bernini, who set himself to dissolve architecture into sculpture and to present both in terms of painting, was a pioneer on a very dangerous path.

That it is possible to *combine* architecture and sculpture with complete freedom, yet without sacrifice of the essential qualities of either of those arts, is shown by the work of Alfred Stevens. Other men may have been his equals in the technique of modelling, a very few may have possessed his immense knowledge of detail, but I doubt if any sculptor, since the greatest masters of the Renaissance, has approached him in the architectonic sense, in the power of thinking in terms of mass composition, and of sustaining his work at that high level of concentrated thought.

Stained glass occupies a curious, and in some ways anomalous, position in modern decorative art. In days when there was no printing-press, when the majority of people could neither read nor write, the glorious imagery of the windows of those great cathedrals, Chartres or Bourges, of churches such as Fairford, were as the very book of life, revelations by artists as convinced of their literal truth as were the people who worshipped below them. It was a genuine and sincere form of art. But however earnest the modern glass designer may be, it is almost impossible for him to maintain this level of complete conviction, and instead of the implicit faith on which the mediæval artist could rely, the modern artist has to reckon not with the implicit and child-like faith of a people as convinced as himself, but with a critical and even pedantic archæological opinion. There is another difficulty that he has to contend with. Unconsciously, he and the wall-painter are in direct antagonism, in that the one deprives the other of the light that is necessary for the effect of his work. It is very little use finding spaces for the wall-painter, if, as soon as he has finished his work, the light on which he reckoned is reduced by 50 per cent.; and it would seem that those who have the custody of our churches and cathedrals should make up their minds whether they want their decoration to go on their walls or in their windows.

If they elected for painted decoration on the walls they should, at least, allow the painter light enough to show his work. If they elected for windows they should limit the work on the walls to mosaics which, by the nature of their material and the necessarily abstract nature of their design and drawing, were able to tell their story in the half-light, half-shadow of a dimly lit church.

Some very beautiful modern stained glass-work has been done by English designers and craftsmen, far finer, in my opinion, and far more suitable to its purpose than any that I have seen on the Continent or elsewhere. That there is and will be a demand for it I have no doubt; all one asks of our artists in this regard is that in designing their windows they should think of them as elements in one great harmony.

Lastly, we come to the decorative painter. An architect must be allowed some voice in this matter, because after all it is his building, the creation of his brain, that is being decorated, and without his building there would be no painting at all, and the architect cannot be relegated to the position of the boy who blows the bellows. There have been, it is true, artists who have made it their business to create the illusion that there was really no building at all, and the perspective makers of the end of the seventeenth century did quite a large business in painting awkward pieces of wall to look as if they were vistas of magnificent architecture.

The interior of a building ought not to be considered as one gigantic picture; the two arts of painting and architecture are not really united when one of them has to be sacrificed entirely, and the better way is for the architect to endeavour to realize from the first the general problem of his scheme, the relation of plain to decorated surfaces, and to reserve in his design the spaces which he wishes to have painted, definitely marking these off from the constructional features of the building. Within the spaces so allocated he would leave the painter a free hand, and make no further protests on the score of illusionism.

One realizes that, in great decoration, the architect and the painter must go hand in hand, and there is one other matter in which the painter might with advantage work more closely with the architect, and that is, in the design of the architecture that he introduces into his painting.

It is sad to find imaginative visions spoilt by quite ignorant architectural drawing. Architects would readily place their technical knowledge at the disposal of their colleagues, and I suggest to students who contemplate decorative paintings that they should study the external forms of architecture more closely.

I believe it to be quite as important for architect and painter to work together in decorative schemes as it is for architect and sculptor, and I do not think our colleagues need be afraid of us. After all we are all out for the same thing, the quest of beauty, and when we architects have asked our colleagues to consider with us these points of scale, tone and character, we will wish them God-speed in their voyage to the Fortunate Isles.

We do not all live in palaces, and municipal buildings are not the only ones that cry out for decoration. There is still opportunity for decorating houses with something more interesting and individual than the latest thing in wallpaper. In the present exhibition there are some admirable examples of wall decorations designed for small interiors. I believe a future is opening out here for our painters, the signs of which are full of promise. Out of all the welter of experiment of the last twenty-five years there is emerging a definite tendency in one direction, a fresh ideal of the painter's work.

The Palace of Art is a building of many chambers, and my contention throughout has been that each of its chambers has its own appropriate treatment, waiting to be discovered by the artist, and that the right way to discover it is for the artists to come out of their hiding-holes, and to search for it together on the spot. At one time I was so fascinated by the magnificent achievement of Colbert in the reign of Louis XIV that I thought the State might organize this, but we have learnt our lesson in regard to State interference, and a very costly one it has been; and I am convinced that there are no short cuts, that if the arts are to recover their lost position it must be won back not by State organization, not even by the devoted labours of the critic and the journalist, but by the steady purpose of artists themselves. Perhaps architects have more opportunities than other artists of breaking through the cordon of the middle-men; and I would appeal to them to lose no chance of going direct to the individual artist and craftsman. It is only in this way that we can escape the insincerity of that "art by the mile," which makes some fastidious minds recoil from all idea of decorative art.

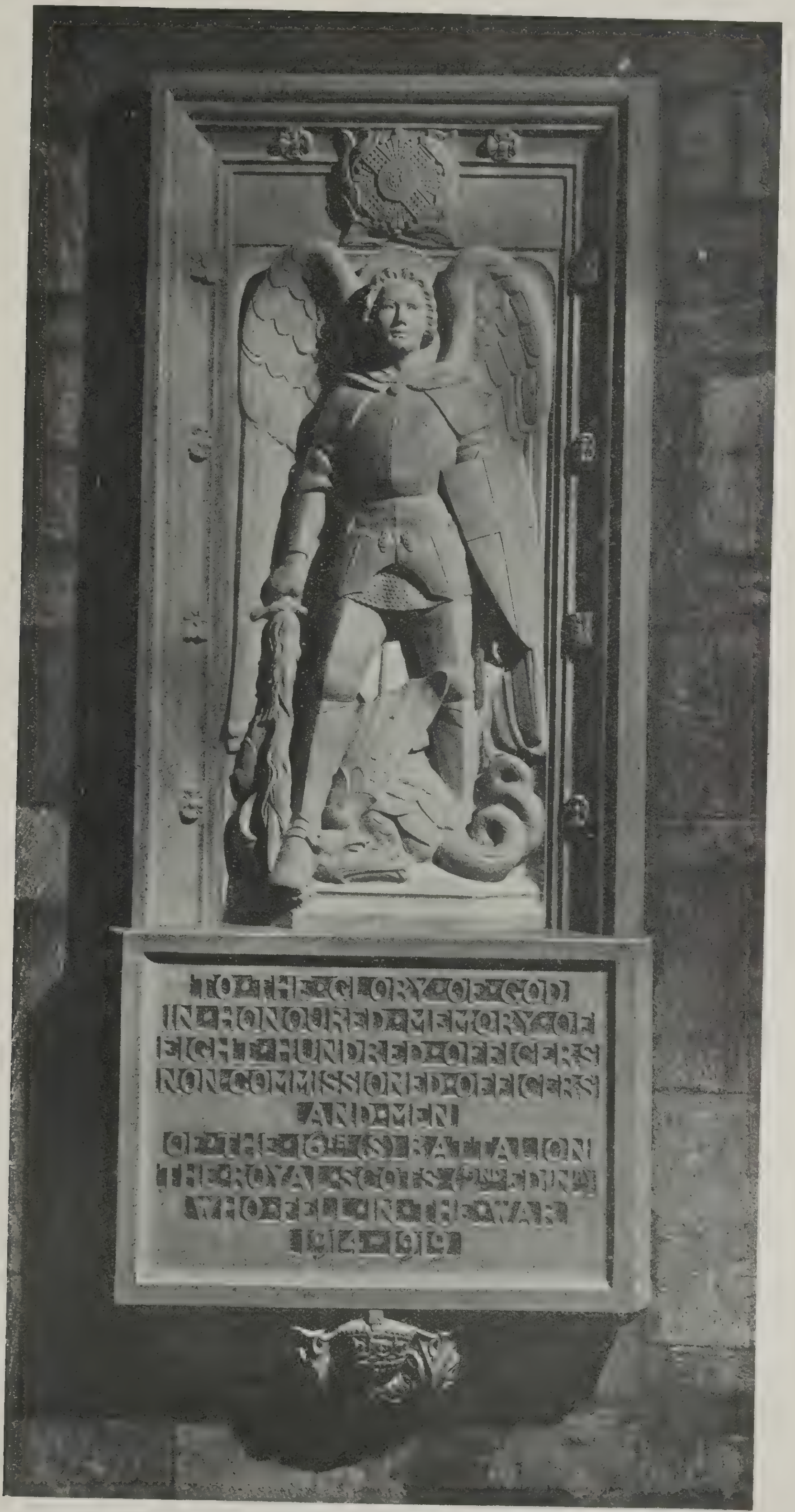
Proposing a vote of thanks to Sir Reginald Blomfield, the chairman, Sir Aston Webb, said that man had in primitive times begun by decorating first himself, then his shelters and habitations. The desire to decorate was not so marked now, but the object of the exhibition was to show how buildings and rooms could be decorated. Wren had been alive to the necessity of decorating buildings.

All the arts should associate together, and exchange of views would lead to unity of art. Students of painting might with advantage spend three months in architectural schools. The function of the arts and crafts was in part to supply articles to complete rooms and render them more beautiful.

[A critique of the Exhibition by Mr. W. W. Scott-Moncrieff begins on page 180.]

# War Memorials. 32.—The 16th Royal Scots Memorial, St. Giles Cathedral

Sir Robert Lorimer, A.R.A., R.S.A., Architect

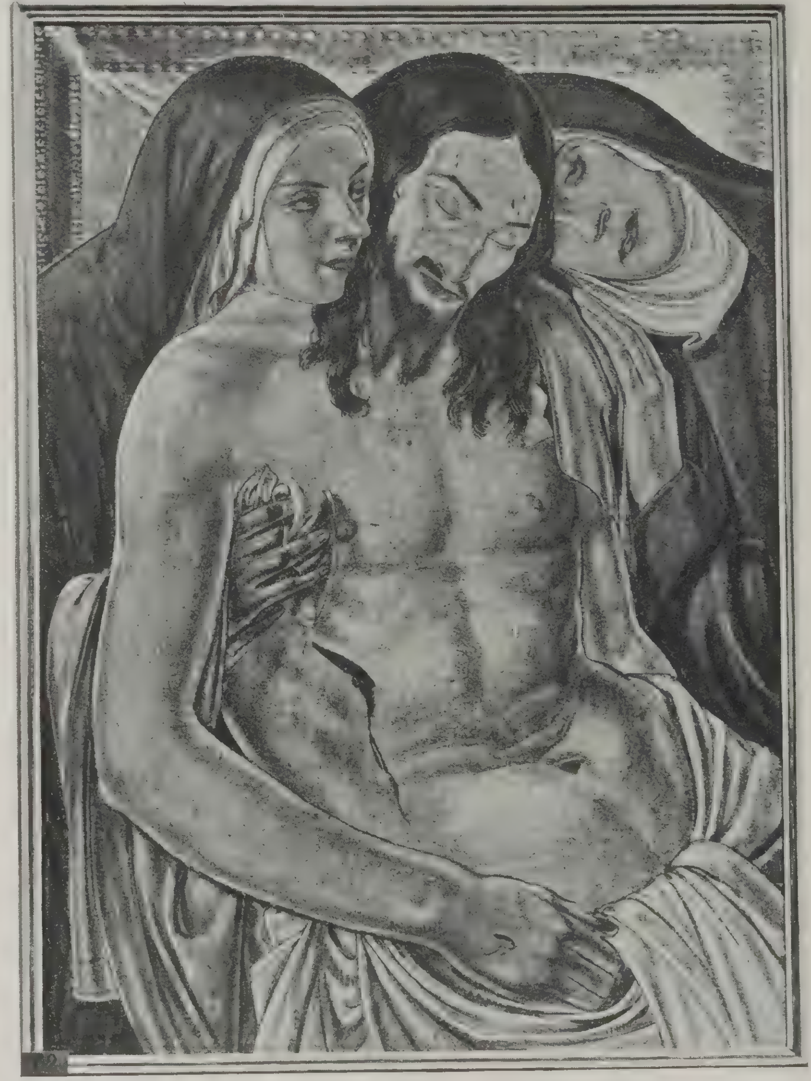


This Memorial is placed on the north wall of the Albany Aisle. It takes the form of a figure of St. Michael carved in rose-coloured limestone, surrounded by a moulded frame of Hoptonwood stone, bearing the regimental badge on the lintel, and supported by an inscribed corbel of the same material. The archangel, who symbolizes righteousness and courage, is shown advancing boldly, with wings spread, and is clad in armour. In his right hand he carries a flaming sword, on his left arm a shield blazoned with the cross, and under his feet lies the evil dragon he has slain. Mr. Pilkington Jackson, A.R.B.A., was the sculptor.

# The Royal Academy Winter Exhibition

## By W. W. SCOTT-MONCRIEFF

THIS exhibition may be considered as one of national importance, because it proves that in spite of the commercial ideal of the last eighty years there is still alive in this country the old desire and the old power to create fine things and to paint well. Now any community which attaches greater importance to the making of money than to the quality of the goods it produces is one which supports a system of dwindling wealth. Conversely, the community which holds to the ideal of the production of the finest quality of goods and workmanship is one which must build up a system of increasing wealth. To put workmanship first and profit second is to create real wealth, both mental and material, since the mind develops or degenerates according to the way in which it is occupied, and there must always be a market for the very best. To put profit first, and quality of goods and workmanship second, is to become gradually poorer and poorer, both mentally and materially; it is, in fact, to head straight for bankruptcy. It is easy to prove the truth of this. Our museums are full of the works of those whose first aim was not to make money, but to produce fine things. Those works are national assets, and if sold would probably wipe out our war debt. So valuable are they that we spend millions upon buildings to put them in, and hundreds of thousands on civil servants who keep them safe in glass cases. But these goods were not made for glass cases. They were made for use. Rich indeed was the community which used them as accessories to its daily life.



"PIETA" THE CENTRE PANEL OF A TRIPTYCH.
BY F ERNEST JACKSON.

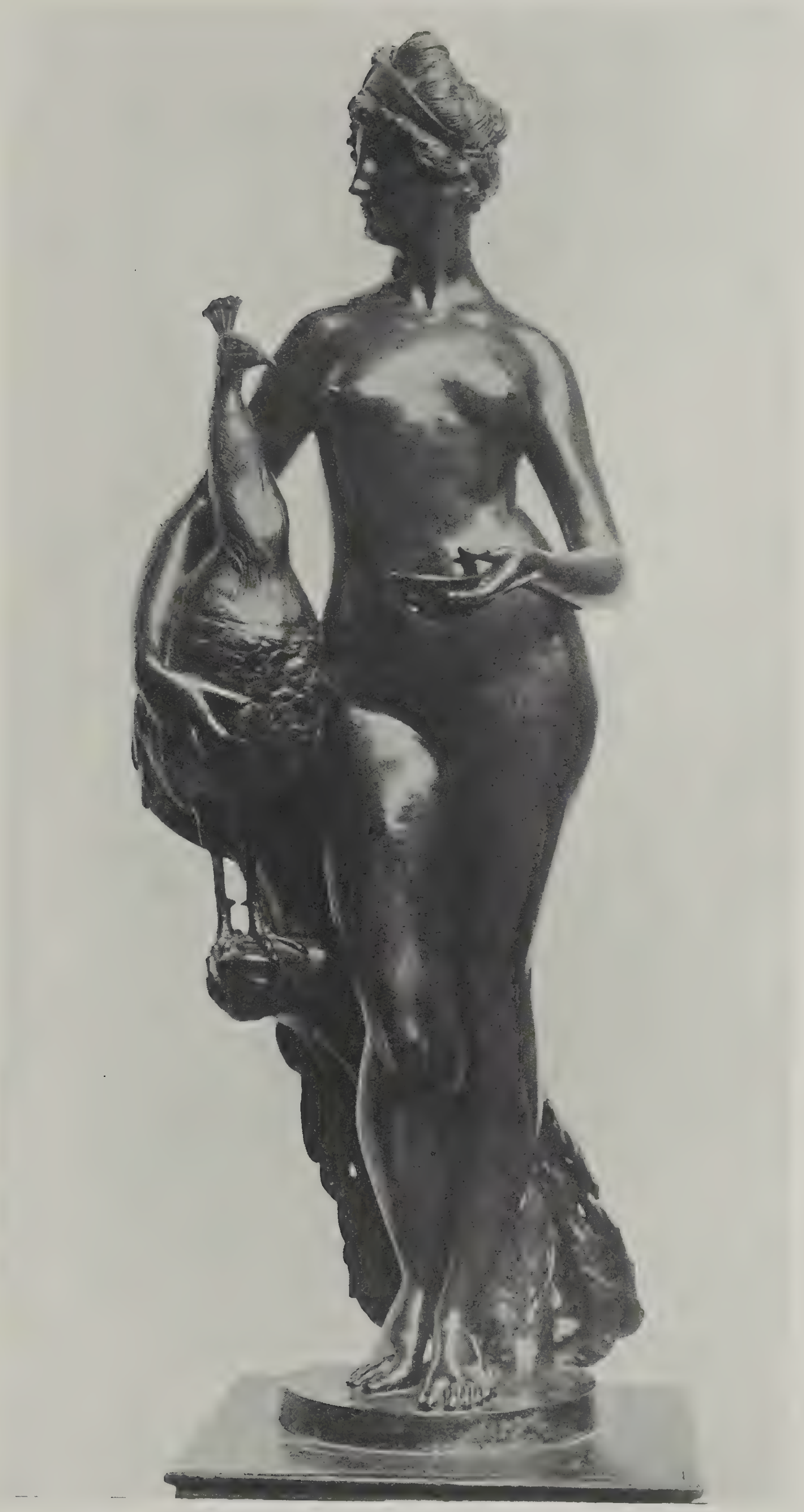
At the present moment we are a very poor country. We have a great number of unemployed, and those who are employed are busy producing in the main what either does not really matter or is rubbish. The houses we are building now are skimpy and mean, and, except for antiques, are filled with rubbish. Our food is manufactured in factories, and were it not for the law, would probably be poisonous. Our things are gimcrack and our ideas tawdry. In attempting to gain the world we are losing our soul.

Professor W. R. Lethaby, who is a prophet not without honour save in his own country, has defined art as "thoughtful workmanship." This is such an obviously true definition, and one which must have been held in every age and in every climate until the last hundred years, that one marvels how it is that the popular conception of art ever came to be twisted into meaning easel picture painting or so utterly divorced from life. Even now in this so-called civilization if you mention the word "art" to the ordinary intelligent *educated* man, he will immediately think of strange beings described in novels which he has read, who are members of a mysterious priesthood and who, in moments of inspiration, apply oils to canvas to get an "effect." In any case, art to him is something quite outside his ken, and has nothing whatever to do with his life.

It is to be hoped that the Royal Academy now sees the error of its way, for if it has not deliberately encouraged the doctrine that art is *really* easel picture painting—plus a little sculpture and still less architecture and nothing of anything else—it has certainly taken no steps, until the present moment, and for one briefer moment in 1916, to encourage the belief that art is the fine development of the creative spirit of man to the end that life may be made great, beautiful, and precious. Art is, in fact, not easel picture painting in particular, nor architecture in particular, nor sculpture, nor any particular art or craft; it is all these members combined to function as a complete body. This is the doctrine which must be preached and which must be accepted as a national belief. It is even a question for the consideration of Parliament and for our Education Ministry. Until this doctrine is accepted we shall, as a nation, continue to wallow in every conceivable form of vulgarity; we shall continue to struggle in the lower strata of competition among the rubbish markets and our minds will tend to be more and more rubbishy, and, morally and materially, we shall decline.

Where would the Greeks have landed themselves had the national belief been that art was something to be surrounded with a gilt frame and sent annually to a temple? But let us praise where praise is due. The Royal Academy has at last taken a step forward, and it is to be congratulated.

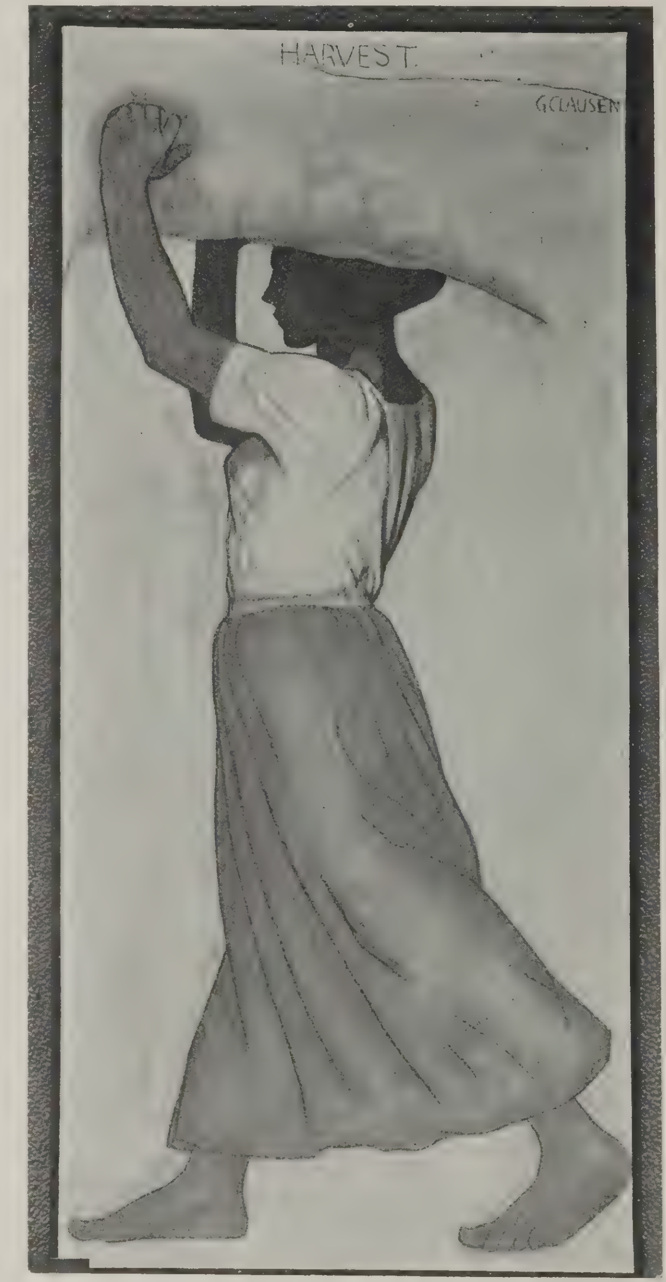
It is important to understand that although the exhibi-



"JUNO," A BRONZE NICHE FIGURE. BY F. DERWENT WOOD, R.A.
*(The Royal Academy Winter Exhibition.)*

tion as a whole has been arranged by the Royal Academy, it may be divided into two distinct parts. Galleries 1, 2, 3, 4, 5, and 6, with Central Hall and Vestibule are mainly devoted to decorative painting and sculpture arranged by the R.A., while galleries 7, 8, 9, 10, 11, and the little Architectural Room are devoted to exhibits of the Arts and Crafts Society, and have been arranged by them.

Let us enter the Vestibule and turn to the left to consider that part of the exhibition arranged by the R.A.; but before we begin, allow a short foreword upon decorative painting.



"HARVEST."
FROM A WORKING CARTOON BY GEORGE CLAUSEN, R.A.

Those of us who have been to the Pantheon in Paris and have seen the work of Puvis de Chavannes and Jean Paul Laurens will have seen examples of two great modern decorative painters. Of these two Puvis de Chavannes is undoubtedly the greater master. His work is part of the wall surface. It is of the same general tonality as the surrounding tone of the architecture, which is of natural light-coloured stone. His third dimensions or "recessions" are expressed by perspective lines. Except for an early work on the wall of the right aisle, there are no spots; there are no "holes" in the wall. The subjects treated lie flat upon the surface. They are not "views" or "scenes" framed with architectural mouldings. They form part of an harmonious and continuous scheme. His themes are strangely dignified and simple, and we follow the idyllic trend of his mind with instant sympathy and appreciation. They are the works of a master mind. Now, Jean Paul Laurens was of the opposite school. His work is of the realistic order. He makes "holes" in the wall. There are great masses of "darks," even "blacks," which alter the whole tone key of the wall surfaces, and although in themselves they show the highest achievement in a certain kind of technique, in our opinion they fail as decorations because they are not of the same tone as the architecture; they are not part of the architectural theme, but pictures painted on the wall. It is with the works of these men in our mind that we pass in review what is shown at this exhibition.

No. 71, "The Ancient Arts"—lunette painted in wax medium, by George Clausen, R.A., is even and light in tone, and is evidently designed as part of an architectural scheme. His working cartoons for the decoration of a hall, designed by Mr. Sellers, are quite beautiful. Mr. Clausen may not be a great draughtsman in a technical sense, but he has the same sympathy for labour as Jean François Millet, and he carries us to an idyllic country, which only the true artist mind could portray. Particularly beautiful is the female figure for "Harvest" (151). There are photographs and small scale drawings giving an idea of the whole scheme and which show clearly what a wide field is open to us if we go to the right men for mural decoration.

"Crafts" (116), by Charles Sims, R.A., and assistants, would doubtless harmonize with architecture of a baroque kind, but the modelling appears to us to have a photographic effect and seems a little feeble and indefinite in drawing. His types are those of very ordinary men and women—even a little common—but the whole lies flat on the wall, except for the doubtful introduction of black into the tone scheme. It is, of course, difficult to say how much of the work is due to Mr. Sims and how much to his four assistants—all of whom are women.

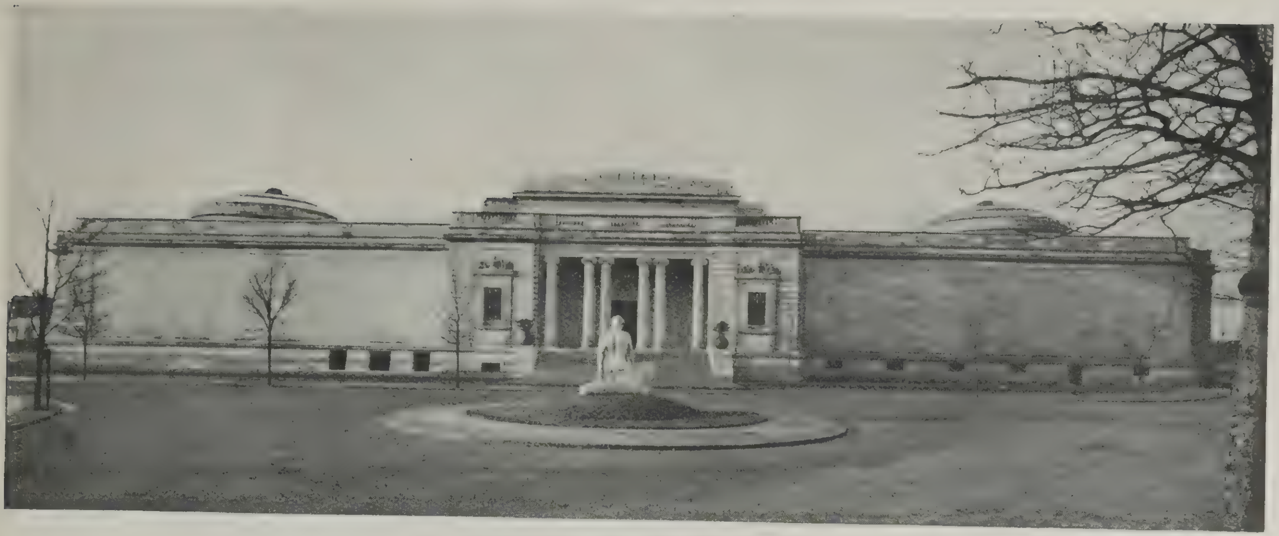
"Eve" (54)—painting in true fresco, by F. Ernest Jackson, is the finest fresco in the exhibition, and his "Pietà" (62)—central panel of triptych (incomplete), is a work of the highest order. It is a tempera painting on gesso over canvas, and represents the body of a Christ of character, supported by the two Marys. The three heads are silhouetted against a background of burnished and patterned gold. Mr. Jackson has a mind of delicate sensibility, for it will be noticed that the hands of the women supporting the dead Christ do not actually touch the body, but hold it with a piece of fine cloth upon which a suggestion of gold is introduced to indicate its precious character. This painting is a fine thing. It is drawn in a masterly fashion. There is a flowing harmony in the lines of the draperies, and its craftsmanship is excellent.

"The Night Passeth, the Day Cometh" (88), by Harry Morley, is more of an easel picture than a decorative painting, but it is worth close study as well for the contrasted movement of the two planes of figures as for the sentiment expressed.

"Sacrifice" and "Remembrance" (168 and 178 respectively) are rather poor examples of decorative painting by Mr. Frank O. Salisbury. These lunettes are destined for Liverpool Town Hall as part of a war memorial.

One regrets that Mr. Frank Brangwyn, perhaps the only living British artist who has devoted himself extensively to the decoration of public and private buildings (examples of his work are to be found in the Royal Exchange, London; Christ's Hospital, Horsham; and as far afield as Canada and Africa), does not exhibit anything. Without him, the exhibition is strikingly incomplete. No other artist in this country has achieved as much as has Mr. Brangwyn: none has attempted as much. In the hands of such a painter, decorative art in England has been brought definitely into the front rank, and in him we, and even more so the Latins, are prepared to recognize a master.

(*To be concluded.*)



THE EAST ELEVATION.

# The Lady Lever Art Gallery, Port Sunlight

WILLIAM and SEGAR OWEN, Architects

THIS building stands in the village of Port Sunlight, Cheshire, and has been erected by the Viscount Leverhulme to the memory of his wife, who died in July, 1913.

The foundation stone was laid by His Majesty King ieorge V on March 25, 1914, and the opening ceremony 'as performed by H.R.H. Princess Beatrice on Decem- er 16, 1922.

The gallery will house a nucleus of Lord Leverhulme's ollections of painting, sculpture, furniture, and china, and r that purpose comprises several types of rooms for their isplay. The general over-all measurements of the building 'e 330 ft. from north to south, and 140 ft. from east to est.

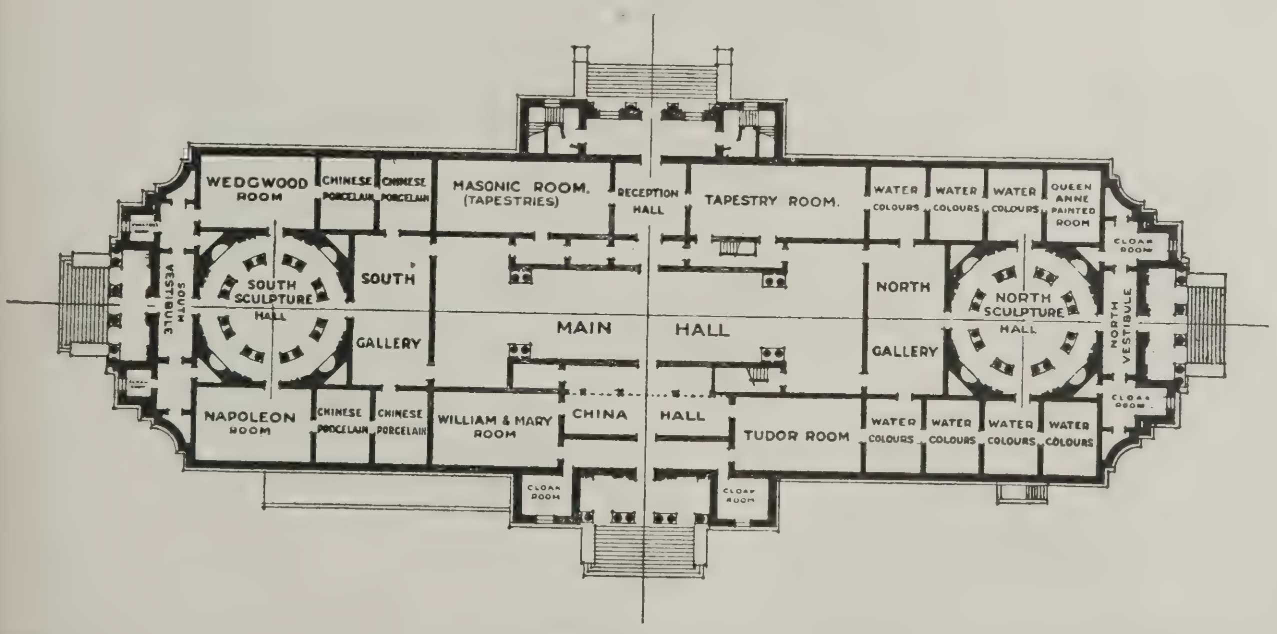
Four entrances give access to the galleries. That to be sed daily by the public being to the south; that to the est, on the occasion of special gatherings and entertain- ents; the north and east, although following the design id treatment of the others, being used mostly for the nvenience of the staff.

The galleries, generally speaking, are arranged around the central hall and the north and south sculpture halls, and include on the north-east side four small period galleries, the Tudor room and china hall, on the south-east the William and Mary room, china and Napoleon galleries; south-west side Wedgwood rooms, china galleries, and masonic hall; north-west tapestry room, four small picture galleries, and Kent room.

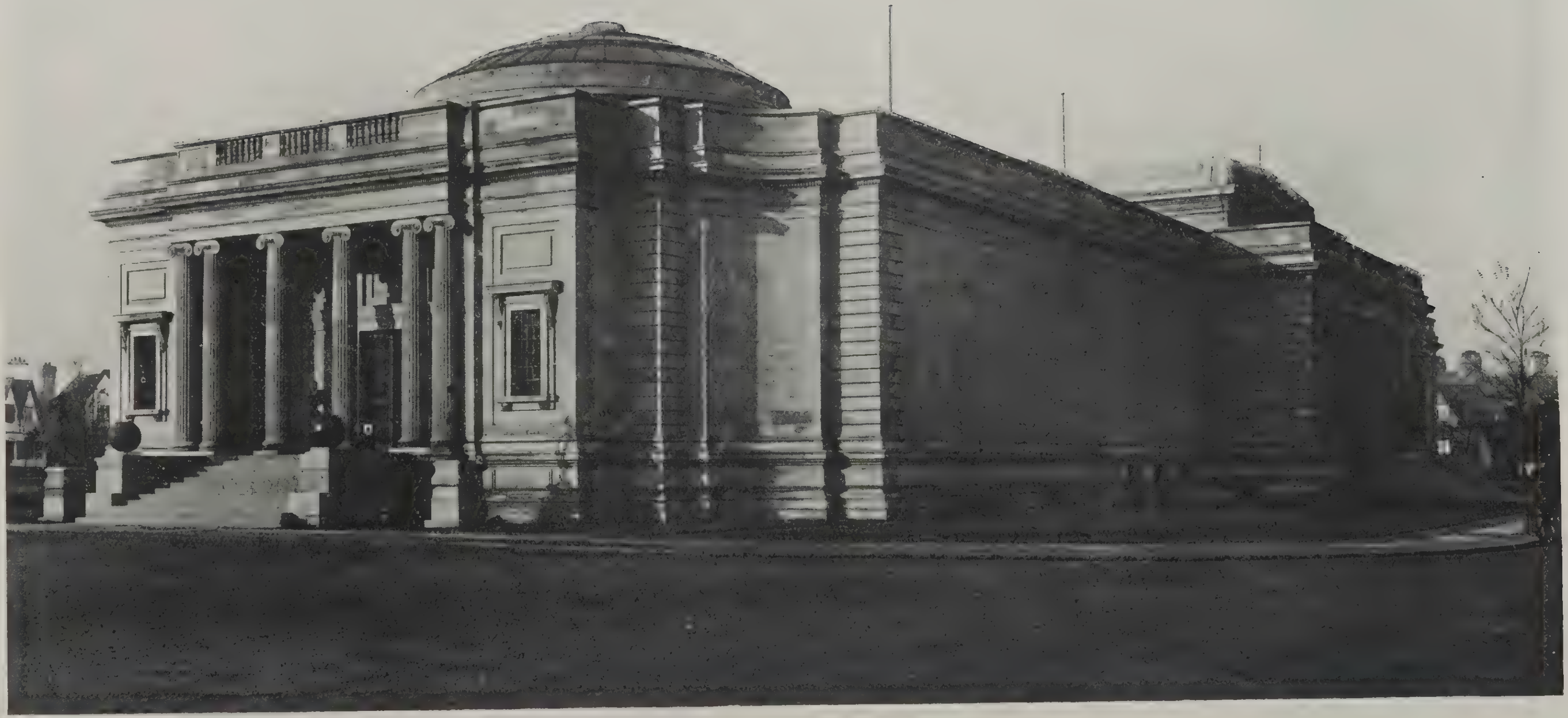
The sculpture halls are circular in plan, 42 ft. in diameter, the colonnade of twin columns carrying a domed light. North and south these lead into two galleries 42 ft. long and 22 ft. wide, and the space between these rooms is occupied by a large central hall 129 ft. long, of a central width of 25 ft., with galleries east and west on the higher level, the end portion having a width of 42 ft.

The reception hall to the west is 24 ft. 3 in. square, having a domed ceiling, and on the north leads to the tapestry room 46 ft. long by 21 ft. wide, and on the south to the masonic room, of equal size.

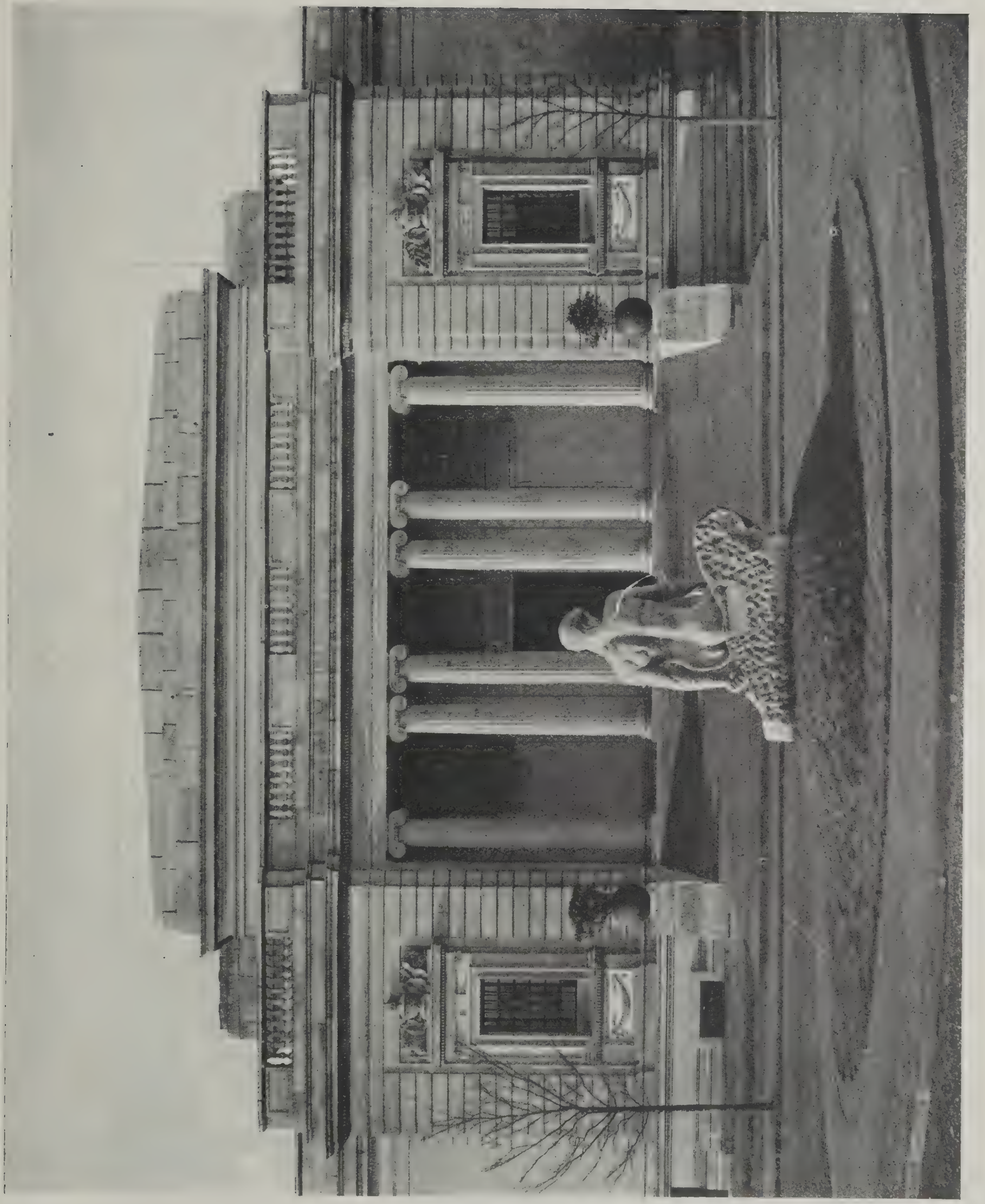
The four series of smaller galleries in which are displayed pictures, china, and furniture of different periods, are 21 ft. by 15 ft. 6 in.



PLAN OF THE GALLERY.

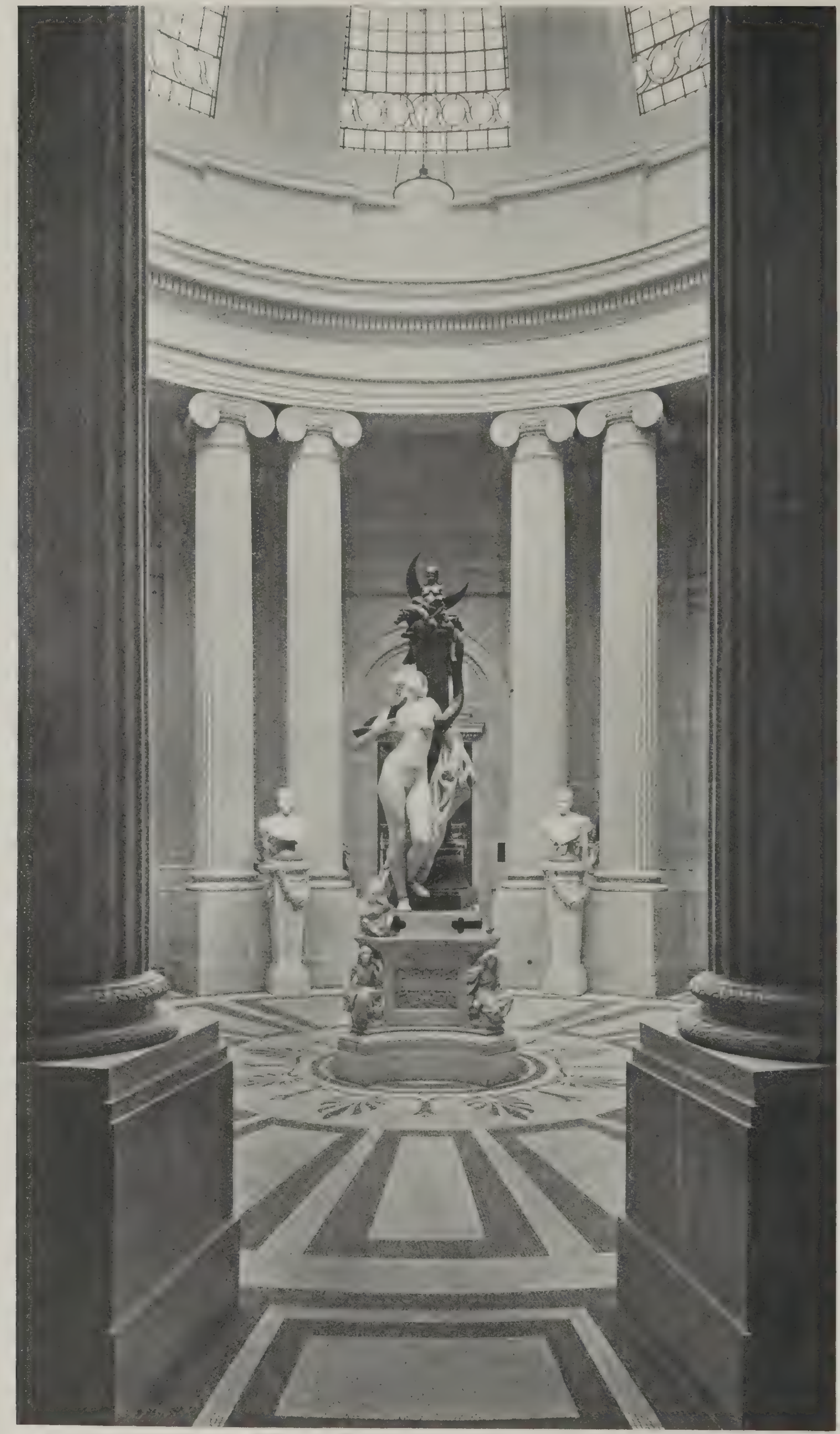


THE LADY LEVER ART GALLERY, PORT SUNLIGHT: A VIEW FROM THE SOUTH-EAST
WILLIAM AND SEGAR OWEN, ARCHITECTS.



THE LADY LEVER ART GALLERY, PORT SUNLIGHT: THE EAST ENTRANCE.

WILLIAM AND SEGAR OWEN, ARCHITECTS.



THE LADY LEVER ART GALLERY, PORT SUNLIGHT: THE SOUTH SCULPTURE HALL.
WILLIAM AND SEGAR OWEN, ARCHITECTS.

The vestibule on the west side gives entrance to the usual retiring rooms, also the masonic banqueting room.

The above accommodation is on one level, which is reached from the roadway by four flights of steps. The raising of the structure in this way gives height for a semi-basement throughout the length of the entire building, providing accommodation for the storage of furniture, chairs, tables, pictures, books, etc., and also provides for banqueting hall, general kitchen accommodation, serveries, etc., heating apparatus, attendants' general stores, and retiring rooms for visitors.

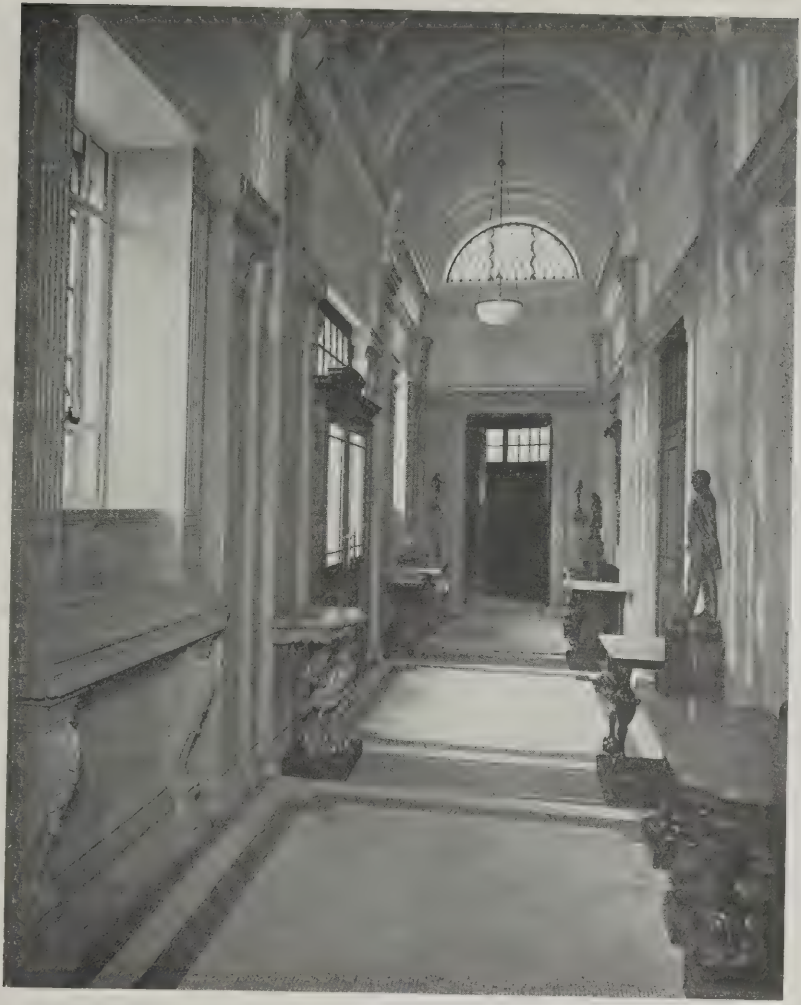
All galleries are lighted from the top—this has enabled the architects to leave the main walls unbroken, giving an effect of quiet dignity and strength, both qualities required in a building which is to house works of art.

The main walls are relieved by the four entrances which are detailed in happy relief to their quiet background. The carving on these features is indicative of the purpose of the building.

The domes of the sculpture halls rise above the entrances at either end, and in the centre the high wall protecting the large central gallery groups with and gives importance to the side entrances.

The Kent room, Tudor room, and William and Mary room are panelled in oakwork of the respective periods, and the Napoleon room is a reproduction of decorations as found at Malmaison. The general interior decoration of the walls of the greater number of galleries is a dull black paint, others are treated as walnut, the china galleries with silk hangings immediately behind the cabinet cases.

The walls of the reception hall and central hall are finished with a pilaster and panelled treatment in plaster. The sculpture halls are finished in French stuc plaster, and all vestibule walls in Hopton stone. The gallery floors are laid with oak blocks brought to a dull dark tone.



THE WEST VESTIBULE.

All the fibrous plasterwork is fixed entirely without wood bracketing to the ferro-concrete walls, ceilings, and beams. Even the picture mouldings are ferro-concrete, faced with Keene's cement, and tested to carry 10 cwts. to each picture hook.

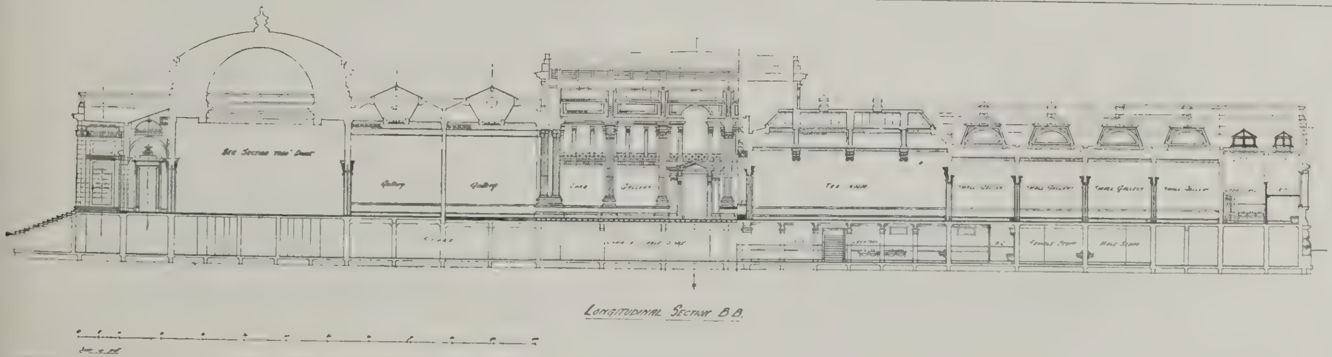
## The Collections

In addition to the collections of tapestries, oil paintings and watercolours, the collection of Chinese pottery and porcelain has been described by experts as unique. In Wedgwood, too, a collection has been assembled of great variety and completeness.

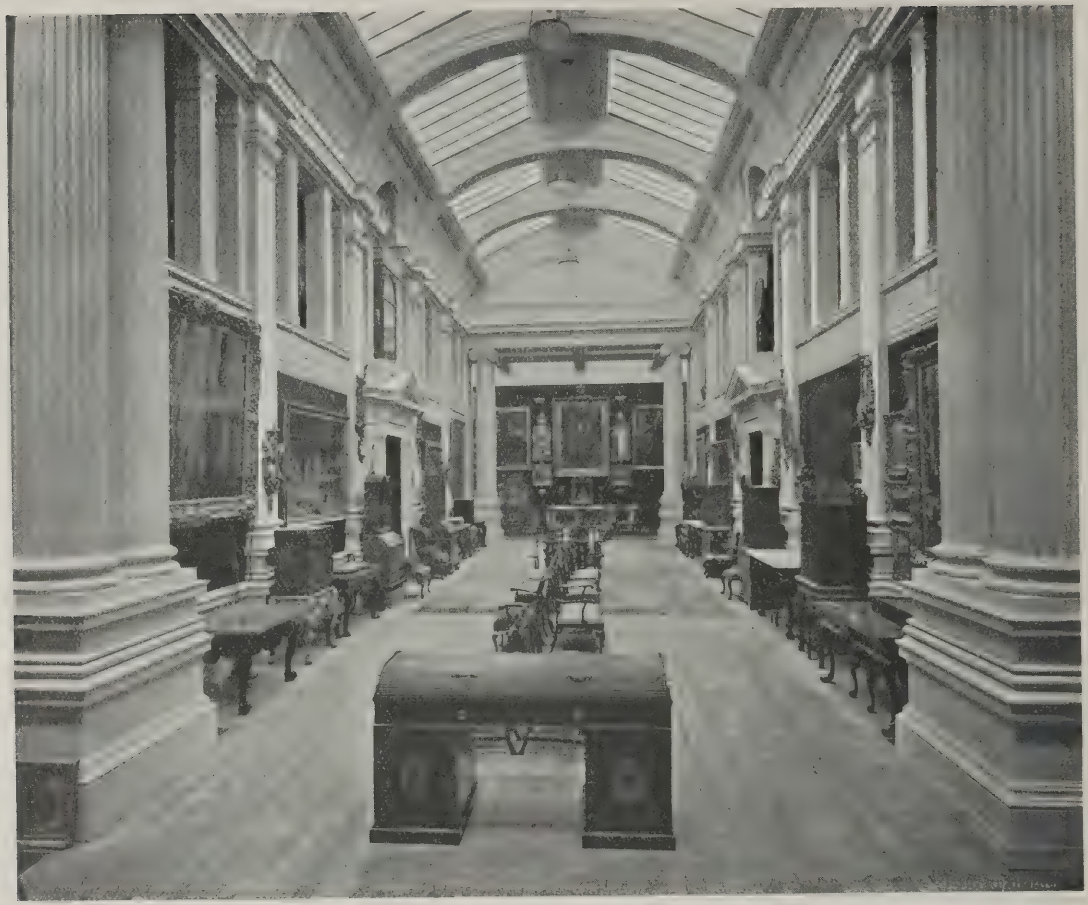
Furniture is represented by the craftsmanship of all the great makers—the Chippendales, Robert and James Adam, Heppelwhite, and Sheraton. The tastes in art of different periods are represented in the Tudor Room, the William and Mary room, the Queen Anne painted room, and the Napoleon room, which is painted and stencilled in the manner of a room at Malmaison.

Sculpture is represented in two domed halls, the northern of which is devoted to the antique. In the southern hall is displayed work by Sir Francis Chantrey, Sir W. Goscombe John, Bertram Mackennal, F. Derwent Wood, W. Reynolds-Stephens, and E. Onslow Ford.

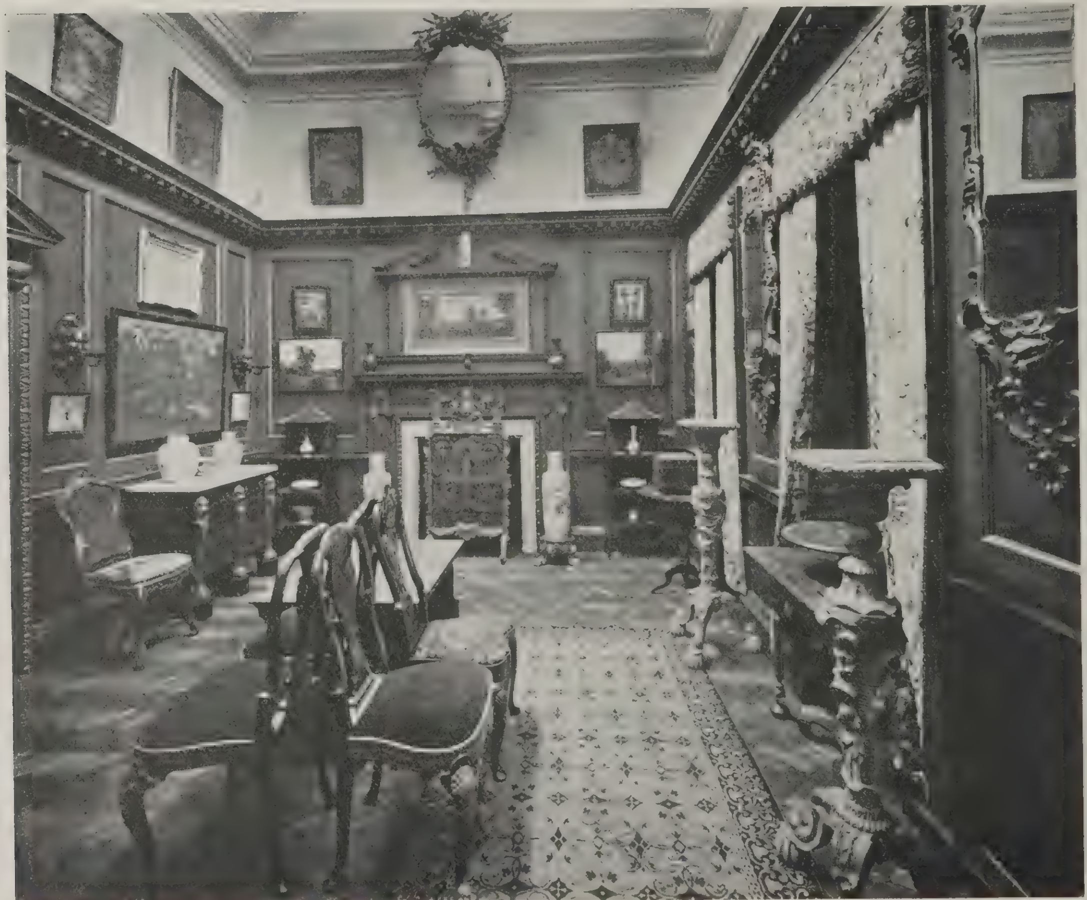
The foundation work and general wall construction was carried out by the British Reinforced Concrete Company; the contractors for the general trades being the Bromboro' Port Construction Company (Messrs. Lever Brothers Building Dept.), who employed as sub-contractors: Messrs. Byrom (masonry); the late J. J. Millson, Manchester, and Messrs. Earp Hobbs and Miller, Manchester (carvers); Messrs. J. B. Johnson & Co., Crown St., Liverpool (plaster work); Messrs. Williams Gamon & Co. Ltd., Chester (glass and metal work); Messrs. C. W. Williams & Co., Manchester (mosaic and marble work); Messrs. Lever Brothers Electrical Department (electric lighting); Messrs. Killick and Cochran, Liverpool (heating, hot water, and cooking apparatus). The ground around the building, and roads adjoining same, were carried out by the Estate Department.



THE LADY LEVER ART GALLERY, PORT SUNLIGHT: LONGITUDINAL SECTION.
WILLIAM AND SEGAR OWEN, ARCHITECTS



THE CENTRAL HALL.



THE KENT ROOM.

THE LADY LEVER ART GALLERY, PORT SUNLIGHT.
WILLIAM AND SEGAR OWEN, ARCHITECTS.

# The Draft Registration Bill

ON Monday next at 5 p.m. a special general meeting of the R.I.B.A. is to be held to consider the Draft Bill for the Registration of Architects, which has been prepared by the Registration Committee and approved by the Council. The Act, the short title of which is cited as the Architects' (Registration) Act, 1923, will operate in England, Wales, and Scotland, and will empower the Council to keep and publish a "Register of Architects."

Appended are some of the more important provisions of the Act :—

The Board which shall be appointed immediately after the passing of this Act shall consist of the following (that is to say) :—

A person nominated by the Privy Council; a person nominated by the Board of Trade; a person nominated by the Board of Education.

The president and fourteen members of the Council nominated from time to time by the Council of the Institute.

The president and two members of the Council of the Society of Architects being architects nominated by the president of that Council.

The president or a member of the Council of the Incorporation of Architects in Scotland being an architect nominated by the president of that Council.

Eight persons being architects nominated by a conference of presidents of the allied societies of the Institute.

A person being an architect nominated by the president of the Architectural Association of London.

A person being an architect nominated by the president of the Royal Academy.

Ten members of the Board of Architectural Education of the Royal Institute of British Architects, nominated by the Board of Architectural Education.

A person nominated in rotation by the governing body of each university in the United Kingdom possessing a recognized school of architecture, the order of rotation being based upon the date of the foundation of such school and subsequently by such machinery as the Board shall set up. The total number not to exceed five.

The appointments to be made annually, members to be eligible for re-election.

Where the word architect occurs in this clause it shall mean a practising architect.

After considering the advice of the Board mentioned in Section 3 of this Act and also subject to the provisions of this Act the Council shall from time to time fix the qualifications for and hold examinations for the purpose of enabling persons to qualify for registration under this Act and the Council may subject as aforesaid fix and take such fees as the Council shall consider to be reasonable for candidates for any such examination and such annual registration fees as the Council shall consider to be reasonable and the Council may provide that such degrees or diplomas of Corporations or bodies (other than the Institute) as the Council may by regulations determine shall subject to such regulations be wholly or in part a qualification for registration under this Act.

5 (1). The following persons being British subjects shall subject to the approval of the Tribunal or, when it ceases to exist, of the Council be entitled to be registered in the register (that is to say) :—

(A) All persons who are in "bona fide" practice as architects at the time of the passing of this Act, or who have been in "bona fide" practice at any time within five years previous to the passing of this Act.

(B) All persons who have been "bona fide" architectural assistants for a period of five years previous to the passing of this Act.

(C) Every person who shall within three years from the passing of this Act apply to the Council to be registered and who shall satisfy the Tribunal that for the period of five years next before the passing thereof and thence up to the time of his applying to be registered he has (except during such time (if any) as he may have been serving in the Forces of the Crown or engaged on national service) either been continuously (providing he satisfies the Tribunal) :—

(i) In part in practice on his own account as an architect and in other part in a responsible position as a "bona fide" architectural assistant to an architect; or

(ii) In a responsible position as a "bona fide" architects' assistant to an architect.

(D) Subject to the intentions of this Act every person being a British subject who may hereafter be declared by the Tribunal, or, when it ceases to exist, by the Council to be entitled to be registered in the register.

(2) Subject to the provisions of this Act the Council shall forthwith cause to be entered in the register the name regular business address and qualifications or principal qualification or qualifications of every person who is a corporate Member or Licentiate or who shall hereafter become a corporate Member of the Institute or who is entitled to be registered therein under the provisions of this Act or who shall be hereafter declared by the Council to be entitled to be registered in the register.

For the purpose of dealing with applications for registration under this Act there shall be a Tribunal which shall have power to reject any application consisting of the following (that is to say) :—

A person nominated by the Privy Council.

A person nominated by the Board of Trade.

A person nominated by the Board of Education.

The president and ten members of the Council nominated from time to time by the Council of the Institute.

Four members of the Board of Architectural Education of the Institute nominated by the Council of the Institute.

The president and two members of the Council of the Society of Architects nominated by the president of that Society, the persons to be architects.

The president or a member of the Council of the Incorporation of Architects in Scotland nominated by the president of that Corporation, the person to be an architect.

Four persons being architects nominated by a conference of presidents of the allied societies.

Where the word architect occurs in the above clause it shall mean a practising architect.

For the purpose only of hearing any application for registration by a member of a society of association of architects existing at the passing of this Act and not being any Institution herein before in this section mentioned the president of or a person nominated by the president of such society or association being an architect shall be an additional and temporary member of the Tribunal.

The Council shall within two months after the passing of this Act request the Privy Council, the Board of Trade, the Board of Education, the presidents of the Society of Architects, the Incorporation of Architects in Scotland, and a conference of presidents of the allied societies to appoint the members of the Tribunal whom they are entitled to appoint under this Act and the Council shall from time to time as occasion may require cause the president of any other society or association of architects who may be entitled to act as or to appoint a member of the Tribunal for the consideration of any particular application to be requested to so act or to appoint and the Council shall take any other steps which they may consider desirable to secure the formation of the Tribunal as soon as may be after the passing of this Act.

It shall be the duty of the Council to summon the members of the Tribunal as occasion may require and to refer to them all applications for registration under paragraphs (B) and (C) of sub-section (1) of the section 5 of this Act.

The Council shall cause any entries to be made in the register which may be necessary to give effect to any decisions of the Tribunal or any such application.

The Tribunal shall charge such fees as may be necessary to cover the expense of its work.

Any member of the Tribunal may be removed therefrom by the body or person appointing such member thereon and any such body or person may appoint another member of the Tribunal in the place of any member appointed by them or him who may die, resign or cease from any other cause to be a member of the Tribunal.

Eight members of the Tribunal shall constitute a quorum and may act notwithstanding any neglect or failure to appoint any other member or members of or any vacancy on the Tribunal and the decision of the Tribunal on any application referred to them under this Act shall be final and conclusive and that notwithstanding any informality or defect in the appointment of any of the members of the Tribunal.

The Tribunal may regulate their own procedure and proper records shall be kept of the proceedings of the Tribunal.

Four years after the passing of this Act the Tribunal shall be wound up and its powers cease.

The Council shall not permit the name of any person who has been convicted of felony to be entered in the register and shall cause to be struck off the register the name of any registered person who shall be convicted of felony* and the Council may refuse to allow the registration of any person or may cause to be struck off the register the name of any registered person who shall after due enquiry be judged by the Council to have been guilty of grave professional misconduct. The Council may also cause to be removed from the register the name of any person who has been declared by a competent court to be a lunatic. The Council shall have the power to suspend any person from the register for any stated time or to reinstate any person who has been removed from the register.

After the expiration of one year from the passing of this Act no person who is registered thereunder shall practise as an architect under the style of an architect or under any style containing the words "Architect," "Architecture," or "Architectural" in partnership or association with or as an employé of any person who is not so registered, but this clause shall not apply to any registered architect who is or may be in partnership with any person or persons following the profession of surveyor or engineer who is a member of The Surveyors' Institution, the Institution of Civil Engineers, and is not engaged in trade and who is approved by the board.

From and after the expiration of three years from the passing of this Act any unregistered person or persons, associations, or companies, who shall wilfully practise as an architect under the style of "Architect" or under any style containing the words "Architect," "Architecture," or "Architectural" shall be liable on summary conviction for each offence to a penalty not exceeding fifty pounds for a first offence and one hundred pounds for any subsequent offence.

After the expiration of three years from the passing of this Act no certificate required to be given by an architect in his professional capacity shall be valid unless the person giving the same is registered under this Act.

After the expiration of three years from the passing of this Act no person shall be entitled to recover any charge in any court of law for any professional services rendered as an architect unless he is registered under this Act.

The fees or charges charged and taken in respect of examinations held under this Act and in respect of entries on the register thereunder and the sale of copies of the register shall as far as possible be not more than are sufficient to meet the expenses of the Council in the execution of this Act.

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The following article appeared in "The Observer" :—

A committee of the Royal Institute of British Architects have published in their official journal a draft Registration Bill to be presented to Parliament next month. The main object of this Bill is to place the profession of architecture on the same standing as doctors and lawyers by entering upon a register the names of architects who have fulfilled certain conditions.

The proposals put forward by the committee will certainly not obtain the unanimous support of the architectural profession. In fact, they represent the views of a small minority of the R.I.B.A., and some of the most prominent and farsighted of their colleagues consider that the proposal is preposterous which makes the Institute the sole and final authority for deciding whether architects have the qualifications that entitle them to be placed on the suggested register. Any such final authority would have to be supported by all the architectural societies, and apparently the committee responsible for this latest Bill have not troubled to obtain unity in their own profession before launching their project. There are at least 2,000 architects in allied societies who are not members of the R.I.B.A. The views of such an influential body as the Society of Architects were bluntly expressed at a recent meeting, and it was made clear that there is deep cleavage between the two principal architectural societies in this country.

Until there is unity within, it is vain to expect that Parliament will agree to a Registration Bill. If it was an agreed measure, there might be some slight chance on a private members' day. But if Members of Parliament are faced with a number of protests from other architectural societies putting forward different claims from those set up by the R.I.B.A., it is inevitable that they will reply that the architectural profession must make up its own mind before it comes to the House of Commons.

In fact, the whole question of registration is allied with that of unification. So long as architects are engaged in fratricidal conflicts they cannot expect Parliament to sanction proposals made by only one section of the profession. The abortive efforts of the past eighteen years ought to have impressed this truth upon the committee responsible for the proposed legislation. Ever since 1905 the R.I.B.A. has been pledged to a policy of statutory registration, and the professional societies generally have expressed their anxiety to further this policy. In July, 1920, a committee of sixty-six members, the most completely representative body of architects of the Empire that has ever come together, began their study of the subject.

Eventually two statements were issued, as a result of a meeting of the committee, which was attended by less than 50 per cent. of the members. The majority statement was to the effect that the interests of the profession would be best served by the grouping of architects into a organic whole under the name of the Institute, but insisted that unification should come before registration. The statement of the minority was to the effect that registration should be obtained first and it was hoped that afterwards the profession would then be unified. The present Bill represents the views of the minority.

In this particular case a further mistake has been made owing to the fact that apparently the committee has not officially consulted either surveyors or engineers, two professions vitally interested in building. To ignore these two classes of professional men was to invite disaster. It may, in fact, be taken for granted that the Bill now published will arouse strong protests from those interested in these matters.

Mr. McArthur Butler, the secretary of the Society of Architects, in a letter published in "The Morning Post" on January 18, says :—

"In your issue of January 15 there is a reference to the R.I.B.A. registration proposals, which it is suggested mean a cleavage in the profession, and it is stated that the history of the proceedings dates from 1905. That may be so so far as the R.I.B.A. is concerned, but the history of the registration movement is that the Society was founded in 1884 for the purpose of obtaining statutory registration of architects, and has from time to time presented Bills in Parliament to that end. While the Society has not yet succeeded in placing a Registration Act upon the Statute Book, its persistent efforts resulted years ago in consolidating professional opinion in favour of the principle of registration, and in 1905 the R.I.B.A., hitherto in antagonism, could no longer resist the pressure, and was converted. In 1911 the Council of the R.I.B.A. approached the Society with a suggestion for amalgamation, and the Society, in redemption of its frequently expressed offer to stand aside if the Institute would seriously tackle the problem, agreed, and was on the eve of dissolution, when the Institute Council discovered that it had not the power to enter into the proposed agreement."

Mr. Butler then proceeds to give some details of the history of the Unification and Registration Committee since its formation in 1920, and says: "The activities of the minority were reflected in the Institute Council elections of June, 1922, when practically the whole of the old Council were turned out, and one of the first acts of the new body was to pass a resolution purporting to dissolve the Unification and Registration Committee and to disband its members, although the committee has not yet completed the work with which it was entrusted on behalf of the whole profession.

"Many of us think and hope that a way may be found out of the present difficulty and that we may accomplish by joint action that which cannot possibly be undertaken successfully by separate units. This would not necessarily entail the absorption of one body by the other. Registration could in my opinion be accomplished very much more quickly and effectively if the whole of the architectural bodies were united in a federation for the promotion of statutory registration, each retaining its autonomy in other matters. This was the proposal which I made before the Unification Committee was constituted, and which I was afterwards asked to elaborate. The majority of the committee, however, preferred a scheme for bringing all architects into one body as a preliminary to registration, and for the sake of unity the Society threw in its lot with the majority although it foresaw from past experience that negotiations on these lines would inevitably result in the situation which has arisen.

"Any cleavage, therefore, is not between the Society and the Institute, but between the Institute's own members, a domestic difference in which the Society is not concerned, but which it greatly deplores as a hindrance to unity of action."

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* The Parliamentary draftsman to advise on the inclusion of "misdemeanour."

# Types and Materials of Houses in England

## By HARRY BATSFORD

MR. HARRY BATSFORD read the following paper before a meeting of the Geographical Association:

At the outset we have to decide whether we will follow in the main a time or place classification. This is a distinction which is always cropping up, and I think you will all agree that it is far preferable, at a meeting of the Geographical Association, to try and study the varying characteristics of buildings in different parts of England, rather than to trace the evolution of style as the centuries pass by, an aspect which has been tackled in a number of text-books.

We all know that there are well-marked styles of building in different parts of England; let me give you an excellent instance. When you stand by Broadway Tower, on the steep northern escarpment of the Cotswolds, and look over the "coloured counties," as Laurence Housman described them, you see the valley of Evesham laid out at your feet, from that commanding height of 1,100 ft. Behind you all the villages are built wholly of limestone. Broadway village tself, on the lower slopes of the hills, is the last outpost of the Cotswold style. The Worcestershire villages in the valley ire totally different, and constitute very harming examples of half-timber and rick.

The local manners of building in England depend largely on the materials vailable, and these again are chiefly onditioned by the geology of the district. Often one particular material or com-ination is predominant in a district, but the raftsmen generally used all the materials hey could, usually with a very keen ense of their qualities and limitations, nd often in more than one manner. Thus you get main and subsidiary types. Shropshire, for instance, is usually described as a half-timber county, but there are a number of houses in stone, and some very interesting productions in brick. The chief exception to this is in Norfolk and Suffolk, and some other chalk districts, where a rather restricted use is made of flint for house building, both in methods and extent, although the mediæval church builders in East Anglia carried their craftsmanship in this refractory material to an extraordinary pitch.

There is, however, a distinctly local school of construction in flint in Wiltshire, in the river valleys round Salisbury. Some houses are built with a chequer of flint and stone, as is often seen in East Anglian churches. Others have a mixture of flint, bricks, and lumps of stone, as in the curious subject shown from Sandwich. The villages of the Bourne Valley, near Andover, have a filling, in the half-timber cottages, of alternate layers of flint and brick, a treatment which it is curious was not adopted more often. Flint is also used to a considerable extent, but with duller and less varied methods, in the cottages of the Chilterns.

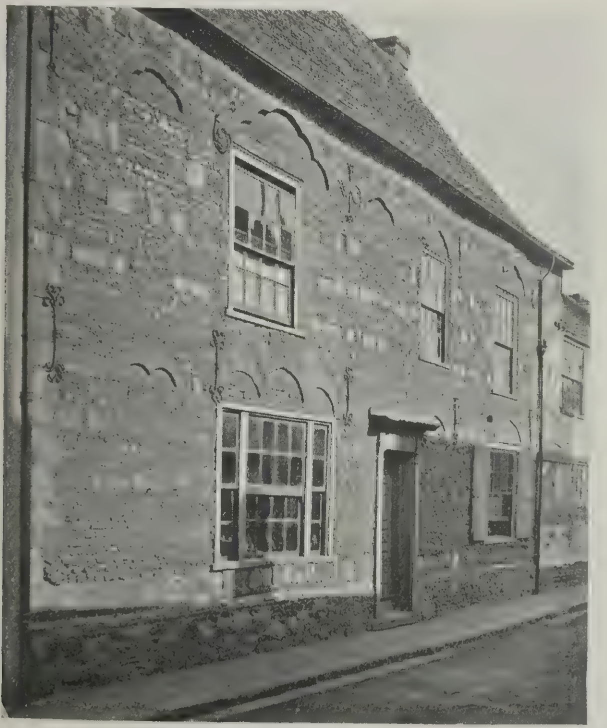
Again, in a clay or brick district patches of rough stone will occur, as round Godalming and in Kent, and give rise to little islanded areas of stone buildings.

But, like everything else, the effort towards the differentiation of local house types can easily be carried too far, for, building in a free tradition, the old craftsmen did not consider themselves bound by any rigid canons of style.

The types of house building vary most in different parts in the case of the humble everyday house: cottages, farmhouses, stables, barns, small manors, and so on, rather than in the bigger houses, which were often designed by special surveyors or architects, and erected by craftsmen imported from a distance. Occasionally, indeed, they used special materials, like terra-cotta, in the days of Henry VIII. Sometimes, especially at the commencement of a new period, the influence of style predominates over that of material or locality, and it is often difficult to tell at a glance from what district come the stone-built houses of Elizabethan and Jacobean times. That does not mean that some large houses do not manifest local characteristics in a high degree. In the same way it is, of course, among the peasant classes that local types of costume and dialects of speech are most marked; education, unfortunately, seems to have a levelling effect.

It is very interesting to try and work out the influence, not only of material and climate, but also try and see how far the buildings express the psychology of the district.

There are often little district mannerisms which are of distinct interest, and much can be done to record them. In Surrey the wide mortar joints in masonry have often pressed into them a number of small bits of local ironstone. In Wiltshire, Hampshire, and elsewhere, farm walls are frequently built of clay, chalk, or rough flint, and as a protection against the weather they have their own little thatched or tile roof. In Northamptonshire is the custom of building with a colour difference obtained by using in alternate layers red ironstone and the yellow-white limestone. Round chimneys of farms and cottages are found in West Somerset, in Pembrokeshire, and in Cumberland. You can also notice many other features, such as the custom in Kent and



A FLINT, BRICK, AND STONE HOUSE AT SANDWICH.

THE MARKET HALL, LEDBURY.

Sussex, of having a little gablet on the roof where the hips join the main ridge.

Following the track of the two chief invasions of England, it is well to look first at the south-east district. In Kent, in which there is a well-marked building manner, many of the larger cottages have hipped roofs, often with little gablets, already mentioned. The cottage at Broad Street, Kent, is an excellent typical example. The roofs are usually tiled, and exhibit in a marked degree the slight wavy effect, due to the use of irregular timbers. The half-timbering, as a rule, is closely spaced, with panels of equal width to the timbers.

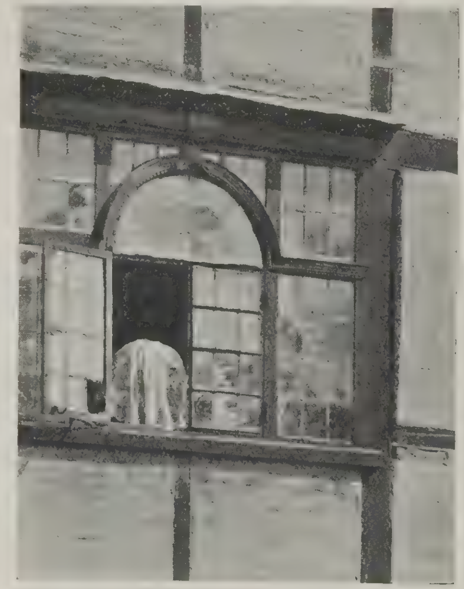
When the oak timbers shrank it became a problem how to make the walls weatherproof. This was carried out in several ways. Tile hanging was very frequently resorted to, and this method, though found in all the south-east counties and in Berkshire, was most extensively used, and reached its highest development in Surrey, where a variety of patterns are frequently used ornamentally on the same house. Houses were often partially or wholly weather-boarded, and there are also Georgian houses completely constructed in this material from the first, as at Dorking. Riverside mills also are frequently weather-boarded in a number of counties. Some houses in Kent have been completely plastered, as at Charlton and Canterbury. Round Midhurst and Petworth groups of cottages are built of rubble masonry, the lower portions of the chimneys being of stone, but the shafts being carried up in brick. Chimneys, though not exhibiting the elaborate brick patterns of East Anglia, are frequently imposing and well-proportioned examples of solid construction, with the stacks either square, octagonal, or set diagonally on the shaft; towards the end of the seventeenth century they are of large rectangular form, and panelled. The lower portions are frequently of great size, finished with crow steps or bricks set diagonally in diminishing stages.

Thatch was frequently used for cottages, but tends to be replaced by tiles. In various parts of Sussex, especially near Horsham, roofs are covered with the local stone slates, the pitch of the roof being kept fairly flat, to take their weight. These stone slates have a particular attraction for moss and lichens which grow on them abundantly. In the more western counties we find small dormers in the roof are characteristic of the Chilterns, and are often set on a small piece of tiling surrounded by the thatch. In Berkshire mention may specially be made of the group of villages round Didcot, which are remarkable for the charm and variety of their houses, carried out in half timber, plaster, and brick, with tile hanging and thatch. There are local types of rounded or canted bays, abundantly glazed, and oriels very often appear, having small roofs of their own, projecting in a greater or less degree from the main gables. East and West Hagbourne, Harwell, Blewbury, and Aston Tirrold must be mentioned, and especially Steventon, where some simple examples of pargetting are found. The window with a central circle also occurs in this district, as seen at Sutton Courtney. It is doubtful if there is a more beautiful group of villages anywhere than these. It is wonderful to come upon them after a long day spent in wandering over the bare empty downs, and one is tempted with little or no exaggeration to use about them the language of the Song of Solomon, and say that they are the chiefest among ten thousand and altogether lovely.

In the Welsh border counties there is, in the abundant half-timber work, every gradation from the plainest panel of "post and pan" work reminiscent of the south-eastern counties, to the most elaborate curved bracing. Probably the largest half-timber house is that of Pitchford Hall, Shropshire, which has only straight and diagonal timbers.

In Kent and Surrey the brick houses are, as a rule, studiously plain, though frequently well proportioned and showing admirable craftsmanship, especially in chimneys, as already mentioned. A custom which came later in the seventeenth and eighteenth centuries is to use headers of a darker brick, and effective use was made of pilasters, cornices, pediments, etc., in the late Renaissance houses from 1660 to 1720.

In East Anglia brickwork has always been prevalent from the close of mediæval days, and the influx of Flemish craftsmen has had much influence on the character and extent of the brickwork, and has helped to bring it to a very high pitch of development.



A WINDOW OF A HOUSE AT SUTTON COURTNEY.

The East Anglian craftsmen delighted in elaborately patterned chimneys. Frequently Tudor houses have been remodelled and plastered in Georgian times, and the panelled stack, as at Clare, Suffolk, is the only reminder of its original date. A very complete style was worked out in brick with finials, windows, and everything carried out consistently in the same material, as, for instance, at Little Hautbois Hall, Norfolk.

In East Anglia many half-timber houses have been plastered all over, and such villages as Lavenham and Kersey are full of these examples. If Norfolk shows the highest evolution of brickwork, it is to Essex and the Cambridgeshire and Suffolk border that we must turn for the most numerous examples of the craft of exterior plasterwork, or pargetting. Even comparatively small cottages are adorned with panels, often carried out in rough cued plaster between smooth or ornamental divisions, and having a central device in each panel. An alternative treatment is to have impressed patterns, such as the basket, looped, diagonal, or radiating fan types. These occur in such villages as Great Chesterford, Newport, etc. More elaborate examples are covered with coarsely modelled ornament which, though its details can be adversely criticized, has, nevertheless, a good general effect.

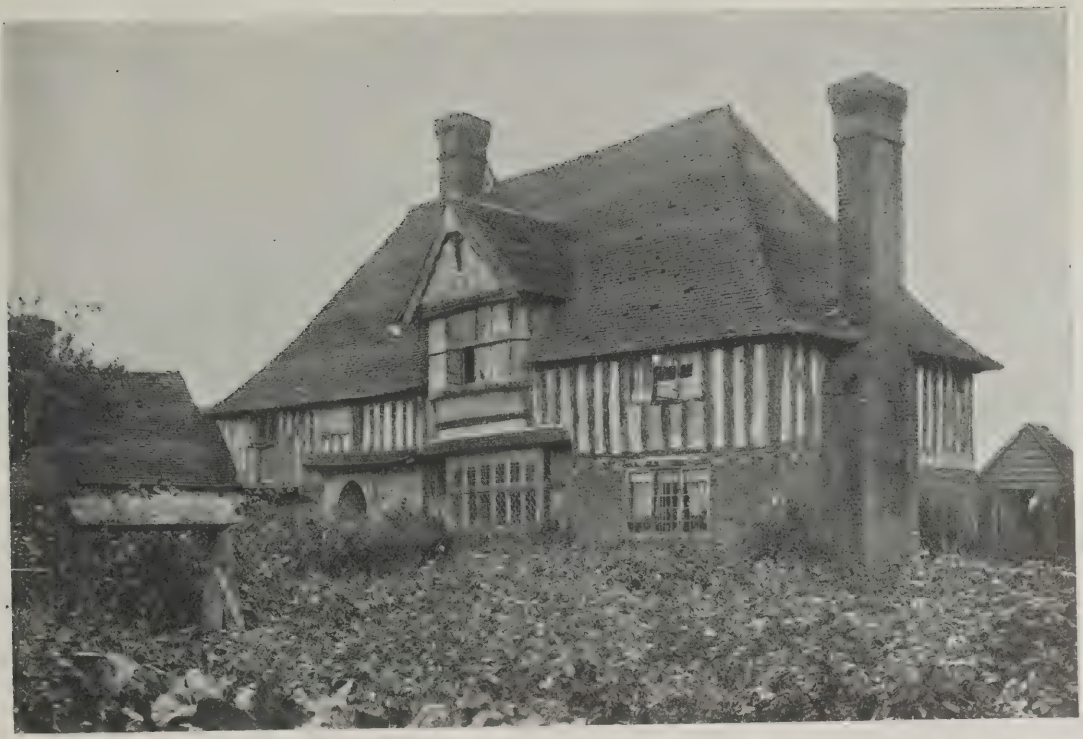
The well-known examples at Saffron Walden have been severely restored, but one of the most effective of the Early Renaissance is the cottage at Wyvenhoe, scheduled as specially worthy of preservation by the Historical Monuments Commission. There are other examples at Clare, and the so-called Nell Gwynne house at Newport, Essex. This treatment continued during the first years of the later Renaissance, and examples at Shopland and Wakes' Colne show that it was used in the seventeenth and beginning of the eighteenth century. Occasionally in the Southern Cotswolds the occurrence of a rather porous variety of stone has led the builders to plaster the houses as a protection against the driving rain, and the result simulates an East Anglian example in a curious way, as at Yelford.

These cottages are many of them thatched, and it is interesting to attempt to note the different local varieties of treatment in this material.

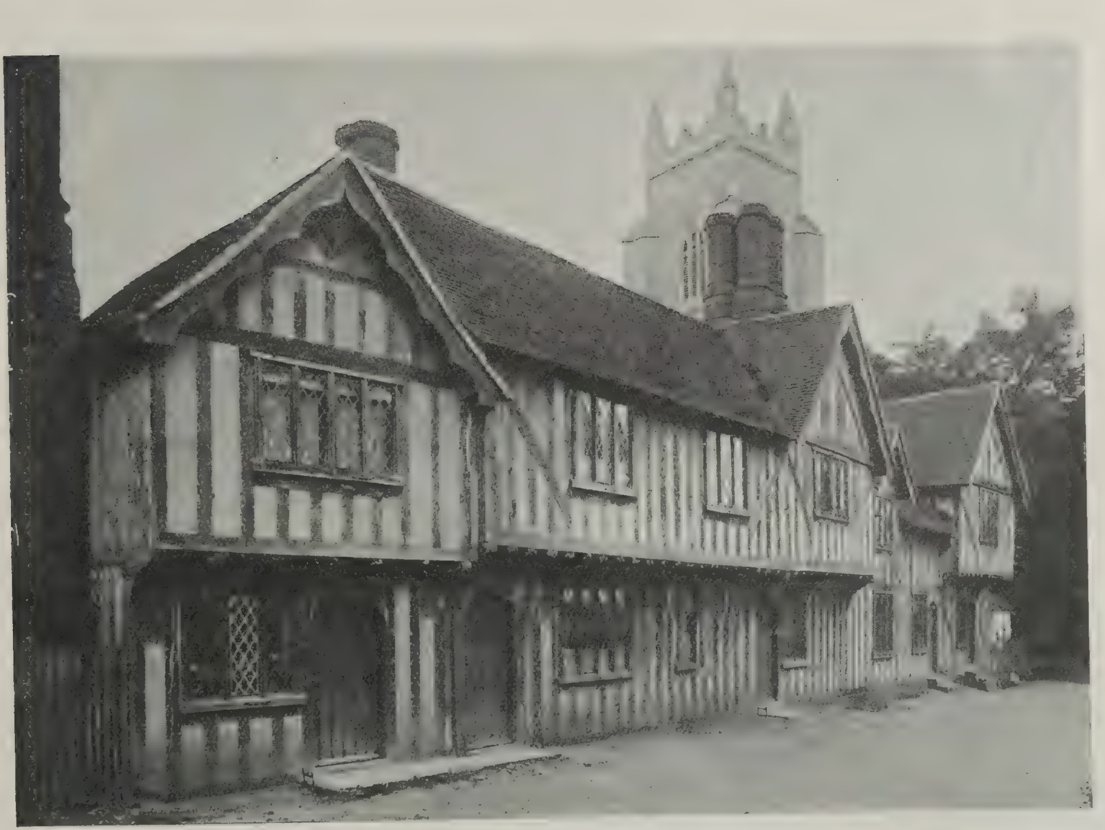
In Norfolk the supply of reeds has led to an excellent tradition in thatching, and a number of churches are still roofed in this way. In Essex and Cambridgeshire the roofs are high pitched, and the thatch over the gables and dormer windows is carried up to a high peak and finished at a point with an interlacing pattern of twigs. This differs from the rounded treatment of Berkshire and Buckinghamshire, where the thatch is brought down a good way over the hip of the roof. The valleys on thatched roofs are frequently carried out in tiles. The thatch of the cob-walled cottages of Devon and Dorset is again different. It is not easy to describe in a few words the difference in character. The West Country thatchers seem sometimes to aim at a peculiarly smooth velvet finish of their work. But the thatch, like the cottages, is rambling and casual, and wanders picturesquely round corners and on different levels.

As already mentioned, a number of the larger Jacobean houses in Shropshire are carried out in stone, such as the big house at Wilderhope, now a farm, Shipton Court, Corvedale, and Madeley Court, now ruined and dilapidated. In Wilderhope the chimneys, according to local custom, are finished with the stacks in brickwork, parallel to the south-eastern treatment of the rough stone in Sussex. Some Cheshire farms and houses are also built roughly of stone, and roofed with large stone slates.

It is lamentable to think what we have lost within the last hundred years. A collection of 600 wash drawings made by John Buckler about 1830 shows that Hertfordshire towns which are now commonplace or slummy were once picturesque with delightful gabled buildings; the amount of beautiful domestic architecture in the county was amazing; Bristol and Exeter also must have been fairy places before the nineteenth century put its blighting hand on them.



COTTAGE AT BROAD STREET, KENT.



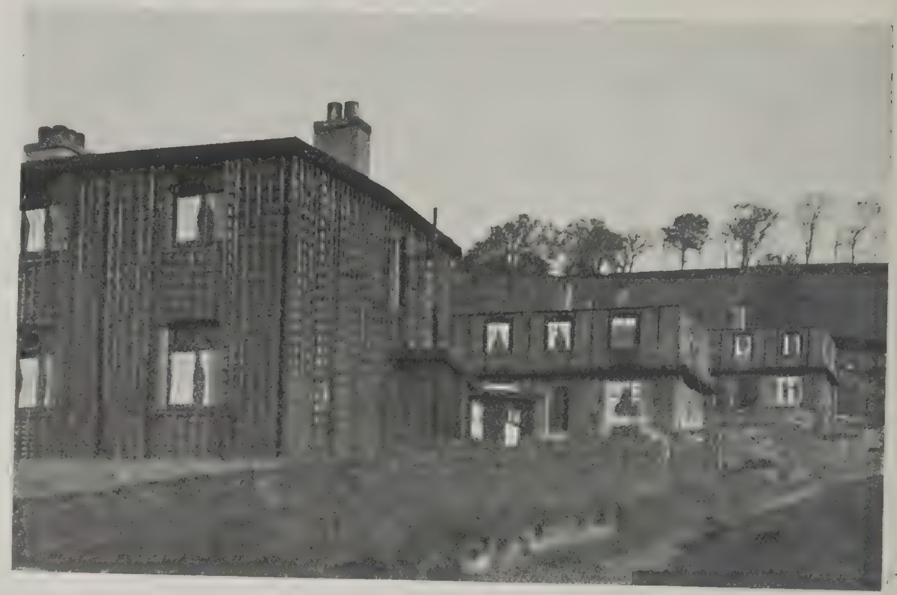
COTTAGES AT STOKE-BY-NAYLAND, SUFFOLK.

EXAMPLES OF HALF-TIMBER WORK IN KENT AND SUFFOLK.

(*See article on page* 191.)

# Houses at Riddlesden, Keighley

## MOORE and CRABTREE, Architects



TYPES A AND B HOUSES.

THE great rise in the cost of building at the conclusion of the war almost stopped the Yorkshire custom of building a "house for yourself and one to let." At this time rents were on a very low cost basis, and local authorities in some districts were in no haste to involve their ratepayers in the expenditure needed to make up lost time in housing. The opportunity to deviate from the model by-laws, the £260 subsidy, the desire to produce good roomy houses by private enterprise, these and other reasons led to the building of the houses illustrated.

The first pair (type A) were built with 9 in. solid walls rough-casted; and these were later covered with trellis to check the action of frost. The second and third pairs (type B) had a wood-framed upper story lathed and plastered inside and boarded outside, the whole being covered with two thicknesses of two-ply Ruberoid.

The fourth, fifth, and sixth pairs were built with 11 in. hollow walls, and the roofs were covered with two layers of rock asphalt. The economy in the roofs is obvious, the party walls and chimney breasts are dispensed with, and Ruberoid and asphalt form the eaves' spouts. The maintenance of roofs of this character compares very well with the slate or tile in general use.

The houses are on land sloping to due south, and the view from each pair, front or side, is uninterrupted, the ground floor of the rear blocks being on a level with the roofs of the houses in front. An ordinary pitched roof would have cut off the view to the south of the Worth Valley and Bronte country. Those who live on the side of hills can appreciate what this means in the lives of the occupants. The view east and west was preserved as far as the limits of the site made possible. Crittalls' Standard windows were used, and fencing made by Rural Industries, Ltd.

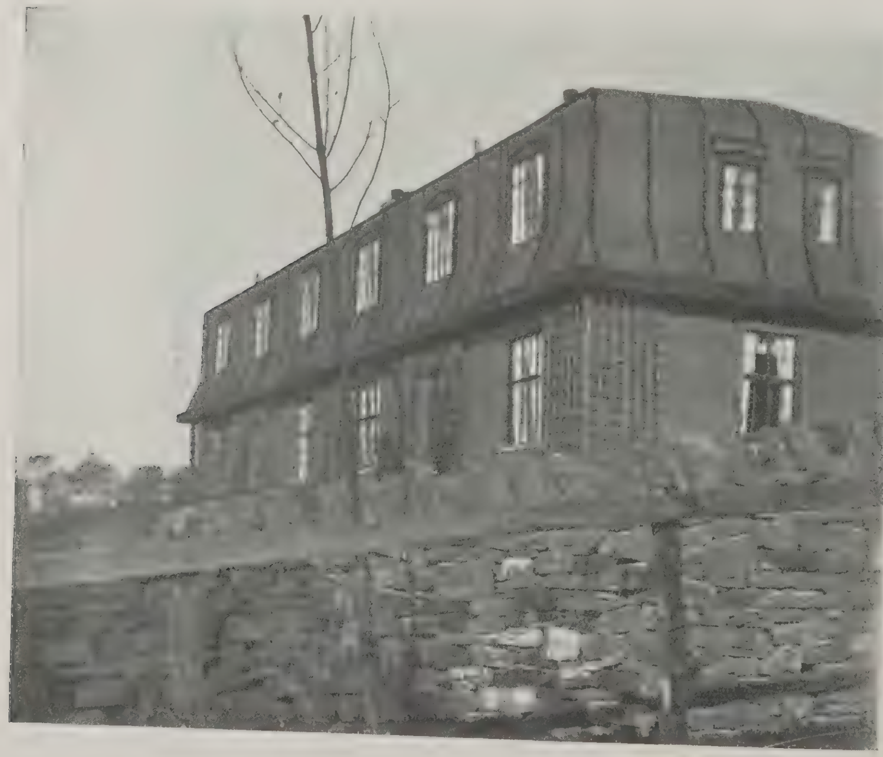
On the opposite page are reproduced drawings of two of the types of houses which have been erected. Similar accommodation has been provided in each type, but the planning has been undertaken in a somewhat different manner. On the ground floor of each house is the living-room, parlour, kitchen, coals, and the pantry, and on the first floor are four bedrooms, a bathroom, and a w.c. In one type the entrance lobby gives direct access to the parlour, living-room, and kitchen, and in the other to the parlour and living-room only, the kitchen being reached through the living-room. The staircase in each type leads to a landing around which the bedrooms are compactly arranged.

With regard to the Rent Restriction Act it seems to be agreed that some protection is still needed as between landlord and tenant. It is suggested by many that in all cases where tenants are taking advantage of the law they ought to be required to prove not only that they cannot find suitable accommodation, but that they are not in a position to provide it for themselves.

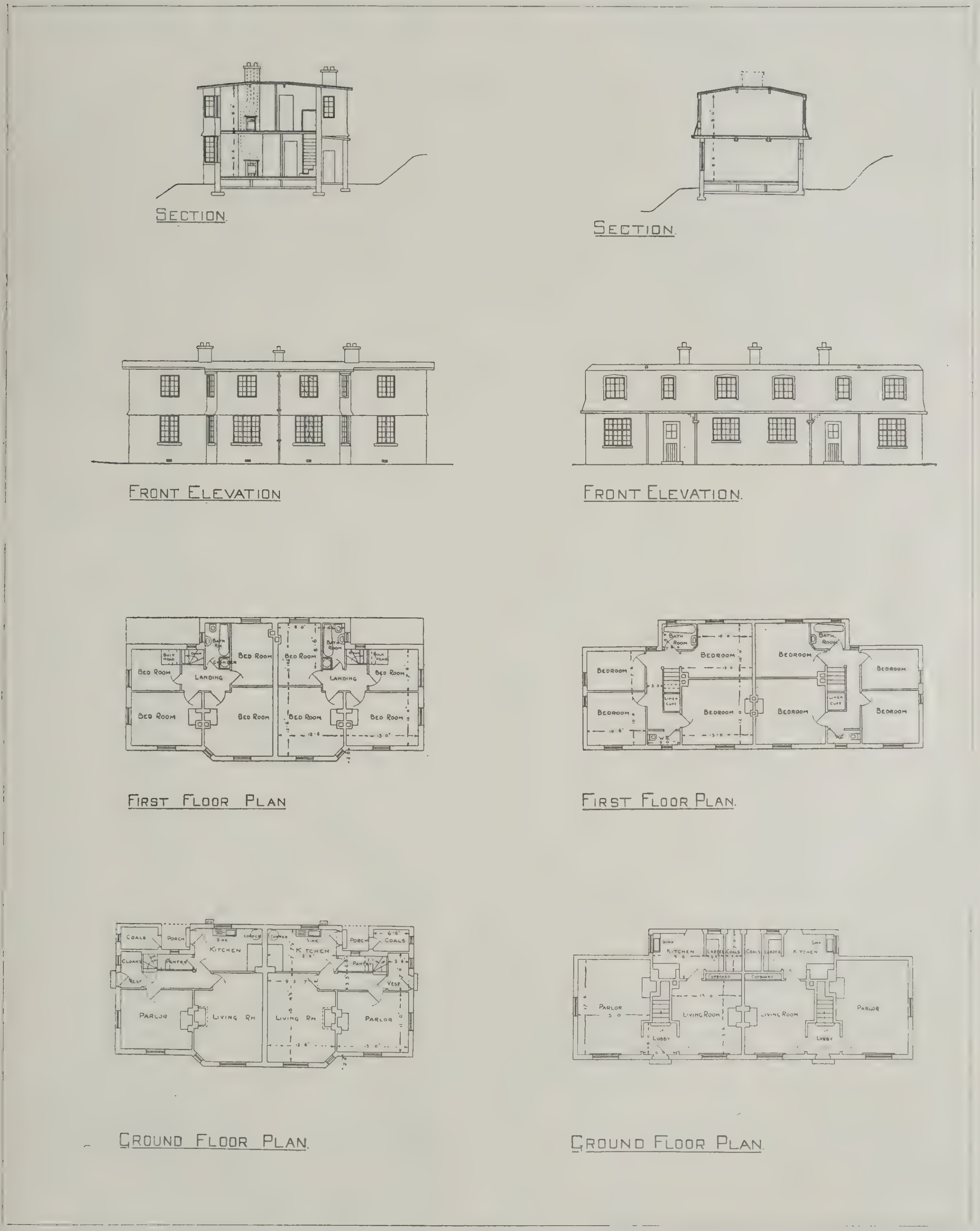
There is no justification for the State doing the housing work that individuals could do for themselves with all the resources of the building societies of the country available, especially with the present rate of interest to borrowers. Millions of pounds are daily advertised as being available to lend on mortgage, and especially favoured terms are given to "occupying owners." These funds are also available for use by employers of labour who could, if they would, employ architects and builders and build in scores or hundreds, and sell to their workpeople, and thus do good work in their own interest and that of the State without advancing very much of their own capital.

The work was done by local contractors, each trade being let separately, which is a local custom. These and the other contractors were as follows: Thomas Moore, Keighley (bricklayer and mason); Greenherd and Murgatroyd, Ltd. (carpenter and joiner); Wright Harris, Keighley (plasterer); James Harrison, Keighley (plumber and glazier); The Ruberoid Co., Newcastle (Ruberoid); Ingham Asphalte Co., Leeds (rock asphalt roofs and footpaths); Crittalls, of Braintree (steel windows); Rural Industries, Ltd., Cheltenham (garden fencing).

The whole of the gardens were trenched and prepared for planting, and about thirty fruit trees per house supplied. The site is specially suitable for the growing of apples and pears.



TYPE B HOUSES.



HOUSES AT RIDDLESDEN, KEIGHLEY. MOORE AND CRABTREE, ARCHITECTS.

# Architecture in the Lay Press

## Registration of Architects

The Bill for the registration of architects, which is to be presented to Parliament next month, is not likely to make much headway. The reason for this, it is understood, is want of unanimity in the ranks of the profession. There are quite a number of architectural societies in existence, but the Bill apparently has been drafted by a committee of the Royal Institute of British Architects without the concurrence of other societies, who hold that the idea that the Royal Institute of British Architects should be the final arbiters in deciding whether an architect had the necessary qualifications to entitle him to a place on the proposed register is preposterous. There appears to be a good deal of inter-society rivalry in the matter, and if a day is ever given by Parliament for discussion of the Bill there will be much opposition. While the majority of the profession agree that registration is desirable, it is not thought that this can be brought about until there is unification within the profession itself.—"The Glasgow Herald."

## Mantelpieces at the Royal Academy

The Royal Academy cannot be accused of lack of enterprise in its Winter Exhibition, which opened on Monday.

It has done something which no one has attempted, so we are told, since 1841, when the question of decorating the Houses of Parliament was urgent.

The exhibition of designs sent in then gave a great impetus, the preface to the catalogue tells us, and it is hoped that the exhibition of decorative art now being held will have equally happy results.

The organizers of the exhibition interpret the words "decorative art" in a generous way. We see everything from vast mural paintings to tiny sketches; from iron gates to tables, looking glasses, mantelpieces, and cups and saucers.

It is only right that the public should realize anew the importance of the decorative arts to architecture, and reflect that in the past the greatest artists did not disdain to devote their art to the beautifying of buildings destined for the most prosaic purposes.

There is no reason why even the offices of a Main Drainage Commission should be an eyesore.—"The Star."

## Modern Architecture

Is the public more interested in architecture than it used to be? That is a question which architects are asking. Personally I think it is, and for a very good reason. There is more interesting architecture about than there used to be.

Moreover, there is a quickening of interest in art generally, and it is beginning to be understood that architecture is by way of being an art and not a mere business.

I notice that the editor of "Architecture," in the prefatory notes to the first issue of the new venture, has a playful dig at the lay Press for its neglect of architects and architecture.

Possibly the gibe is justified, but it has to be remembered that, with rare exceptions, the Victorian architect and his architecture were negligible.

To-day on every hand buildings are going up that really do express their time, and, subject to criticism as they may be in details, do show a recognition of the world we live in, and are not mere slavish copies of styles that, once appropriate to the national sentiment, have long been demodé.—"The Pall Mall and Globe."

## The New Hotel for Manchester

Everybody must feel sorry for all the Manchester business men who will have to find new quarters because of the Corporation's sale of Victoria Buildings. But the Corporation could hardly have done anything but what it has done. We cannot take very seriously the plea of one speaker for the preservation of the Victoria Hotel and Victoria Buildings on account of their beauty. They are certainly no Parthenon. At the same time, unless drawings which have appeared in the Press are misleading, the soul is far from likely to be ravished by the charms of their proposed successor. It will be grievous if this gloomy apprehension is to be fulfilled. A big hotel block of the quality of the Piccadilly Hotel in London, on the Victoria Hotel and Buildings site, would give a memorable first impression of Manchester to the stranger arriving from Liverpool or the North. And such things have their value, even in business. — "The Manchester Guardian."

## An Architect's Dress

Last year I ate more than one dinner in company with famous architects. It might not be easy to say how an architect should be dressed, but it is certain that his garments should have an architectural cut. At this moment I can call up in my memory but two portraits of architects; I give you my word that among those with whom I ate and drank not one had any resemblance to Mr. Inigo Jones or to Mr. Pecksniff.—A LONDONER, in "The Evening News."

## The Adornment of Cities

Sir,—Slowly, but perceptibly, modern civilization is struggling free from the Victorian dogma that business and beauty are incompatible. The latest evidence of this tendency is found in Doncaster, where the local authorities have seriously taken in hand the æsthetic possibilities of the industrial developments of the town.

At the base of all sound town-planning lie broad and dignified thoroughfares and wide open spaces, beautified by tree planting. Doubtless these fundamentals, in the instance under notice, are well in mind.

But I should like to put in a plea for the consideration of two other points, not so immediately obvious, but none the less vitally affecting the æsthetic values of urban planning and building.

First, I would plead for an adequate use of the curve in the laying out of streets. Victorian city architects, and those of the same period in the United States, were obsessed by the rectangular idea, to the serious detriment of the cities they planned. How much of the dignified and pleasing impression created by a gem like Bath may be traced to the careful employment of the curve in crescent and circus!

My second point is the æsthetic and moral value of colour in buildings. Modern processes in the production of terra-cotta and vitreous brick have placed at the disposal of architect and builder a wide variety of colours for external decoration. Why should not our town-planners take into account for their new streets not only structural harmony, but also pleasing colour schemes?

One can picture the delightful effect of a whole thoroughfare in which the dominating tints should be blues and greens, or greys and yellows, relieved by ivory white. Such schemes would bring to the lives and outlook of the inhabitants a new zest, and sub-consciously remove the standing reproach that English towns and English folk are equally drab and dreary. —Yours, etc.,

J. M. HOGGE.
House of Commons.
—"The Times."

## The Problem of the Noisy Office

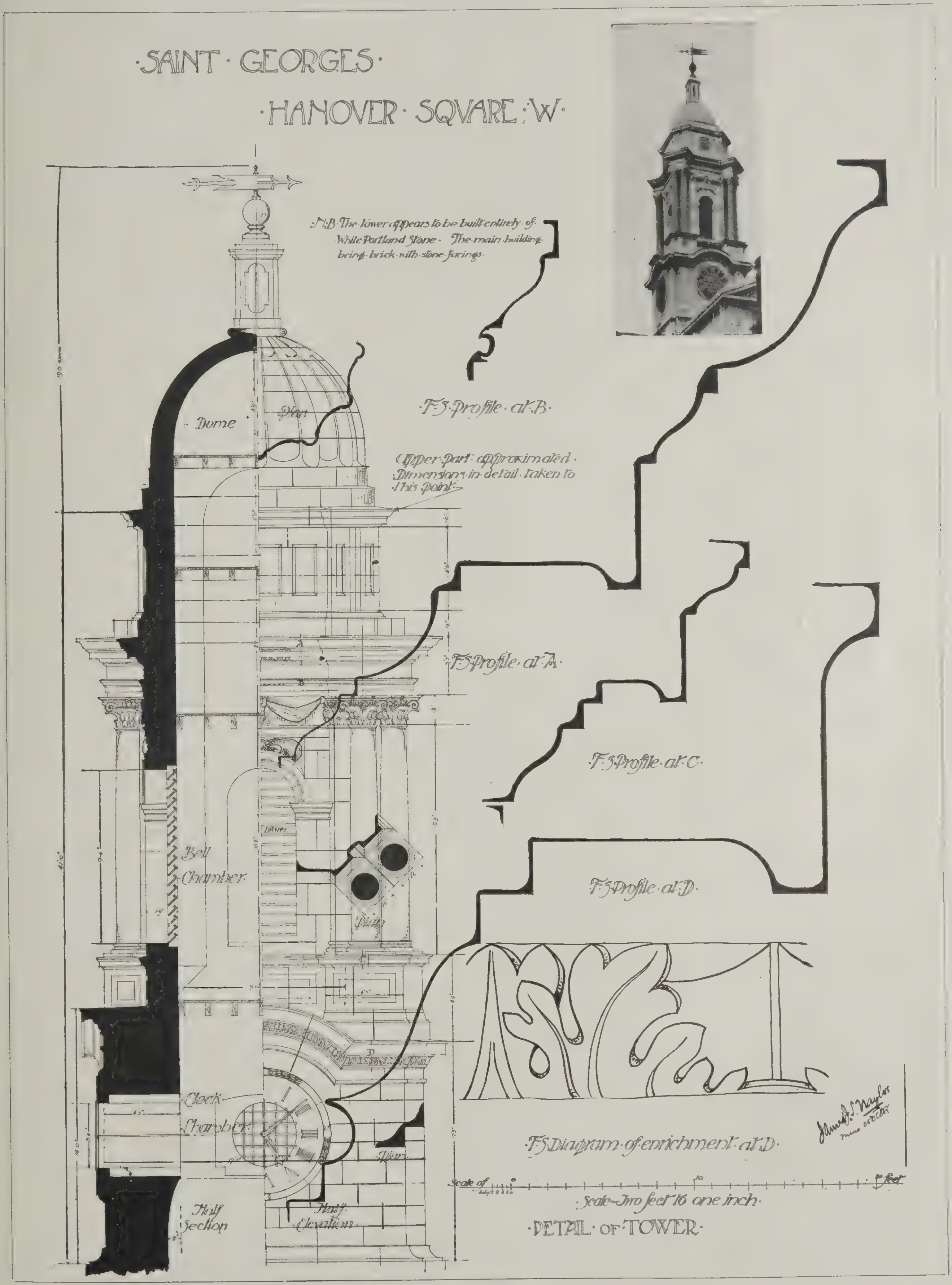
I know a case in the City of London where two buildings side by side vary considerably in their comfort, owing to the volume of sound reaching them from the street. One building has opposite it an office block having a granite base pierced with few windows; and this hard surface acts as a reflector, nearly doubling the noise of the traffic. The other building has opposite it a city church set some feet back from the street, covered with ivy and reflecting by comparison very little. In both cases the direct sounds from vehicles are equal, but in the first case the reflected sounds added to the direct sounds are sufficient to cause a noticeably greater annoyance.

In the States, where offices are frequently planned in a single large hall without partitions between departments, it has been proved that an absorbent upon the ceiling, such as a fireproof felt, covered by canvas, will tranquilize a building and increase staff efficiency to an extent able, in a few years, to cover initial expenditure. The same principles are being applied to school buildings. In a modern fireproof classroom an ordinary scrape of the foot is reflected between floor and ceiling at least a hundred times. This causes unrestful conditions.

It is quite possible to plot the curve of irritability and reverberation, and it is an instructive one. A 70 per cent. absorbent in the form of a panel upon the ceiling of classrooms has produced results in the comfort of students and teachers exceeding all expectations. An absorbent plaster has also been tested. In England successful acoustic experiments are handicapped by the absence of anything corresponding to the American acoustic felts, plasters and tiles. It is to be hoped that the Royal Institute of British Architects and the Board of Scientific Research will be able together to arrive at some useful results.—HOPE BAGENAL, A.R.I.B.A., in "The Daily News."

# Measured Drawings. 21.—The Tower of Saint George's Church, Hanover Square, London

Measured and Drawn by James J. S. Naylor



St. George's, Hanover Square, is regarded as the finest of the many buildings designed by John James. Much of the work of James bears a close resemblance to that of Hawksmoor, whom he succeeded in 1705 as clerk of works at Greenwich. In 1711 he became master carpenter of St. Paul's, after Jennings, and in 1716 was appointed assistant surveyor to St. Paul's, and surveyor to the commissioners for building new churches. St. George's Church was erected during 1713–24.

# Book Reviews

## "Architectural Building Construction"

It is hardly possible to speak too highly of such a book as Messrs. Walter R. Jaggard, F.R.I.B.A., and Francis E. Drury, F.I.S.E., have—with infinite care and an unusual perception of what constitutes a true guide to the science of building construction—recently added to the literature of the subject under the title "Architectural Building Construction." Of the two volumes now included in this notice, the first has already reached its second edition, while the second comprises Part I of Volume II, Part II of which, when published, will complete the work.

In glancing through the profusely illustrated pages, one is constantly impressed by the very high standard of draughtsmanship the authors have set themselves, and consistently maintained throughout. The drawings, however, possess other qualities besides intrinsic excellence of technique, for they reveal in the well-chosen examples presented to the student just that sense of architectural culture which is so lamentably absent from the majority of text-books dealing with the same subject. This observation is deliberately made, for it touches upon an aspect of the matter which the writer has long regarded as of vital importance to the interests of the young architect.

Most works on building construction completely fail in their illustrations. These may be, and often are, quite neatly drawn, and are generally accurate as regards the precise constructional facts they essay to impart to the reader. But it is rare, indeed, to discover in the hundred and one examples they exhibit for the student's instruction anything which—æsthetically considered—rises above mediocrity.

One can recall—in this particular connection—illustrations in otherwise excellent works, which are positively harmfu in their immediate and ultimate effects or the student. He is confronted in such circumstances with a carefully enough drawn illustration—let us suppose—of a French casement with a centre-hung fanlight above it, which bears every indication of having been inspired by a working joiner. The general design is commonplace, the panes ill-proportioned, and the mouldings of the most vulgar description.

These are faults which can never be atoned for by an accompanying precision in delineating the position of the water bar, or meticulous care in drawing the hinges.

There can be no manner of doubt that such illustrations as are here referred to are responsible for a great deal of harm to those students who are pre-disposed to accept, without question or the experience to discriminate, whatever they see in their text-books. Feeling, as they very naturally do, that the authors are to be trusted for their technical knowledge, they are unconsciously influenced by the form in which that knowledge is presented. And if this is unscholarly and unrefined, a lowering of standards must result.

Methods of assembling materials of various kinds into separate constructional units are comparable with the letters of the alphabet, and, like them, may be ungrammatically combined. And for the same reason that a correct knowledge of their order does not of necessity imply the capacity to write polished English, a profound acquaintance with tusk-tenons, wiped joints, and Flemish bond, offers no guarantee that it will inevitably lead those who possess it to design with real architectural expression.

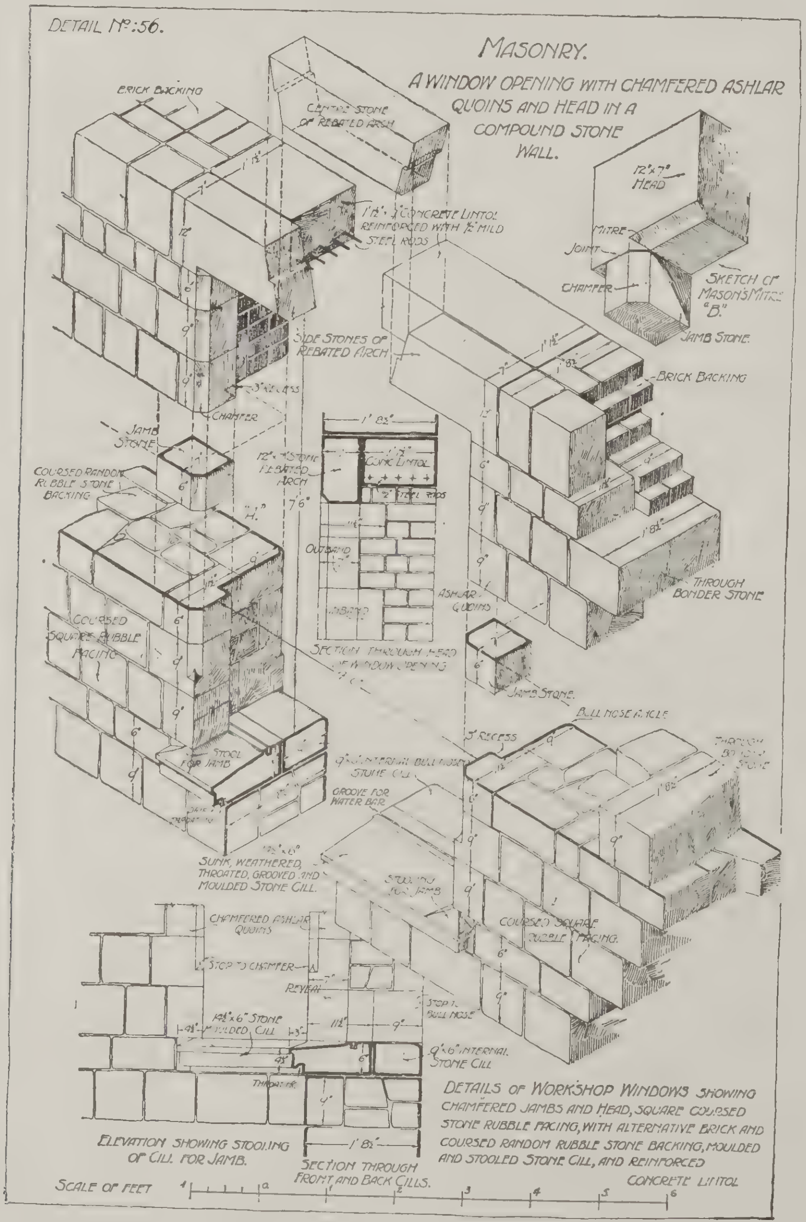
The great merit of "Architectural Building Construction" lies in the fact that it combines authentic practical data with well-designed examples of their application, which is a distinction that entitles the work to take a high place among text-books on this important subject.

By its aid students will not only be able to master all its practical essentials, but be placed in a position to develop along logical lines a cultured sense of their architectural possibilities.

Much use has been made by the authors of dissociated isometric and oblique sketches, and by the system employed of fully figuring the parts; the student is afforded the opportunity of preparing from the examples thus illustrated, complete detail drawings to scale.

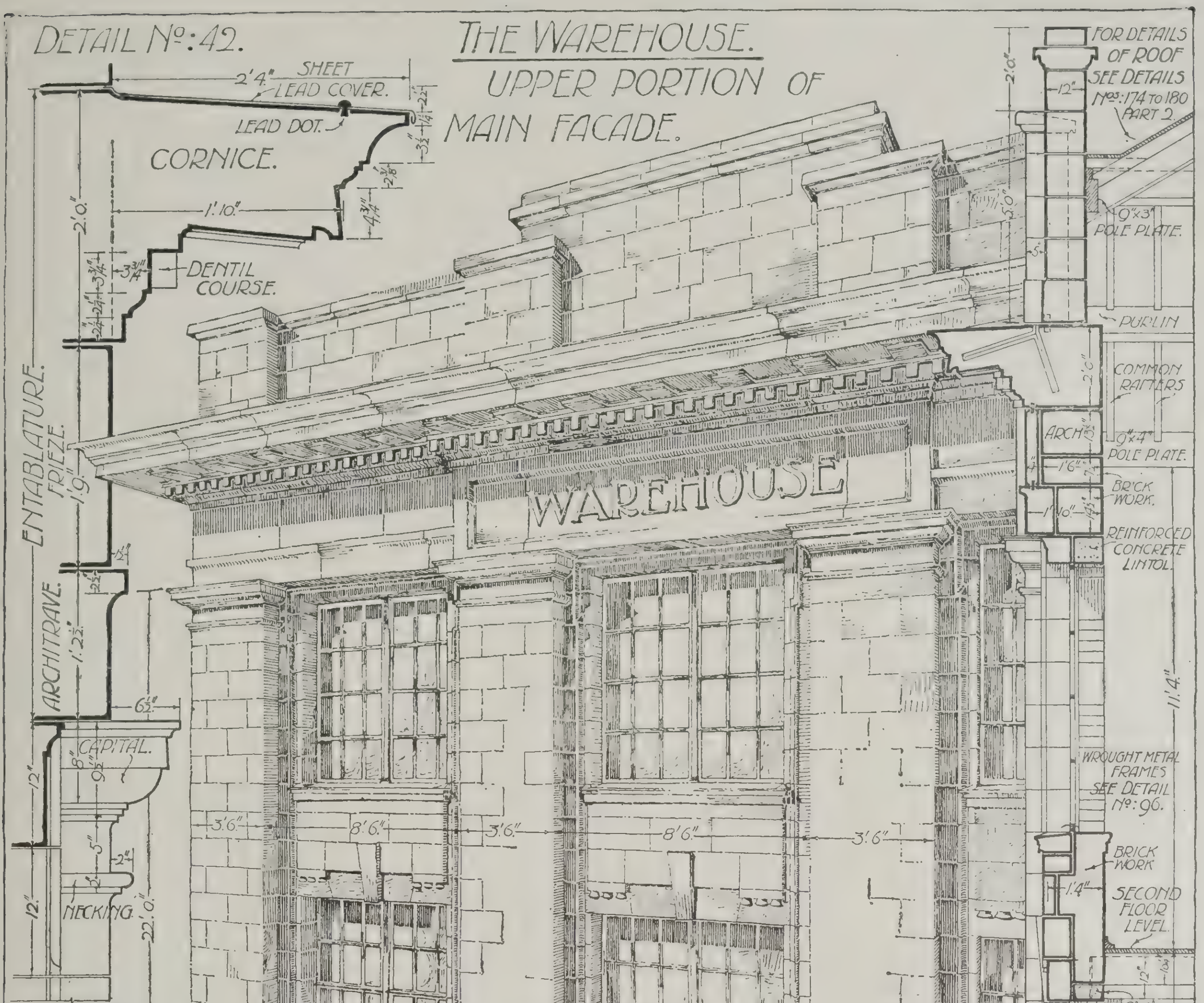
Vol. I, which, as previously mentioned, is now in its second edition, comprises seventeen chapters, and deals with brickwork, masonry, carpentry, joinery, steel sections, and roof coverings and finishings. In the pocket of the binding are included general contract drawings, a cottage, and a workshop.

Part I of Vol. II, in addition to a more advanced consideration of the subjects contained in the elementary treatise, and further contract drawings in the cover, devotes approximately half of its 380 pages to calculations. Even these, thanks largely to the attractively drawn


DETAIL Nº:56.
MASONRY.
A WINDOW OPENING WITH CHAMFERED ASHLAR QUOINS AND HEAD IN A COMPOUND STONE WALL.
BRICK BACKING
CENTRE STONE OF REBATED ARCH
1'1½" × 12" CONCRETE LINTOL REINFORCED WITH ½" MILD STEEL RODS
12"×7" HEAD
MITRE
JOINT
CHAMFER
SKETCH OF MASON'S MITRE "B."
JAMB STONE.
SIDE STONES OF REBATED ARCH
3" RECESS
CHAMFER
JAMB STONE
COURSED RANDOM RUBBLE STONE BACKING
12" × 4" STONE REBATED ARCH
1' 8½"
CONC LINTOL
STEEL RODS
OUTBAND
INBAND
SECTION THROUGH HEAD OF WINDOW OPENING
BRICK BACKING
ASHLAR QUOINS
THROUGH BONDER STONE
JAMB STONE.
COURSED SQUARE RUBBLE FACING
STOOL FOR JAMB
BULL NOSE ANGLE
3" RECESS
THROUGH BONDER STONE
9" × 6" INTERNAL BULL NOSE STONE CILL
GROOVE FOR WATER BAR
SUNK, WEATHERED, THROATED, GROOVED AND MOULDED STONE CILL.
STOOLING FOR JAMB
CHAMFERED ASHLAR QUOINS
STOP TO CHAMFER
REVEAL
COURSED SQUARE RUBBLE FACING.
STOP TO BULL NOSE
14½" × 6" STONE MOULDED CILL
9" × 6" INTERNAL STONE CILL
THROATING
ELEVATION SHOWING STOOLING OF CILL FOR JAMB.
SECTION THROUGH FRONT AND BACK CILLS.
DETAILS OF WORKSHOP WINDOWS SHOWING CHAMFERED JAMBS AND HEAD, SQUARE COURSED STONE RUBBLE FACING, WITH ALTERNATIVE BRICK AND COURSED RANDOM RUBBLE STONE BACKING, MOULDED AND STOOLED STONE CILL, AND REINFORCED CONCRETE LINTOL
SCALE OF FEET
1
2
3
4
5
6

DETAILS OF STONE DRESSINGS FOR A WORKSHOP WINDOW.

(*From "Architectural Building Construction."*)



DETAILS OF THE UPPER PORTION OF A WAREHOUSE FACADE.

*(From "Architectural Building Construction.")*

diagrams with which they are interspersed, possess a lure not often associated with them.

Taken as a whole the work is a scholarly production, and its excellences are so manifest and numerous as to cause regret on the writer's part that it was not available when he was a student.

FREDERICK CHATTERTON, F.R.I.B.A.

"Architectural Building Construction." By Walter R. Jaggard, F.R.I.B.A., and Francis E. Drury, F.Inst. of Sanitary Engineers. Vol. I, 15s.; Vol. II, 20s. Cambridge University Press, Fetter Lane, E.C.4.

## Reinforced Concrete

The author of this interesting book has spared no pains to produce matter which shall be of practical use to designers in reinforced concrete, and it is presented in a particularly attractive form, in which the value of clear description is enhanced by ample and well-drawn illustrations.

It should be particularly helpful to those who are only occasionally called upon to design in that material. To such the L.C.C. regulations are a good general guide, and the author has given prominence to them throughout; and even (page 82) limits the scope of the book to compliance with them. In this he does less than justice to portions of the book which are clearly outside the limited range of the Regulations; and it is open to question whether he has not in many instances accepted them somewhat too readily as the last word on the subject.

In their present form the Regulations were submitted to the Local Government Board for approval during the War, when members of the four professional institutions who had statutory facilities for criticism were largely engaged on unusual duties.

Reinforced concrete building in London scarcely seems to have flourished under them. They insist upon an important variation from ordinary practice which very seriously affects economy in design, the effect of which appears to be reflected in the comparative numbers of steel-frame and of reinforced concrete buildings which have been erected in London since they came into force.

Regulation 54 alters the usually accepted figure of fifteen for the modular ratio, $m\left(\frac{Es}{Ec}\right)$, to 9,000 divided by either the compressive stress on the concrete or by the compressive stress as enhanced by hooping, viz., twelve instead of fifteen for 750 lb. concrete, ten for 900 lb., and about eight to ten in columns.

The object of this was obviously to increase the theoretical share taken by the concrete of any load or bending moment jointly resisted by the concrete and the steel. But this it can only do by reducing the theoretical share taken by the steel.

When it is applied to beam sections economically deep, in which the stress on the steel is the criterion of strength, it permits slightly less steel to be used; which scarcely adds to the factor of safety. When, however, it is used in proportioning columns to the critical stress on the concrete, it forces the designer to choose between sacrificing the economical advantages of rich or of adequately hooped concrete, or paying for considerably more steel.

The very severe and even prohibitive handicap which this imposes on reinforced concrete when in competition with steel-frame construction was pointed out in the technical press (*vide* "Engineering," July 9 and 16, 1915); but unfortunately the warning was disregarded.

The present volume throws no light upon this not unimportant point, the author having apparently overlooked this particular Regulation altogether. On page 103 it is stated that the stress in the steel reinforcement of columns of 2 : 2 : 4 concrete may be raised to $m{\cdot}c = 15 \times 750$ lb.; and on pages 105 and 106, he similarly disregards Regulation 54 when calculating the strength of a hooped column. The omission is doubtless accidental; otherwise the author's painless extinction of this unfortunate Regulation might be generally accepted with advantage.

The author rightly attaches considerable importance to the use of standard notation, and a carefully compiled index of notation, instantly found by an inserted stiff page of coloured paper, is an excellent feature; although only one out of many thoughtful precautions for assisting the reader. But neither the author nor Mr. Etchells, who has contributed a foreword on Notation, explains why the familiar symbols of ds and $s_1$ denoting depth of slab in tee beams in the published L.C.C. Regulations, in the R.I.B.A. reports and in the majority of British textbooks, should have been altered to th and $th_1$, letters which are commonly used for height and tensile stress.

The variation of symbols which have passed into general use is apt to be irritating, even when very desirable. When they have been incorporated by legal regulations they should certainly not be varied.

The subject of continuous beams is treated clearly and exhaustively. Rigidly connected columns and beams are dealt with by a novel and ingenious method, which is a really valuable contribution to the means of studying an intricate and important subject. In a future edition, it might perhaps be as well to emphasize that the method presupposes a rigidity in the joint not less than that of the beam or column. Joints in structural steelwork do not always fulfil this condition, and require different methods.

The claim made in the title that this is a practical handbook is by no means undeserved. The general treatment of the subject is simple, straightforward and thorough; and the time of the reader is saved by good indices and copious cross references. The type and printing are excellent, and the illustrations are clearly drawn and admirably reproduced. The book gives good value for the purchase price.

[In view of the great importance of our contributor's remarks with regard to Article 54 of the L.C.C. Regulations, we give below the opinions of several of the leading reinforced concrete firms :—

Messrs. Peter Lind & Co., of Westminster.—"There is no doubt that the L.C.C. Regulations dealing with reinforced concrete require a larger section of column than any other set of Regulations on the Continent or in America. This is unfortunate, in that the increased costs of a column designed to L.C.C. Regulations, and designed in accordance with Regulations ruling elsewhere, amount to as mu as 20 per cent. It is not, howe Article 54 which is responsible for t increased cost. This article is providi for the fact that as the percentage of st increases the efficiency of the co-ope tion between steel and concrete becom less. Practically all Regulations provi for this by not allowing steel above certain percentage to be taken in account to the same extent as the steel lightly reinforced concrete columns. T cause of the heavier columns of t L.C.C. Regulations is to be found in t rule requiring a cover of 1½ in. outside t bars, together with the rule that preven any portion of this cover to be taken in account for carrying purposes. Co tinental rules require 1 cm., or less th and ½ in. cover for internal colum 2 cm., or less that 1 in., for colum in the open. Further, they permit t cover to be taken fully into account f carrying purposes for *lightly reinforc* columns. If the cover required by t L.C.C. Regulations was corresponding reduced the design of these importa members would be brought into line wi established practice everywhere else the world."

The Trussed Concrete Steel Co., Lt of South Kensington.—"The same i dictment has been made by most peo who dealt with the L.C.C. Regulations reinforced concrete, and most of them a agreed that Regulation 54 needs amen ment. The amendment is still the su ject of controversy. Under these circu stances the remarks on Regulation 54 a in my opinion quite in order, althoug perhaps, a little out of place in a bo review."

Messrs. D. G. Somerville & Co., Ltd.- "Reinforced concrete columns, as d signed strictly according to the L.C. Regulations, involve a ridiculous waste money. At a time when utmost econom is essential this regulation should be in mediately amended."

The British Reinforced Concrete E gineering Co., Ltd., of Manchester.- "We are quite in agreement with yo contributor's remarks concerning Reg lation 54 of the L.C.C. Regulations f reinforced concrete."]

"Reinforced Concrete"—a Practical Handbook. R. J. Harrington-Hudson, B.Eng., A.M.I.C.E., A.M Mech. E., M.C.I., M.Am.C.I., 318 pages, 131 Figur 19 Plates, 5½ in. × 8¾ in. 16s. net. Chapman and Ha

## Publications Received

"English Church Architecture of t Middle Ages." By A. Freeman Smit Price 5s. net. T. Fisher Unwin, Adelp Terrace, London, W.C.2.

"Everyday Life in the New Ston Bronze, and Early Iron Ages." B Marjorie and C. H. B. Quennell. Pri 5s. net. B. T. Batsford, Ltd., 94 Hig Holborn, London.

"Mazes and Labyrinths." By W. Matthews. Price 18s. net. Longman Green & Co., 39 Paternoster Row, E.C.

Mr. James Gillespie has prepared f the Edinburgh Architectural Associatio a large volume of "Details of Scottis Domestic Architecture" (Waterson, Edin burgh, £3 3s. net).

"The Management of House Property. By Edgar L. Chappell, F.S.S. Price 6d net. The Welsh Housing and Develop ment Association, 38 Charles Stree Cardiff.

# Craft Guilds

## By EDWARD WARREN, F.R.I.B.A.

CORPORATIONS, or "Guilds," for protecting the rights and privileges of traders, whether in merchandise or in the work of their hands and brains, were of great antiquity all over Europe. The Mercantile Guilds, or "Gilds Merchant," as they were called in England, were apparently of earlier origin than the Craft Guilds, and were very naturally of early formation in seaports, where, before the establishment of a national customs organization in the name of the Crown, and especially in ports where the Hansa League had no domination, dues were collected upon goods exported or imported, and the Crown, or the nearest local power, the borough or the overlord, took their share.

We find plenty of instances of the establishment of Gilds Merchant by Royal Charter, notably at Cardiff in the reign of Edward II.

The Gilds Merchant were frequently wealthy and powerful organizations, and came next in town governance to the borough council, presided over by the mayor or chief officer of a corporate town.

These Merchants' Guilds dealing in, and collecting dues upon, merchandise of all sorts, by right of Charter, powerful financially and economically, looked down upon, and kept as far as possible in abeyance, the Craft Guilds of mere workers with their hands at any trade or craft, whether those concerned with the building and decorative arts, or the innumerable handicrafts necessary to civilized life, all the crafts connected with the manufacture of cloth, leather, clothes, or shoes, or the provision of food, drink, or other conveniences, "butchers, bakers, and candlestick makers."

From the earliest times the merchants who dealt in goods which they neither made nor handled, who did not demean themselves by working with their own hands, have constituted a sort of trading aristocracy distinct from that of the military lords and their descendants, who had seized and held, or been given by kings, or overlords, for services rendered, strong places and great tracts of desirable land, and who constituted the feudal and non-trading aristocracy which is still to some extent in evidence here, and still more in Germany, Austria, Spain, and Portugal, and in titular rank all over Europe with the exception of those parts which were invaded by and subjected to the Turks.

The craftsmen, doubly overlorded, naturally created organizations to protect such privileges as they had won, to regulate their wages, to prevent undercutting, and to establish and improve the crafts they professed, in fact, real trades unions.

These guilds seem to have existed in Great Britain at any rate in the second half of the twelfth century. They were well established and important in the thirteenth century, and extremely flourishing in the mid-fourteenth, when they received a great blow in the awful visitation of the Black Death, about 1348–68, as to which more anon.

It is very probable that there were Saxon trading and craft guilds before that fortunate event, for British arts and crafts, the Norman invasion.

The word "Guild" is of German origin (in this country of Saxon, of course,) —"Gilde." The "U" in guild being due to Norman French spelling.

In Saxon times the word was certainly used extensively to signify, primarily family groups or clans, and later corporations. We have the word in town names such as Guildford, and probably Gilling and Gillingham, and we preserve it in the word Guildhall, signifying the official home of a corporation. The Frith Gilds were defensive companies.

Merchant and Craft Guilds in their early days were generally, if not invariably, placed under the patronage of a saint, and had a chapel, or the use of one, allotted to them in a parish or cathedral church. But they must not be confused with the Parish Guilds which were definitely religious and charitable organizations, and not Craft Guilds. The Craft Guilds certainly shared chapels often with one another, and, very likely, with Parish Guilds.

At Chichester the Gild Merchant reconstituted in the twenty-fourth year of Henry VI's reign, i.e., as the Gild of St. George, the mayor being the master. A Gild Merchant, still in name, subsists at Preston (the only town in England), and is celebrated once every twenty years by festivities and processions. (Dr. Cross.)

It is stated, in Kitchen's "Winchester," that the first Gild Merchant in England was established there. Dr. Cross, "The Gild Merchant," states that "During and anterior to the fourteenth century it is probable that a charter of the King was necessary for the founding of a fraternity, but in the succeeding centuries we meet with numerous examples of the establishment and incorporation of Craft Gilds and trading companies by the town authorities."

The system of mother and daughter towns in regard to Gilds Merchant may have applied also to Craft Guilds. "Mothers" were the great towns and seaports, or important central towns such as London, Bristol, and Oxford. Many Irish towns were "daughters" of Bristol.

The early French Guilds, "*confrèries*" or "corporations," closely resembled the British in organization, and probably the French system was copied here.

In both cases the guild was governed by a master elected by its members from their own body, and generally a highly skilled craftsman of considerable repute, variously known as master, maitre, or warden, and a treasurer, bursar, or boursier, probably also a scribe or secretary.

In the ninth year of King Henry V, according to an entry in the Brewer's records, there existed in London 111 craft confraternities, but these were not necessarily distinct gilds or companies, as weak trades or poor confraternities sometimes united for mutual assistance. Amongst them are "writers of texts," pouchmakers, piemakers, whittawyers sheders, malemakers, hurers, galochemakers, leches, writers of court letters, and orglemakers. And a list, dated in 1518, of the companies keeping the watch, which seems to have implied providing a stated number of bowmen to attend in the mayor's service on the vigils of St. John and St. Peter, and keep the watch.

Forty-seven companies undertook this honourable task, the blacksmiths sending two bowmen, the carpenters six, and the goldmsiths, mercers, drapers, fishmongers, and one or two other rich companies eight apiece.

The Gilds Merchant, of course, included various trades, and in a small, fairly thriving town like Wallingford, where we find in 1227 all sorts of small trades included in the gild—glovers, "ferrons" ironworkers, "fabri," i.e., smiths carpenters, wheelers, coopers, weavers, fullers, and bakers.

Our interest as artists and craftsmen is naturally with the workers in the trades concerned with building, and its many accessories, and in the various minor crafts in which the element of design is prominent.

It must be remembered, however, that in mediæval times and, indeed, much later, except, perhaps, in Italy, no craft was in any way distinguished, unless those of the gold and silversmiths.

The weaker of the crafts were in small towns, presumably too poor to form separate guilds, and it was only in large and rich towns that small crafts had distinct corporations. Incorporation was expensive. The weavers of Oxford paid two gold marks to obtain their right to a guild.

The constitution of Craft Guilds seems to have been practically identical in all, and identical or closely similar in France and England.

Legitimate and recognized guilds were incorporated, not apparently always by the Crown, but always with the consent of the borough.

There were, however, irregular guilds, at any rate in London, non-incorporated, and known as "adulterine" guilds.

Here and there, where locality fostered special trades, and where the numbers of the craftsmen were considerable, properly constituted and chartered guilds were established.

At Oxford the cordwainers had an important guild. A great and wealthy town like Bristol had, of course, many flourishing guilds, and it has to this day the Society of Merchant Venturers.

The firmly established custom of three grades in all the trades coincided with that of military life; you had in the trades apprentices, journeymen, and masters, as you had pages, esquires, and knights.

The fully developed guild, in a prosperous corporate town, consisted of men all following one craft or "mystery," and jealously protecting the secrets and the privileges of their society, but further it was watchful of the workmanship of its members, admitting none not supposed to be competent workmen, and it was also a social and charitable society. It had its hall, its coat of arms or badge, its liveries for ceremonial occasions, and its furniture, plate, and crockery.

Apprentices were not admitted, the craftsman must be at least a journeyman, and the masters formed a distinct upper grade, from whom the master or warden was elected.

All questions affecting the craft or mystery professed were debated in the guild, the prices for work, wages of workmen, materials, and craftsmanship.

The guilds did not teach their craft, but they were most exacting in examination of the work of candidates for admission, frequently, indeed, denying admission until a candidate had satisfactorily performed a definite piece of difficult work.

They were examining not teaching bodies, and their examinations were formidable. Their great utility to their crafts was the very high standard they maintained, and, naturally, example, rivalry, and ambition infected the general body of their members, with the results in the very high average of skill we find in the mediæval handicrafts.

The sense, and love, and cult of beauty obtaining in these Craft Guilds, any time, say, from 1150 to 1450, are more than remarkable. The immense, whole-hearted concentration upon the production of beautiful things, not only in architecture and its contributory and dependent crafts, but in all objects of use, in religious, civic, and military ceremonial, in all the appurtenances of daily life, is the salient fact, the obvious lesson of mediæval craftsmanship, of which the guilds were the great social mainstay. If they were not training schools, if they did not directly undertake teaching, they taught by their mere human contacts, by their rivalries, and by the productions of their members. They obeyed, they exacted obedience to a great rule.

Everything had to be handsome. There was no fuss about it, it was the great unconscious rule, universally accepted.

Men being what they were, that is to say, much what they are, and are like to be, this splendid concentration upon and demand for beauty may to some extent be explained by the fortunate absence of too many other interests.

Nowadays the interests are of such an enormous number and variety, outside of a man's home, that many men don't stop at home, and outside of a man's trade, that many men following a trade or craft are only interested in it as a means of living, not for itself. Fortunately there are still craftsmen who are interested, who do care, who live in and for their crafts.

It is very obvious, however, that the skilled mediæval craftsmen who carved, who modelled, who painted, who wove tapestry, and could give themselves expression, got immense pleasure and fun out of their work, or it wouldn't be so pleasing to us moderns.

William Morris, our great past-master, said once something like this: "If you don't put pleasure into your job nobody's going to get much out of it." That's as true as most things he said.

They loved larks, these dead and gone guildsmen, just as much as we do; their guilds gave them social opportunities and feasts. When a master was elected he had to give the guild a dinner, or pay a fine of a mark or more. Sometimes they exceeded, and took a drop or so too much. Sometimes they quarrelled and drew knives, and were suppressed and fined. They were unquestionably religious, they all had to pay for the upkeep of their altar, and the candle. They were devoutly proud to walk in religious processions, in their liveries, with their craft emblems and banners, and disputed the honour of bearing lights.

They were subject to various penalties for the infraction of rules, and had many guild dues to pay. But if they fell into ill-health, poverty or misfortune, the guild was prompt to help them. If they died poor, their guilds frequently cared for the widow and children.

The craftsman's guild was not only a closely protectionist trade corporation—jealous of pay and privileges, striving always for the creation of a lucrative monopoly, but honestly jealous for its standard of workmanship, its good repute, and that of all its members—but the members' social and benefit club. It did pretty well all that the various more or less modern associations, such as the Oddfellows, the Shepherds, the Druids, and the Foresters do now.

What chiefly concerns us is that these guilds in their best days (which ended for most of them at any rate before the middle of the sixteenth century, and in beauty and charm, for most of the crafts long before that) did steadily maintain the highest standards of workmanship, and the fine traditions of their craft.

By the end of the thirteenth century the Craft Guilds had attained a very secure position in the social hierarchy, and were thoroughly recognized as stable and most useful elements in the social order of municipalities. They could be, and were counted upon as supports of the State, as loyal adherents of Church and Crown, and as unofficial training schools, through their incorporations of respectable and knowledgeable citizens in the highly skilled masters of the crafts, with whom the apprentices lived and served. They turned out a constant stream of well-trained craftsmen, law abiding, trained to obedience, for the most part decent living, good, useful citizens in time of peace, good, useful soldiers if need were in time of war.

The guildsmen were immensely attached to their guilds, immensely proud of their craft or "Mystery." They showed their affection for the one and their pride in the other, by frequent bequests to their guild or "Company," with the result that in time they became considerable property holders in houses and lands. The larger guilds or companies, in the larger and richer cities, especially, of course, in London, became immensely wealthy, and this accumulation of wealth helped their undoing and final dissolution as real active craft guilds. The survivors, in the London City Companies, are rich landlord associations, administering a good deal of benevolent work, making frequent and liberal contributions to useful causes, educational and other, and maintaining a kindly traditional contact with their nominal crafts, observing the form of apprenticeship and service for their members, and generally keeping up the names and shells of things and customs, but containing few or none of genuine craftsmen, and only exercising, which they do with great splendou and most genial hospitality, the excellen custom of occasional communal eating and drinking.

The causes of change during the centuries of their existence were many There was the inevitable gradual change with the social changes of those centuries in accordance with the constant rule o change which optimists, mostly youthful always call Progress, and pessimists mostly elderly, bewail as subversion or retrogression.

One sudden, unexpected, and awful cause of change in the guilds and in the crafts was the terrible visitation of the Black Death, a hideous form of plague, that seems to have made its first appearance in Dorset, some authorities say Southampton, in 1348 or thereabouts, and which rapidly spread westward and northward. We find records of its frightful devastation in the great and thriving towns of Bristol in 1349.

The case of Bristol was the case of many, if not most, of the thriving, crowded commercial towns of narrow streets and dense population, and is therefore typical. Craft Guilds in Bristol were of very early origin. Mr. Hunt, in his "Bristol," one of the historic towns series, says "there can be no doubt that these institutions existed here before the Conquest," and he further says of the Guild of Kalendars, one of the most ancient in England, that "besides performing the ordinary guild functions of mutual help, of visiting the sick, and providing masses for the dead, it undertook works of education and learning"; further, "The Guild meetings are said to have been held on the Kalends of each month." The latter statement, I should think, is a modern pedant's guess derived from the name, which signifies calenderers or hot pressers of linen, and has nothing to do with the kalends, which were not much thought or known about in the eleventh or twelfth centuries.

A Charter of John, while Count of Mortain, in 1188, "to his burgesses within and without the walls" of Bristol, says, "They may have all their reasonable Guilds as well or better than they had them in the time of Robert and his son William, each of Gloucester."

There were many craft guilds in Bristol, amongst the richest the weavers and the tailors, and of the building and kindred crafts as many probably as in any English town but London.

There was also the Fellowship of Merchants, subject to and receiving the support and confirmation of the municipal government, and still existing as the Merchant Venturers, and occupying its hall. Its regulations made under the celebrated Canynges, then mayor, were established in 1467 and became part of the law of the town. All foreign trade was carried on under its direction, and all merchants were bound, under a penalty of a pound of wax, to appear before the Master and Fellowship and hear their decrees.

It seems to have had an internal or affiliated guild, the Fraternity of the Merchants and Mariners of Bristol, which was dedicated to God, our Lady, St. Clement, and St. George, and maintained a priest and twelve poor sailors. All masters and mariners had to pay a contribution to this guild, on the completion of a homeward voyage.

# Correspondence

## American Methods in English Architecture

*To the Editors of* THE ARCHITECTS' JOURNAL.

Sirs,—In your issue for January 10 ttention is drawn to Mr. Alfred C. ossom's scheme for the improvement of mmercial architecture in England by e offer of an educational travelling udentship to the United States, the st of which, it is understood, is to be enerously defrayed by Mr. Bossom imself.

Such a valuable and practical educa onal scheme will undoubtedly receive e hearty support of the architectural dies in this country, and the Society of rchitects, whose establishment of a holarship to provide facilities for the udy on the spot of American architec re and methods was announced in the ovember issue of "Architecture," will atch its development with the greatest terest.

The two schemes differ mainly in the ethod by which the holder of the student ip is to be selected. Mr. Bossom ap rently proposes to institute an open chitectural design competition on lines hich are similar to those of the Society Architects' Victory Scholarship com tition.

The conditions of the Society's Ameri n scholarship, which is restricted to ritish subjects, are calculated to attract e type of architect who has followed a successful student's career by gaining rther knowledge and experience, which is intended this scholarship shall crown. will be awarded to the architect whose tainments and personality recommend m to the jury as the candidate best ted, in their opinion, to benefit by the ward and to enable the Society to pass that benefit to others.

The details of the Society's American holarship scheme are in the hands of a mmittee, and a further announcement the subject will be made in due urse.

C. MCARTHUR BUTLER.
The Secretary of the Society of Architects.

## nification & Registration

We publish below a letter which has en sent to the R.I.B.A. We under and that a deputation concerning this being received at the Institute as we to Press.

*o the President and Council of the*
*yal Institute of British Architects,*
*9 Conduit Street, W.1*

Gentlemen,—In April 1920 the so eties allied to the R.I.B.A. and other chitectural bodies were invited by the I.B.A. Council to appoint representa ves to serve upon a Committee repre ntative of the whole profession, cluding unattached architects, for the rpose of considering and reporting on the subject of Unification and egistration. These societies appointed their representatives, and the Committee was duly constituted. For upwards of two years the Committee and its individual members devoted a great deal of time and trouble in getting together information for the preparation of a report upon the matter which had been referred to it.

In July 1922, before any report by the General Committee was issued, the Council of the R.I.B.A. passed a resolution purporting to dissolve and discharge the members of this Committee which was appointed, jointly with the R.I.B.A., by the Society of Architects, the Allied or other Societies, and by those architects who were not attached to any of these Societies.

This action of the Council of the R.I.B.A. did not commend itself to many representatives who had been appointed by their own societies, and others, to serve on the Committee; and the members of the Committee were invited to be present at a conference of Presidents of the Allied Societies held at the Royal Institute on July 21 last to discuss the position which had arisen.

This meeting held the view that the action of the Institute Council in purporting to dissolve the Committee was unconstitutional, and it was considered desirable that the Committee should complete its work, and prepare a report suggesting the outline of a definite scheme for further general consideration.

At a meeting of the Committee held on October 5, 1922, those present reaffirmed the decision of July 1922, and requested the undersigned to communicate with all the members of the Committee, inviting them to express their opinion on the proposal that the Committee should continue its work and complete and present its report to the various bodies represented upon it, intimating that, in the event of there being a general consensus of opinion in favour of proceeding, it was proposed to invite the Institute Council to reconsider its decision of July 1922 and to co-operate with the Committee in completing the work it has undertaken on behalf of the profession as a whole.

The replies show an overwhelming majority in favour of this proposal, there being no dissentients. We therefore, on behalf of the other representatives on the Unification Committee, request the Council of the R.I.B.A. to receive us as a deputation so that we may personally present our case.

With great respect it is pointed out that by extending this courtesy to the representatives of the Committee, the Council of the R.I.B.A. will not pledge itself to any course of action but will at least serve the useful purpose of ascertaining if there is some means of reconciling conflicting views on questions of policy and principle and of achieving, by co-operation, the end we all have in view, and which, at present, we are seeking to reach by different methods.

We are, Gentlemen,
Yours faithfully,
(*Signed*) HERBERT T. BUCKLAND.
E. J. SADGROVE.
H. C. CORLETTE.

## Housing and Resident Ownership

*To the Editors of* THE ARCHITECTS' JOURNAL.

Sirs,—If the Government could bring forward a scheme whereby it could make possible and induce the working classes and others to own their houses, among the many social and economic advantages of such a scheme would be a saving in repairs, amounting in the aggregate possibly to millions per annum.

Why should not the Government encourage resident ownership by agreeing to advance, by way of mortgage, practically the whole cost, less a deposit of, say, £20, at a low rate of interest? The capital sum repayable by means of a sinking fund, based on the 4 per cent. tables, spread over forty years, would amount to about £5 per annum.

Take, as an example, a freehold or long leasehold house costing £500; the interest at 4 per cent. would be £20 a year, plus the sinking fund of £5, a sum which the working classes could afford to pay, i.e., £25; added to which would be maintenance, repairs and insurance, and also the rates and taxes, unless it was found possible to remit these temporarily either wholly or in part.

A difficulty which might arise is that a man, losing his work in a particular neighbourhood, would be compelled to move and vacate his house. To solve this problem he might be given Housing Bonds to the value of this property at that time, and thus be able to obtain possession of another house in the required district.

Such a scheme might be worked by approved Building Societies, with their existing organization and the necessary Government backing.

A long lease would probably be better than freehold, as it would be possible to enforce proper maintenance and repairs.

PERCY B. TUBBS.

## Tutankhamen's Tomb

*To the Editors of* THE ARCHITECTS' JOURNAL.

Sirs,—One remembers Wilde's poem upon the sale of Keats's love-letters, and the expressions of opinion upon the publication of the Browning love-letters some years ago, but not one word seems to have been uttered against the rifling of an ancient Egyptian's tomb. Yet who would care for his father's or mother's grave to be opened and the poor body brought forth just in order that the wedding-ring upon a finger might be subjected to expert examination by archæologists, historians, architects, and the like? R. K. W.

Can the passing of time excuse the intrusion into any tomb?—there to find the ornaments and jewels of some other age, the burial garments, and a spray of flowers. What was laid to rest with so much tenderness and care, should not be dragged into the light of day by the curious people of another age.

## Building Trade Crisis

Another stage was reached last week in the threatened dispute in the building industry arising out of the employers' proposals for the extension of the forty-four-hour working week to forty-seven hours for eight months of the year, with forty-four hours for two months and forty-one and a half hours for the remaining two months, and a reduction in the wages of all operatives by 20 per cent.

The following official statement was made by Mr. George Hicks and Mr. R. Coppock at the close of last Friday's meeting :—

A Central Committee has been set up, consisting of the Emergency Committee of the National Federation, with one representative from each affiliated union, to deal with all matters arising in the event of a dispute, and to arrange propaganda and deal with other matters which it will be necessary to place before the affiliated membership. The unions have decided to pool the whole of their national organizers to be at the disposal of this committee and to be utilized in any area where their services are most required.

A deputation has been appointed to meet the General Council of the Trade Union Congress next Wednesday to place the full facts of the situation before that body. We believe that the Federation of British Industries is behind this suggestion of longer hours, and we consider that the whole of the trade union movement should be made aware of the demands in order that support of the trade union movement may be enlisted. We believe it is only part of a general attack on trade union standards. Other industries are being attacked in different ways and at different times.

On the resumption of Parliament a meeting will be requested between the Labour members of Parliament and the representatives of the building operatives, in order that the Labour members may be made fully aware of the position. While this Central Committee has been set up, it does not in any way interfere with the functions of the elected representatives of the Federation on the Wages and Conditions Council, but will at all times be the negotiating medium between the operatives and the employers. We are still hoping that the position is capable of being negotiated without any disturbance taking place in the industry.

We understand that the employers are meeting, and there may be a suggestion put forward from that meeting which will lead to further negotiations. That, of course, we shall entertain.

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## Wilberforce Museum, Hull

A fine oak-panelled room has recently been restored in the Wilberforce Museum (originally the home of the Lister family), Hull, by the generosity of Messrs. James and Charles Downs. The oak panelling was stripped from the walls in order that slight repairs might be carried out, and during this process the fine old arched fireplace shown in the photograph was revealed. The room was probably the original kitchen for the mansion, the chimney being open to the sky. Wilberforce House was built by the Lister family about 1590, and Charles I was entertained there in 1639. It is now a public museum devoted to the history of Hull, and the recent restorations have been carried out under the supervision of the Curator, Mr. T. Sheppard, M.Sc., F.G.S.

[We are obliged to the editor of "The Connoisseur" for permission to use the illustration.]

## R.I.B.A. Prizes and Studentships

At the meeting of the R.I.B.A., held on Monday evening last, the awards of prizes and studentships for 1922–23 were announced as follows :—

R.I.B.A. Essay Medal and 25 guineas :

Lionel B. Budden, M.A., A.R.I.B.A., Withinfield, Heswall, Cheshire.

Owen Jones Studentship (£100) :

Cyril Forbes Filbey, 123 Crystal Palace Road East Dulwich.

Grissell Gold Medal and £50 :

Percy Morrey, M.B.E., A.R.I.B.A., Wynhill Bramhall, Cheshire.

Ashpital Prize (books value £10) :

Alexander Simpson Reid, 221 Clifden Road Aberdeen.

Measured Drawings Medal and £50 :

Wesley Dougill, B.A., Liverpool, The Lees, 58 Colthorpe Road, Edgbaston.

Pugin Studentship (Medal and £75) :

A. Newton Thorpe, Cemetery Lodge, Fulford, York.

Godwin Bursary and Wimperis Bequest (Medal and £130) :

William Thomas Benslyn, A.R.I.B.A., 42 Wes Side, Wandsworth Common, S.W.

Tite Prize (£100) :

John Chane Shepherd, A.R.I.B.A., 51 Torrington Square, W.C.

Honourable Mention :

Miss Isabel Maud Chambers, The Priory Roehampton.

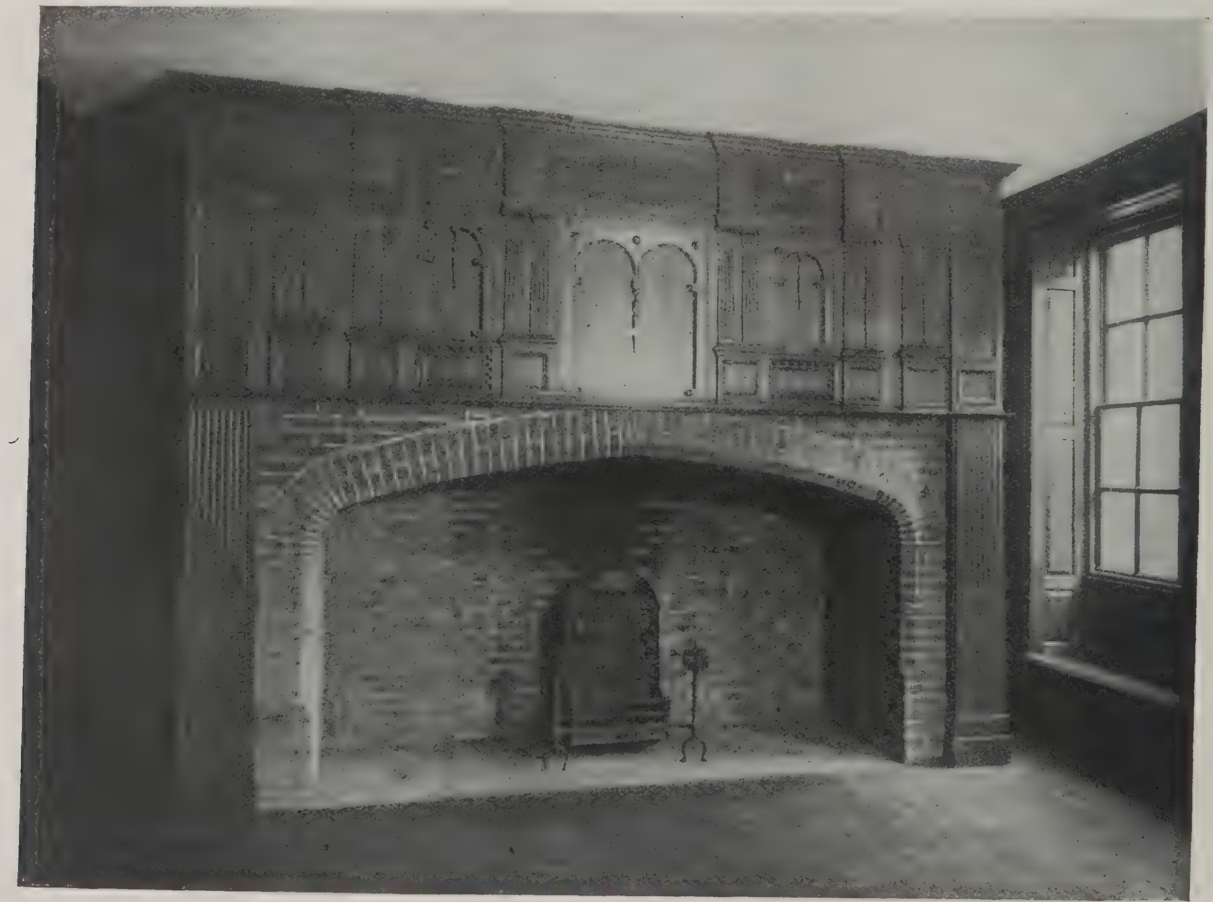
Henry Saxon Snell Prize and £60 :

Ernest G. Theakston, F.R.I.B.A., 12 New Court, Lincoln's Inn, W.C.

Honourable Mention :

George Bertram Edward Norburn, A.R.I.B.A The Crossways, Northwood, Ramsgate.

Alfred John Brown, A.R.I.B.A., 35 Handside Lane, Welwyn, Herts.



ROOM IN THE WILBERFORCE MUSEUM, HULL, SHOWING A RECENTLY DISCOVERED FIREPLACE.

## Competition News

*The "Chicago Tribune" Competition.*

The accompanying illustrations show the design of Messrs. W. J. H. Gregory and B. R. Saunders, AA.R.I.B.A., which obtained honourable mention in the "Chicago Tribune" competition for their new administration building. Representatives of twenty-two nations sent in designs. The site is 100 ft. frontage, by 135 ft. deep, and the height allowed by the by-laws is 400 ft., the area being limited to 3,600 sq. ft. at a height above 260 ft. The plan shows a central entrance for the "Tribune" offices and a subsidiary entrance for the offices over. The main entrance leads to a central domed hall lit on three sides. This hall gives direct communication to the public space. The circulation gives access to offices, elevators, and staircases. Future extensions on the remainder of the site were allowed for in the design. It was taken into consideration that the building should be treated as a tower and the vertical lines emphasized. The winning design was illustrated in our issue for January 3.

*Durham School Memorial Chapel.*

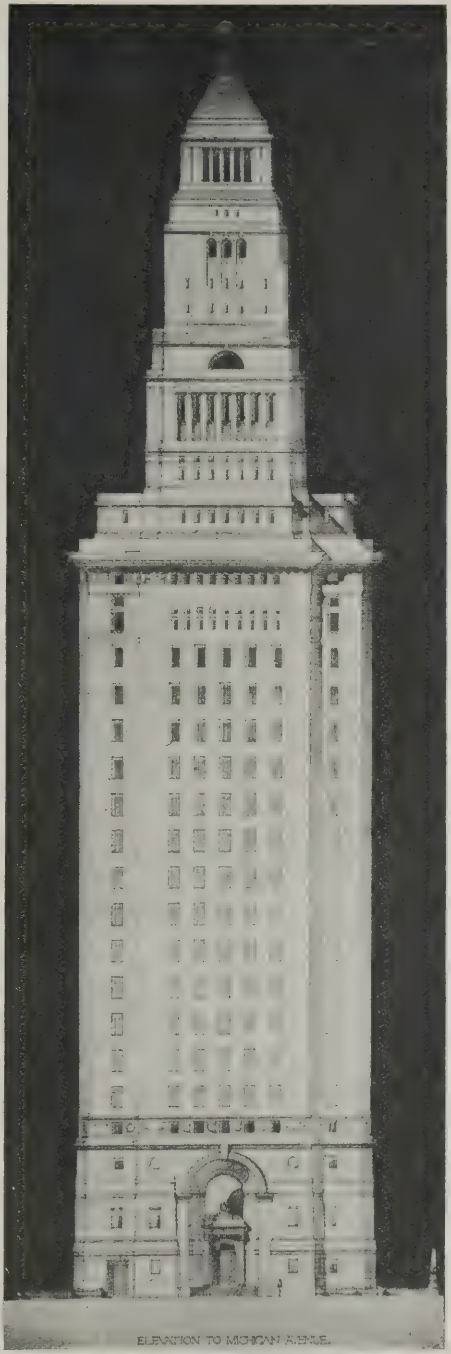
The Memorial Committee is inviting a number of selected architects to submit plans for this building, and Sir Charles Nicholson has been appointed assessor. Architects wishing to compete should apply to Mr. H. S. Harrison, 19 Western Hill, Durham.

*Brechin War Memorial Competition.*

The R.I.B.A. have issued the following notice: "Members and Licentiates of the R.I.B.A. must not take part in the above competition because the conditions are not in accordance with the published regulations of the Royal Institute for architectural competitions." A similar notice has been issued by the Society of Architects to their members.

*Old Cranleighans' War Memorial Competition.*

The winner of the above competition is Mr. W. S. Masters, of Messrs. Trehearne and Norman, Windsor House, Kingsway, W.C. Mr. Shepherd was the assessor.



## The College of Hygiene

The Council of the R.I.B.A. have made representations to the Ministry of Health pointing out the desirability of holding an open architectural competition for the design of the new College of Hygiene in London, which is to be built with funds provided by the Rockefeller Foundation of New York. This course would give to American architects an opportunity of taking part in the competition.

## List of Competitions Open

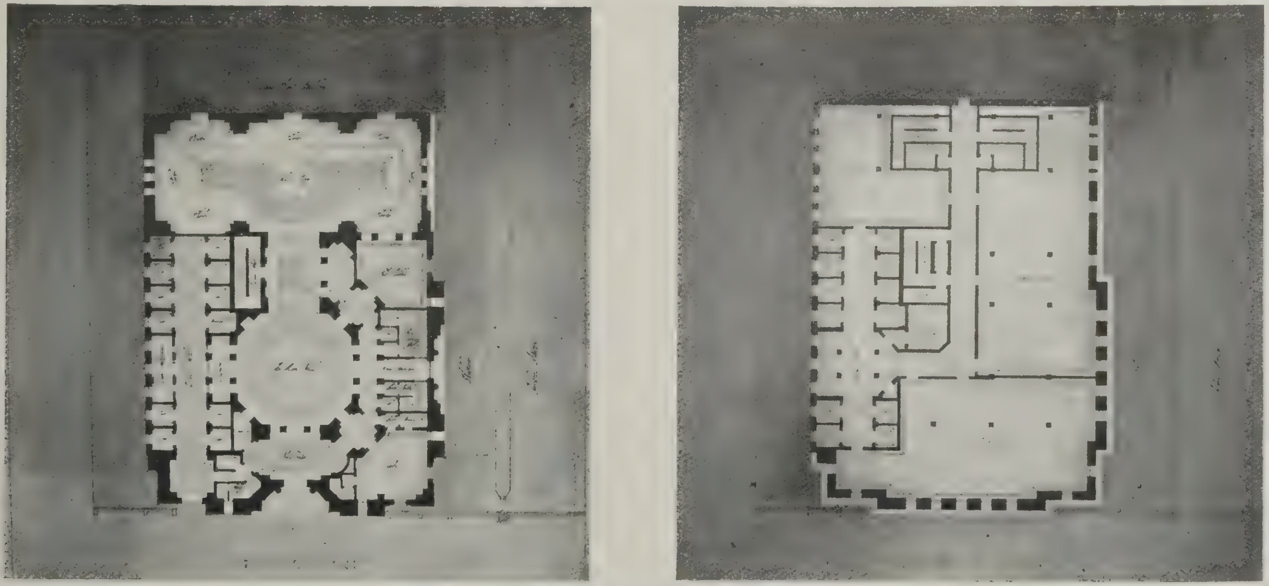
| Date of Delivery. | COMPETITION. |
|---|---|
| Feb. 1 | War Memorial to be erected in the Public Park, Brechin, adjacent to the Gleneadam Railway Bridge. Cost not to exceed £1,200. Apply Mr. F. A. Ferguson, Town Clerk, Brechin. |
| Feb. 28 | Scheme for the distribution of drinking water for the town of Mantes-sur-Seine. Apply Mairie, Mantes, or at the offices of La Renaissance des Cités, 23 Rue Louis le Grand (11c). Premiums: 4,000, 3,000, and 2,000 francs. |
| March 31 | War Memorial for Port Said, Egypt, to the memory of the soldiers of the Australian and New Zealand Forces who fell in Egypt, Palestine, and Syria during 1916, 1917, and 1918. Premiums: 250 guineas, 100 guineas, and 50 guineas. Apply High Commissioner for Australia, Australia House, Strand, W.C. |
| March 31 | War Memorial in Crow Nest Park, Dewsbury. Assessor, Professor C. H. Reilly, O.B.E., M.A., F.R.I.B.A. A copy of the conditions together with plans of the site may be obtained on application to Mr. H. Dearden, A.R.I.B.A., Borough Surveyor, Town Hall, Dewsbury, on payment of one shilling. |
| No date | New Town Hall for Cork. Limited to Architects living or practising in Ireland. |

## London Master Builders Sports Association

*League table up to and including January 20th.*

| | Plyd. | Wn. | Lst. | Drn. | Goals F. | Goals A. | Pts. |
|---|---|---|---|---|---|---|---|
| Perrycobow .. | 7 | 6 | 1 | 0 | 21 | 10 | 12 |
| Minter .. | 4 | 4 | 0 | 0 | 13 | 6 | 8 |
| Trocoll .. | 5 | 2 | 3 | 0 | 7 | 12 | 4 |
| Holancube .. | 2 | 1 | 1 | 0 | 4 | 4 | 2 |
| Higadillo .. | 5 | 1 | 4 | 0 | 4 | 4 | 2 |
| Holloway .. | 5 | 0 | 5 | 0 | 4 | 13 | 0 |

Last Saturday: Minter 5, Holloway 1; Perrycobow 5, Trocoll 0.



THE "CHICAGO TRIBUNE" COMPETITION

THE HONOURABLE MENTION DESIGN OF W. G. H. GREGORY AND B. R. SAUNDERS, AA.R.I.B.A.

# Enquiries Answered

*The Editors cordially invite enquiries from readers who require information on architectural, constructional, or legal matters. Answers to enquiries are in all cases the work of experts; and while every care is taken to make the replies thoroughly reliable, the Editors cannot hold themselves responsible for any inaccuracies that may inadvertently occur. Correspondents whose difficulties involve possible legal proceedings are strongly urged to consult their solicitors before taking action on any advice that may be given. Examination questions cannot be answered. It must be understood that, as a rule, both question and answer will be published in these columns. The name and address of the querist must always be given, not necessarily for publication. Correspondents are requested to be as brief as possible, and to write on one side of the paper only.*

### *Raised Footpath.*

"Footpath" writes: "The landlord adjoining my property has made up a footpath 18 in. above the previous level, consequently it is above the dampcourse of my house, and the damp is penetrating through the wall and causing me a great deal of inconvenience. Can I compel the landlord to lower this path below our dampcourse, or put a channel, or plaster the wall up to the level of the path? My house has been built for twenty years, but the path has only recently been made up. I have no 'right of way' through this path whatever."

—I am of opinion that if the dampness caused by the raising of your neighbour's back-entrance path above the level of the dampcourse is serious, and not merely sentimental, you may certainly call upon him to remedy the injury caused to your property, and an action would lie against him for damages. Upon the evidence of the sketch plan sent, it would appear that the amount of rainwater falling on the path is quite an inconsiderable quantity and not at all likely to cause any real injury. Have you proper rainwater guttering, or does the nuisance arise from adjacent and higher ground?

F. S. I.

### *Building Foundations.*

F. C. writes:—"The Ministry of Health in their journal 'Housing' for May 24, 1920, recommended for clay soils a type of foundation as accompanying sketch, consisting of reinforced concrete beams supported on 'stumps' of concrete, the holes for the latter being bored with the earth auger. I used this type of foundation for my own house, where the subsoil gives a lot of trouble, but I had a slight settlement after the dry summer last year. I do not, however, consider this settlement conclusive proof that the type of foundation is faulty, as I found on examination that the builder had not carried down the concrete stumps as deep as specified at the point where the settlement occurred, the stumps being, in fact, only about 2 ft. 6 in. deep, instead of 3 ft. 6 in. I have since used the same type of foundation in building three more small houses, but modified to this extent, that I carried down the stumps 4 ft. deep from the surface concrete, and used 1 ft. 6 in. square piers at all corners and under all chimneys. These have not been long enough built to contribute anything to my experience as to the reliability of the foundation. I should be glad if you could give me any information as to the reliability of this kind of foundation. Enquiries I have made from the Ministry of Health have not elicited anything, as they say they know of no housing schemes where this foundation has been used."

—The depth of a foundation affects the safe load upon it. Rankine's formula is

$$W = wd\left(\frac{1+\sin\theta}{1-\sin\theta}\right)^2$$

where W = maximum vertical load lb. sq. ft., $w$ = weight of a cubic foot of soil in lb., $d$ = depth of base of foundation below the immediately surrounding surface in ft., $\theta$ = angle of repose of soil. Assuming $w$ = 100 lb., $\theta$ = 40°, then for a depth of 2 ft. 6 in.

$$W = 100 \times 2{\cdot}5\left(\frac{1+{\cdot}643}{1-{\cdot}643}\right)^2$$
$$= 100 \times 2{\cdot}5 \times 21{\cdot}152 = 5{,}288 \text{ lb. sq. ft.}$$

For 3 ft. 6 in. deep the figures would be 7,403 lb. sq. ft., and for 4 ft. deep 8,461 lb. sq. ft. As the actual load on an ordinary foundation is generally limited to about 1½ ton sq. ft. = 3,360 lb. sq. ft., it will be seen that 2 ft. 6 in. deep should be sufficient, unless the soil is clay, in which case other considerations come in, and 5 ft. should in general be the minimum depth for such soil.

The reinforcement shown for the longitudinal concrete under the walls takes no account of the negative bending moment over the piers so that if any deflection took place the concrete would crack across and possibly let moisture reach the reinforcement. In calculating this as a reinforced concrete beam carried by the piers 6 ft. apart one would have to make allowance for the fact that it also rests on the soil; perhaps this might be considered worth ½ ton per foot super. Then the calculations would be as follows: the beam being 12 in. by 9 in. with three ½ in. diameter rods giving an effective depth of 7½ in. the ratio of steel to concrete will be $\frac{3 \times {\cdot}2}{12 \times 7{\cdot}5} = {\cdot}0067$, and the distance from the neutral axis to the compressed edge will be

$$k = \sqrt{r^2m^2 + 2rm} - rm$$
$$= \sqrt{({\cdot}0067^2 \times 15^2) + 2 \times {\cdot}0067 \times 15} - {\cdot}0067 \times 15$$
$$= \sqrt{{\cdot}01 + {\cdot}2} - {\cdot}1 = {\cdot}36.$$

The arm of the resistance moment in terms of the depth, say $a = 1 - \frac{1}{3}k = 1 - \frac{1}{3} \times {\cdot}36 = {\cdot}88$. Allowing a tensile stress in the steel of 16,000 lb. sq. in., the resistance moment will be $trbd^2a = 16{,}000 \times {\cdot}0067 \times 12 \times 7{\cdot}5^2 \times {\cdot}88 = 63{,}677$ lb. in. Again, allowing a compressive stress on the concrete of 600 lb. sq. in., the resistance moment will be $\frac{1}{2}ckbd^2a = \frac{1}{2} \times 600 \times {\cdot}36 \times 12 \times 7{\cdot}5^2 \times {\cdot}88 = 64{,}152$ lb. in. The lower of the two values must be taken. The bending moment being $\frac{WL}{8}$ we have for the 6 ft. span from pier to pier $W = \frac{63{,}677 \times 8}{6 \times 12} = 7{,}075$ lb. or per foot run $\frac{7{,}075}{6} = 1{,}179$ lb. Add to this the assumed value of the reaction of the earth 1,179 + 1,120 = 2,299 lb. per ft. run. This is equivalent to a height of brickwork in the two half brick walls of

$$\frac{2{,}299}{\frac{2 \times 4{\cdot}5}{12} \times 112} = 27{\cdot}4 \text{ ft.}$$

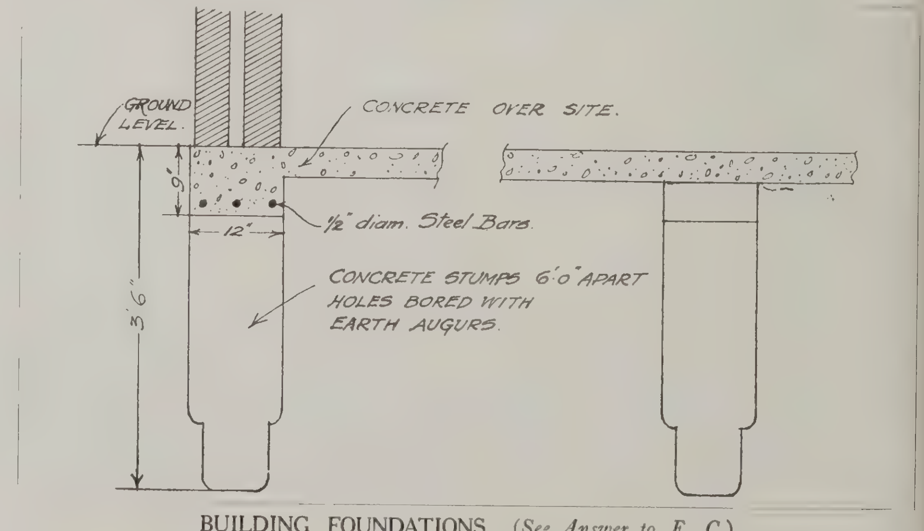
without the weight of floors or roofs, but as the brickwork will be of less height the remainder will allow for the loads it carries. Hence the type of foundation may be considered suitable.

HENRY ADAMS.

### *Oregon Pine.*

A correspondent writes: "Thank you for your reply regarding my enquiry concerning the treatment of Oregon Pine.

"I have been making enquiries in other directions, and think that the result of these may be of interest to you or your readers. I therefore enclose a sample of this wood treated as follows: To the finished surface apply a solution of six parts of water by weight to one part by weight of caustic soda. A white efflorescence will appear when the work is thoroughly dry; this can be removed with vigorous brushing with a hard brush; no wax has been applied to the enclosed sample." This treatment, judging from the sample enclosed by our correspondent, appears to be satisfactory.



BUILDING FOUNDATIONS. (*See Answer to F. C.*)

# Societies and Institutions

### *R.I.B.A.*

The paper on "Tradition and Originality in Italian Renaissance Architecture," which was to have been read by Mr. Geoffry Scott on May 28, has had to be postponed until next Session. Mr. Delissa Joseph, F.R.I.B.A., has accepted the Council's invitation to read a paper entitled "Building Heights and Ancient Lights," on the vacant date.

The Council of the R.I.B.A. have resolved that candidates who have sat for and failed to pass the Special War Examination shall be allowed to sit for the Special Final Examination (without the submission of probationary work) at any time before the end of 1925. Candidates who have failed in the Special War Examination on only one occasion will not be required to pay a further fee for one attempt at the Special Final Examination, but candidates who have failed at the Special War Examination on more than one occasion will be required to pay the ordinary fee for the Special Final Examination, viz., £10 10s.

### *The Melting Pot.*

"The Architectural Melting Pot" was the title of a lecture delivered by Mr. John S. M'Kay to the members of the Royal Technical College Architectural Craftsmen's Society in the College, George Street, Glasgow. The lecturer made a survey of the conditions under which architects and craftsmen were now working, and indicated how the spirit of the old styles might be recreated.

### *Mediæval Building in Belgium.*

Mr. James A. Swan, F.R.I.B.A., in delivering a lecture on the above subject before the Wolverhampton Building Students' Association gave some interesting particulars of the Cloth Hall and the Cathedral, Ypres, and the Skippers' House, Ghent. He drew particular attention to the construction of timber roofs, and described the work of the craft guilds in the use of brick, stone, and wrought iron. The lecture was illustrated by drawings and lantern slides.

### *The Notable Houses of Northamptonshire.*

Mr. J. Alfred Gotch, in the course of a lecture on "The Notable Houses of Northamptonshire," delivered before the Sheffield, South Yorkshire and District Society of Architects and Surveyors, said that Northamptonshire, as a county, was particularly rich in noble buildings. It showed how new churches were built and existing ones added to until the Reformation. On the dissolution of the monasteries, church building practically ceased, and a great period of house building began, which lasted from the middle of the sixteenth century till the Civil Wars of the next century. Northamptonshire shared to the full in the building activities of the time, and some of the largest private houses in the county were erected during these years—Holdenby, Kirby, and Burleigh, for example—whilst many were considerably enlarged including Rockingham Castle, Drayton, Rushton, Apthorpe, and Canons Ashby. In addition, Dingley Hall was built, as well as many smaller manor houses. Among the other buildings of interest mentioned were the market-house at Rothwell, which was never finished; the very curious triangular lodge, and the new building at Lyveden; all of which were built by Sir Thomas Tresham. The triangular lodge sets forth in stone the mystery of the Trinity, everything being in threes; there are three sides, three floors, three windows in each side on each floor, and three legends, each with thirty-three letters. Sir Thomas, who was a deeply religious as well as a superstitious man, further emphasizes these characteristics in the "new building," evidently built for a dwelling-house, in that it is in the shape of a cross, with equal arms, on plan, the cornices being decorated with carved symbols of the passion, the crown of thorns, the hammer and nails, pincers, sword, spear, lantern, and the sword of St. Peter with the ear of Malchus adhering to it. The lecture was illustrated with a series of excellent slides. A hearty vote of thanks to the lecturer was proposed by Mr. A. F. Watson, and seconded by Major C. B. Flockton.

### *Birmingham Architectural Association.*

Mr. C. Grant Robertson, M.A., C.V.O., Principal of the Birmingham University, has delivered a lecture on "Provincial Universities and the Study of Architecture" before the Birmingham Architectural Association. The lecturer remarked that he would welcome a department of architecture in the University of Birmingham. Such a department would have to start in a small way, and be built up as experience and application dictated.

Members of the profession would have to be consulted, and arrangements made, which would enable the students to spend part of their time in offices, for there were parts of an architect's education which could only be learnt by practical experience. One fact which was not always realized was that an architect, like any other professional man, must have a good general education before commencing to study for his profession, and unless students could satisfy the authorities that they had a sufficient groundwork, they should not be admitted to the University.

* * *

Mr. S. H. Meteyard, in reading a paper before the Birmingham Architectural Association on "Stained Glass," said that a stained glass window called for as much care and thought as any decorative painting on an opaque ground. The colouring was very much a matter of personal taste, and depended largely on the amount of light to be admitted. For instance, in the east window of a church, a dark window was an advantage, and that darkness should wherever possible be obtained by dark-coloured glass rather than by brown paint. The scale of the work, the regulation of the size of the figures, and the fineness of the detail to the distance from which they were going to be seen was very important. It was worse than useless to put a lot of fine detail in a position where it could not be seen properly.

Speaking of the material production of a window, Mr. Meteyard said that in the old days, owing to the smallness of the pieces of glass used, a very considerable part of the work was covered with lead. As the craftsmen became more expert the sheets got larger and the artists relied more on the paint; however, they always got a glassy appearance until the introduction of enamel colours, when all look of glass disappeared. The best system of leading was, after the main forms had been outlined, to make the subsequent divisions more or less horizontal with perhaps a few that could not be so arranged vertical, or nearly so.

The lecturer then described the processes to which the glass was subjected, and stated that there was sometimes a tendency not to fire the painting sufficiently, which resulted in the paint disappearing in a very few days.

### *The Institution of Heating and Ventilating Engineers.*

Those interested in the increasing use of central heating in this country were given information which would lead to economy in working, and also in fuel, by Mr. B. R. Wingfield, Ph.D., M.I.E.E., in a paper read before a meeting of the Institution of Heating and Ventilating Engineers. After describing various types of regulators he remarked that he was convinced that overheating would be avoided and that there would be a saving in fuel to the ultimate benefit of the community if temperature regulation was made a regular part of every central heating installation, whether large or small. Increased numbers of installations would bring down first costs, and the reputation of central heating of being a costly and, therefore, a luxurious method of warming, which only the wealthy could afford, would disappear. This question of reliably regulated and simple central heating was very important at the present time, when on account of the difficulty of getting domestic help, the question of the "labour-saving house" was again a subject of frequent discussion. There was no reason why a carefully planned hot-water heating installation should materially add to the cost of, say, a five or six roomed house if the saving in chimneys and fire places were taken into account.

### *Engineers' Surveyors' Association.*

At the monthly meeting of the Engineers' Surveyors' Association, held at the Institute of Marine Engineers, London, a well-attended assembly was able to listen to a paper on "The Cast Iron Sectional Water and Steam Boiler," a subject with which the majority of the engineers present were in daily contact. Through the courtesy of the National Radiator Co., Ltd., of Hull and London, lantern slides of the most modern heating appliances were shown, and also a two-reel film depicting the "Ideal" Boiler in manufacture from start to finish. These views proved most interesting and instructive, and were followed by a lengthy discussion, numerous questions being dealt with by Mr. J. A. Peacock on behalf of the manufacturers. Captain W. H. Raven was in the chair.

## Lectures on Sixteenth-century Art

A course of ten public lectures on Sixteenth-century Art is to be given by Professor Percy Dearmer in the Great Hall of King's College, London. The lectures, which will be illustrated by lantern slides, will be given at 5.30 p.m. on the following Tuesdays. (The first lecture, entitled: Architecture. Renaissance: (i) Vitruvian; (ii) Palladian, was given yesterday.)

January 30.—Architecture. English Tudor, and Early French Renaissance.

February 6.—Sculpture. Fifteenth- and Sixteenth-century Sculpture outside Florence (Italian, French, and German).

February 13.—Painting. Netherlands, Middle Period: Quinten Massys, Patinir, Mabuse, L. van der Leyden, Pieter Bruegel.

February 20. — Painting. German: Dürer.

February 27. — Painting. Italian: Leonardo and his followers.

March 6.—Painting. Italian: Correggio and Michelangelo.

March 13.—Painting. Venetian: Giorgione.

March 20.—Painting. Venetian: Cima, Carpaccio, Catena.

March 27.—Painting. Summary.

Tickets for the lectures can be obtained before each lecture outside the Great Hall, or between 10 and 4 at the College Office. Fee: 1s. for one lecture, 7s. 6d. for the course of ten.

## The Work of the Architects' Assistant

Mr. John Mitchell, general secretary of the Architects' and Surveyors' Assistants' Professional Union, has drawn our attention to an interesting paragraph which appeared in "The Daily Telegraph" in the course of a descriptive article of a new building. In the course of this article it is stated: "It would be interesting to know the number of drawings which have been prepared in order to supply the builders with information necessary to enable them to complete their work. In addition to general plans, &c., to a scale of 8 ft. to 1 in., there are portions of the building to be illustrated in detail to a scale of ½ in. to 1 ft., and these again are augmented by drawings showing mouldings and enrichments full size. The architect, no doubt, has had an energetic and enthusiastic band of architectural assistants to help with this tremendous task, and, as their zealous help contributes, in large measure, to the despatch and progress of the work, they undoubtedly share with the designer a just pride in his completed masterpiece."

Mr. Mitchell says: "In my experience this is the first time that the work and existence of architectural assistants have been cited in the public press as being a contributing element to the completion of an actual building. Usually the services of the architect, contractors, clerk of works, etc., are described, and rightly so; but why the important work commonly entrusted to architects' assistants is entirely ignored may be attributed to the obsolete and unjust assumption that they are permanently learners and can never enter the ranks of workers and producers. They are presumed, regardless of age and experience, to be serving a life sentence to elementary study. In the instance quoted they are admitted to be live workers actually helping, in no unimportant way, the production of artistic and utilitarian matter of first merit. They are described as having contributed 'in large measure to the despatch and progress of the work,' even as the sanitary engineer and others. A notable honour this for men whose rank and status is usually deemed unworthy of public notice. I presume that the architect was aware of this publication, and venture to express appreciation of his sense of justice and my opinion that to the laurels won by architectural achievement has been added an additional lustre by this disinterested and gracious act."

## Coming Events

*Wednesday, January 24.*

Royal Academy.—Lecture on Decorative Painting. By George Clausen, R.A. 3.30 p.m.

Northern Architectural Association.—"The Rise and Decline of English House Design" (lantern). By Nathaniel Lloyd, O.B.E.

*Thursday, January 25.*

Birmingham University.—Lecture on Town Planning. By H. H. Humphries, M.Inst.C.E.

Institute of Structural Engineers.—"The Relations between the Architect and the Engineer." By W. J. H. Leverton, F.S.Arc.

*Friday, January 26.*

Royal Technical College Architectural Craftsmen's Society, Glasgow.—"Modern Sanitary Ware and its Manufacture." By Henry S. Brown.

*Monday, January 29.*

R.I.B.A.—Special general meeting to consider Draft Registration Bill. 5 p.m.

Royal Sanitary Institute.—Introductory Lecture. By Louis C. Parkes, M.D.

Architectural Association.—"The Artist Craftsman in the Theatre of To-day." By Albert Rutherston.

## The Cardiff School of Architecture's Dance

The third annual dance of the School of Architecture has been held in the Cardiff Technical College. The Assembly Hall was tastefully decorated for the purpose. Moreton's Orchestra maintained its excellent reputation, and a large number of students and their friends spent a thoroughly enjoyable evening. Amongst those present were Mr. Ivor Jones, A.R.I.B.A. (secretary of the South Wales Institute of Architects), and Mrs. Jones, Dr. D. J. Roberts (of the Ministry of Health), Dr. Magra, Mr. T. Lewis, Ph.C., Mr. F. C. Highfield, Ph.C., and Mrs. Highfield, Mr. R. H. Winder, M.A., A.R.I.B.A. (assistant lecturer in Architecture), and Mrs. Winder, and Mr. W. S. Purchon, M.A., A.R.I.B.A., head of the Department of Architecture and Civic Design. The Students' Committee and its secretary, Mr. Brian Thomas, are to be highly congratulated on the success which attended their efforts.

## Street Lighting

The last meeting of the Illuminating Engineering Society was devoted to the discussion of street lighting. Mr. A. P. Trotter presided. Mr. Haydn T. Harrison, in his introductory paper, emphasized the importance of adequate public lighting in the interests of health and safety, and the increasing demands made by the greater speed of modern motor traffic. Dealing with the specification of public lighting, Mr. Harrison endorsed the method based on measurement of minimum horizontal illumination, approved by a Joint Committee in 1913, and quoted the classifications of streets on this basis proposed by this Committee, and also in the United States. He also discussed the spacing of lamps, pointing out the advantage of a lower ratio between distance apart and height of suspension, and described various methods of getting improved distribution of light and more uniform illumination between lamps.

Mr. L. Gaster, in a second supplementary paper, dealt chiefly with street-lighting in relation to safety, and pointed out how the reduced lighting in the streets of London during the war had led to increased accidents. He laid stress on the need for avoiding unduly sharp contrasts and for obtaining uniformity. He suggested that the supervision of the lighting of London under one central authority would prove beneficial in this respect. In these days of fast-driven motor traffic adequate public lighting was not merely a parochial matter, but one of national importance. A series of lantern slides were shown, some illustrating actual conditions in wartime, showing the very "patchy" effect produced by the methods of screening adopted. Other illustrations showed some pleasing designs of posts and lanterns in American cities. The standards in St. James's Park, on the main way leading to the Victoria Memorial, were mentioned as examples of good constructive design. Street lighting formed an essential part of town planning, and in securing illumination that was both useful and pleasing the co-operation of architects would be valuable.

The discussion was opened by Dr. Clayton Sharp, who gave a striking account of the thorough methods of testing adopted in certain American cities, complete stretches of roadway being allotted for practical experiments before decisions were taken.

Public lighting inspectors from Glasgow, Newcastle-on-Tyne, and other cities joined in the discussion, and a useful contribution was made by Mr. H. L. Thomson, Chairman of the Lighting Committee to the City of Westminster, who referred to the decorative effects of street lighting. Mr. Thomson remarked that all light which passed upwards and did not fall on the roadway or pavement was not necessarily wasted. Such light fulfilled a useful purpose in illuminating the exteriors of important buildings which ought to be visible at night as well as by day. He also suggested that useful supplementary illumination might often be obtained from ornamental brackets of pleasing design attached to the frontages of such buildings, and remarked that public lighting authorities might often derive benefit by consulting architects in connection with questions of this nature.

Wednesday, January 31, 1923 Vol. LVII. No. 1465

# THE ARCHITECTS' JOURNAL & Architectural Engineer

*With which is incorporated "The Builders' Journal."*

A PANEL IN THE ASSEMBLY ROOMS, BATH.

S. D. ADSHEAD, F.R.I.B.A., ARCHITECT. ALFRED HAYWOOD, PAINTER.

27-29 Tothill Street, Westminster, S.W.1.

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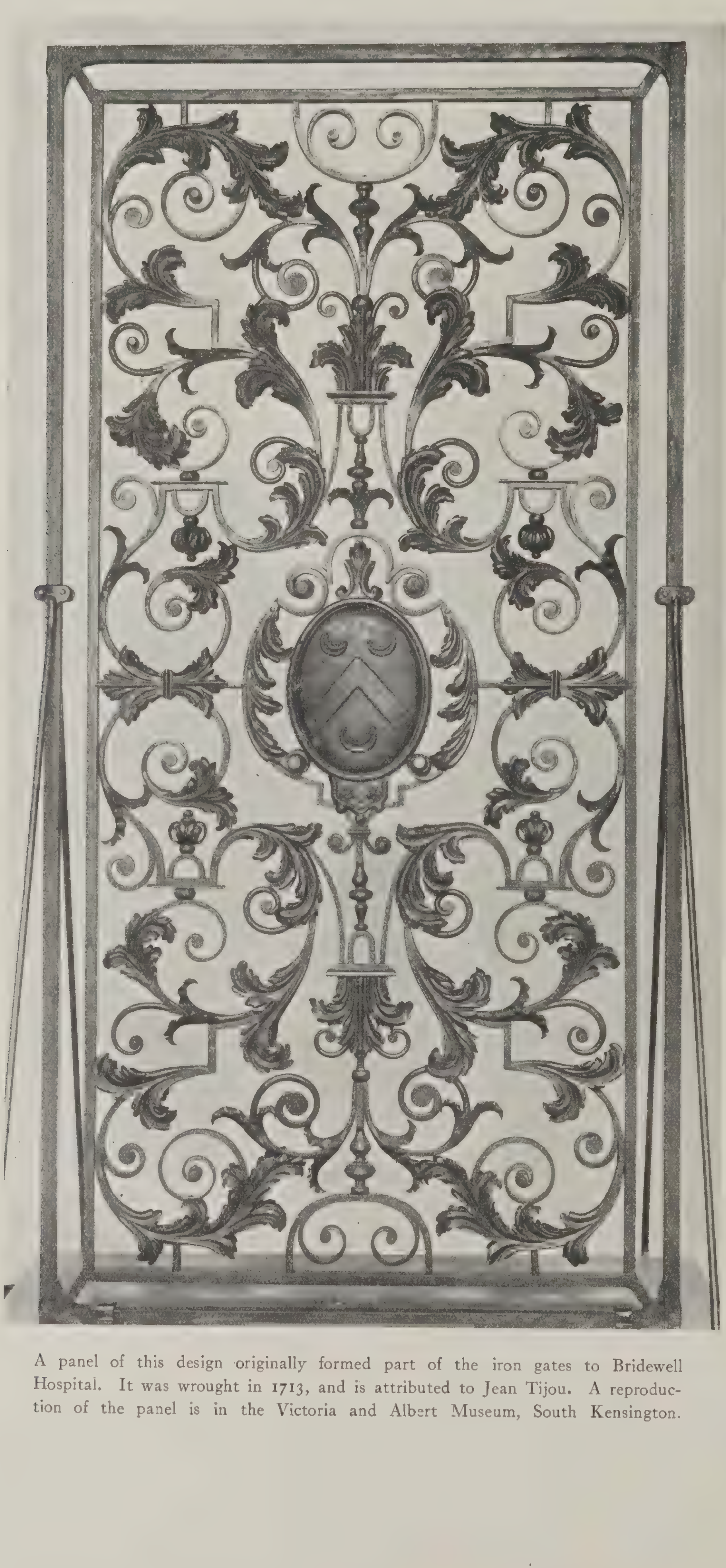
# Details of Craftsmanship. 16.—A Panel of an Iron Gate at Bridewell Hospital, New Bridge Street, London



A panel of this design originally formed part of the iron gates to Bridewell Hospital. It was wrought in 1713, and is attributed to Jean Tijou. A reproduction of the panel is in the Victoria and Albert Museum, South Kensington.

THE

ARCHITECTS' JOURNAL

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# Town Planning and Amenity

INASMUCH as our Government is one which rests ultimately upon public consent, so, too, must the renewed interest in the town, as evidenced by town planning and all that is therein included, be a manifestation of popular feeling. Town planning, in fact, represents to-day the highest form of voluntary co-operative enterprise on the part of the individual towards improving our cities for the benefit of the community. It represents a revival of that civic consciousness, of that pride n city, which was the greatness of Athens in times of peace no less than in times of war. Of the magnitude of the sacrifices that the individual will unhesitatingly make for his country in war we have recently had ample enough evidence, but in times of peace the inspiration seems lacking. May not this interest in town planning be indicative of a changed attitude? It is not, however, sacrifice in the big sense that s wanted, for the most part, although here and there must be individuals whose personal interests are in conflict with those of the community, as in the development of a new district or the formation of a new road which interfere with certain personal privileges or advantages; but rather in small matters of daily life, and nowhere, perhaps, are these small sacrifices more urgent than in the alleviation of the dirt and untidiness which is a characteristic of all our cities.

It is both a blessing and a curse that man adapts himself to his surroundings and learns to accept them without question. How else could the discomforts of the war have been faced with such comparative equanimity, but how else, too, can we account for the silent acquiescence to the constant outrage on our senses which the state of our streets inflicts? Let us only walk along an important thoroughfare and take conscious note of all that offends, leaving aside a possible ugly and heterogeneous assortment of buildings. What do we find? On the ground a pavement partially littered with tramway or omnibus tickets; springing from the kerb a series of badly designed lamp-posts and tramway standards; on the fronts of buildings ugly lettering and offensive signs; pasted to their flanks hideous paper advertisements; wherever there is a vacant space a wooden hoarding aggressively impinging upon our thoughts with a diversity of useless information; and from the tops of the buildings are slung great bunches of wires crossing and recrossing the street, hitched up to coping or chimney with utter disregard.

An impartial student of our organization might well wonder why we silently tolerate these things, why we do not legislate for self-protection, and why, since the law controls —to some extent—noises and smells, it yet leaves our eyes at the mercy of the unscrupulous and the disorderly. An inquiry into these things, interesting as it might be in revealing odd human inconsistencies, cannot now be undertaken; our concern is rather with a means of remedy.

For the realization of any reform it is necessary for the public imagination to be roused. There are many methods by which this may be done: through the art of the novelist, by the efforts of a popular preacher, by constant reiteration in the Press, by a demonstration on the part of a few enthusiasts, by the medium of the kinematograph, or by a political campaign. Town-planning organizations and town-planning enthusiasts should make it part of their work to arouse the public imagination until there is a general revulsion against the dirt, untidiness, and disorder which surrounds the life of our cities. That municipal authorities are, to some extent, alive to the evils of untidiness is seen by the provision in public parks of rubbish baskets, and in the streets and trams of boxes for used tickets, and the recent "keep-to-the-left" campaign for pedestrians is symptomatic of a desire for orderliness in place of chaos, which is one of the underlying motives for tidiness. The slight success, however, which these efforts attained shows how little the public imagination has been touched. The small sacrifice entailed in throwing a ticket into a special box, rather than on the ground, or in walking on one side of the pavement is rarely made. And these things are only the beginnings. They must be extended until our cities are altogether beautiful, for orderliness is the first essential of beauty; until we have neat lettering over our shops; until we have shapely and efficient lamp standards; until we have well-arranged and decorative hoardings (for advertising in itself is a legitimate pursuit); until we relegate our electric signs to special places, just as we relegate cabs to certain ranks and do not allow public vehicles to stand all over the street and disorganize the traffic; until we bury our cables of communication; until we have pleasant, unoffending street illumination by night; until our public buildings, our underground stations, our cab-shelters, and our telephone boxes soothe and satisfy the eye, and the mind through the eye, instead of hurting and wearying; and, finally, until we cease to tolerate the individual desire at the expense of public comfort.

Town planning, if it is to be a vital force in national life, must take cognizance of these things. It is already beginning to arouse interest in the town just as it is itself the outcome of an interest, but it must stimulate that interest to sacrifice. It is not enough that citizens should read in their morning paper and discuss at their evening dinner the proposals of the town council to construct a new road here, to clear a slum there, or to develop this or that area; they must feel that they have their contribution to make towards the shaping of their city, and the appearance of its streets must be a matter of personal pride. Toleration of unnecessary disorder must cease, for ugliness and disorder have as direct an effect upon mental health as bad drains have upon the physical health, although the sufferer may be as unconscious of the presence of the one as of the other.

How is the public imagination to be aroused so that it may no longer accept this state of affairs with such complacency? There are surely many ways: by means of public lectures with illustrations of the towns in other countries which are already alive to the menace of untidiness; by means of exhibitions, showing plans and drawings of the city as it was, as it is, and as it will be, again with pictures of other cities; by means of competitions for the design of lamp standards, street name-plates, and the like; by means of contributed and editorial articles in the local Press; and by means of personal influence. This and much more must be included in the next few years' preparatory town-planning work, so that gradually a loyalty for the city will arise, which will cleanse the streets of their discordant sights, and beget a love of order and a spirit of communal sacrifice which will be reflected in the entire national life.

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## "The Best Building of the Year"

How to interest the public in architecture is a question that has been so often debated that it threatens to become tedious. There is good reason to believe, however, that an effective scheme has at last been devised—we refer to the decision of the R.I.B.A. to award every year a bronze medal to the best modern building in London. This proposal has been welcomed with much enthusiasm by the daily Press, than which there is no better index of popular opinion. There is no reason why the "medal" idea should be confined to London. Let all the provincial societies offer a similar award for their own areas, and it should not be long before a distinct improvement in public taste becomes generally perceptible. May we add a suggestion? To label a building "good" is excellent; but the uninitiated require to be told why it is good. Would it not be possible to set forth, very briefly, preferably on the plaque itself, the principal reasons for the award? We learn, by the way, that no plaque is to be awarded this year, though the architect of the selected building will get his medal. We hope that this decision concerning the plaque will be rescinded. The label for the building appears to us to be the most important part of the scheme.

## The Whitgift Hospital

By a majority of 1,865, Croydon electors have voted for the promotion of a Bill in Parliament which will mean the destruction of the Whitgift Hospital. We had hoped for better things from the inhabitants of Croydon after their recent very spirited protest against this threatened act of vandalism. Of course, local sanction does not necessarily mean Parliamentary sanction, and we must hope that the good sense of the national assembly will prevent the destruction of what is essentially a national possession. It is not as though there were no alternative to demolition. We, ourselves, have published a scheme for moving the building bodily back upon its site (the idea of Mr. H. V. Milnes Emerson, A.R.I.B.A.), and thus overcoming the traffic difficulty; and several other equally feasible suggestions, mostly of a town-planning nature, have been put forward. We understand that there is a feeling in Croydon that if Parliament would sanction payment from national funds for the extra cost of an alternative widening scheme the building might yet be saved. Parliamentary grant or not, the building must be preserved. There are many rich men in this country to whom the few extra thousands of pounds required to carry out an alternative scheme would be a mere bagatelle. If, in the event, it should prove necessary, there can be no doubt that they will come forward.

## Improving the Strand

Long ago it was decided to bring the Strand alignment between Wellington Street and Charing Cross back to the present line of the Savoy and Cecil Hotels. This improvement, we note, is now in process of realization so far as it relates to the site of the old Tivoli Theatre, whereon a huge cinema theatre is in course of erection. By the summer a stretch of frontage from the Tivoli site to a point in front of Agar Street will also be aligned. This will necessitate the pulling down of a number of old shops sentimentally dear to the Londoner, but architecturally worthless. The improvement will leave in the widened part an ugly little promontory between the Hotel Cecil and Adam Street, and apparently it is not intended to demolish this for some time to come. We hope that steps will be taken to remove it as quickly as possible, for besides its unsightliness it will be an obstacle to traffic. And while the authorities are considering this matter, they might very well give attention to the growing uglification of the Strand as a result of the licence permitted to the shopkeepers who, in many instances, have almost entirely obscured their frontages with giant placards and other advertising signs. Upon one building there is an enormous screen upon which lantern views of advertisements are projected from the other side of the street. Personal liberty, when it means the degradation of an important thoroughfare, should be firmly repressed.

## Registration

We publish on a later page the correspondence which has passed between the R.I.B.A. and the Society of Architects on the Draft Registration Bill. As we anticipated, the Society refuses to support the Bill in its present form. No other consequence could have been expected. This document was still-born. Yet before it is decently buried it must needs suffer a coroner's inquest in Parliament. The verdict, we believe, is a foregone conclusion. It is inconceivable that Registration can be reared without a united profession behind the demand.

## Rebuilding Westminster Abbey

"Rebuilding" rather than "restoration" would appear to be the description best applied to the work that is now in progress on the Henry VII Chapel at Westminster. The whole exterior of the chapel is being renewed stone by stone. In conversation with a Press representative Mr. Knapp-Fisher recalled that exactly the same work was carried out 110 years ago. It is to be hoped that the special lime-work which is being applied to the new work will ensure to the fabric a much longer lease of life. That rebuilding is necessary we may be assured, seeing that the work is in the hands of Professor Lethaby. Yet it is melancholy to reflect that in course of time not one stone of the original building will remain. Does any still exist? No matter how careful man's precautions, change and decay must ever have the last word. The mightiest buildings of Babylon are mingled with the dust, and "to this sad complexion must we all come, Horatio."

## Trees in Streets

The resolution of Bermondsey Borough Council to spend £500 on tree-planting in the streets can hardly have been prompted by a desire to reduce unemployment; the amount being infinitesimal for that object. No doubt the councillors have absorbed so much of the garden-suburb idea as to realize the unique power of trees to redeem mean streets from squalor. If the jaded inhabitants of those streets cannot get into the country, the next best thing is to bring a touch of the country to them. Yet trees in streets are not all joy. They are an item of considerable expense and of some little danger. Unless they are constantly trimmed, they shut out too much light; the drippings from them in moist or even foggy weather are rather a nuisance in one way or another. Dry they are hardly less of a menace to health, as they form so many vehicles for accumulating and distributing dust that irritates eyes and lungs. There is, of course, much to be said on the other side. No doubt a very good case could be made out for tree-planting in streets; but much depends on whether the streets and pathways are wide or narrow. If they are narrow, tree-planting had better be omitted.

*MONTHLY CAUSERIE*

# Joking Apart

## A Man's View of Domestic Architecture

As duly reported in the Journal, a woman lately addressed the Architectural Association on the subject of "A Woman's View of Domestic Architecture." Those who attended the meeting in the mischievous hope that they were to be introduced to yet another aspect of the Sex War were perhaps disappointed; but the conditions of strife were, nevertheless, present—the implacable divergence of masculine and feminine mentalities. Owing, however, to the charm which women can exercise upon all men who are not their husbands, brothers, or fathers, the modesty with which the speaker presented her views, and the good humour with which she met the rather heavy-handed raillery of some who took part in the debate, nothing occurred to disturb that condition of digestive ecstasy which is the foundation upon which the learned deliberations of the Architectural Association are built. It was, perhaps, to be expected that a woman's view of domestic architecture should have no bearing on any single aspect of architecture whatever. The size and pattern of scullery sinks, of cupboards, of cookers, of boilers, of cleaners, of scrapers; the best place to keep pots and pans, the worst place to keep coal—these matters, although they may be restrictive of architecture, have little more bearing on the art of designing buildings than the quality, texture and surface of canvases has on painting pictures—as was brought home to the meeting by one particularly horrid man, who opened his remarks by saying that he could claim to be a first-class architect, as he always put a nail beside the scullery sink to hang a dish-cloth on. The subject discussed was, in fact, our old friend, "Labour Saving," and as a mere man I should like to offer the result of my reflections on the matter.

In approaching a stale subject it is well to do so from a fresh direction, like the bachelor living alone, who, years ago, disposed of the annoyance of continual work at the sink by buying six dozen plates and having a wash-up once a fortnight—(no woman, by the way, would have thought of that!). The whole ground of "Labour Saving" is already trampled flat along numerous paths by previous explorers, who have followed one another in some cases far beyond the boundaries of common sense into the domain of folly.

"The Daily Mail" has organized drag-hunts over the familiar ground which have fixed in the public mind that the more intricate the working scheme and complicated the fittings of a house, the greater is its comfort and convenience; and which have also established certain wholly fallacious first principles of householdry (to coin a much-needed word), such, for instance, as that one of the first cares and most laborious duties attendant on domesticity is dusting the balusters!

Recently, in my capacity as eminent architect, I have been called upon to meet the requirements of a family, the members of which had taken this idea into their blood like a microbe, so that, had I been able to slip a clinical thermometer successively into their mouths, I have no doubt I should have found a general condition of actual fever. The question cropped up with the sketch plans and snapped at my heels for six months, so that I feel no little pride at having equipped that house with the most completely undustable balusters I have ever designed. Of what account is it whether the balusters are easy to dust or difficult to dust, so long as the stairs are beautiful to contemplate and convenient to use? We may be certain of one thing—that whether the balusters are easy to dust or difficult to dust, they certainly will not be much dusted, and that no normal, healthy person will care whether they are dusted or not. I cannot, however, conscientiously leave the matter there: it is right that I should say that the only occasion in my life in which I was confronted by this great problem of architecture, before "The Daily Mail" called attention to it, was when I broke in upon the routine of my own house by forbidding the housemaid to dust the balusters. The dear girl had discovered that she could make a display of activity without exerting herself and without disturbing her native apathy by reclining on the stairs and flapping negligently with a cloth!

In scheming the domestic machinery of a house to be run by servants the two leading characteristics of some of them, dishonesty and callous stupidity, must be borne in mind. This is not to impute personal dishonesty to those servants, but that dishonesty only which is a tradition of domestic service. Servants are human beings, and it is probable that if masters fare ill at their hands it is because they deserve ill: certainly the attitude of the master to the servant has changed for the worse since the days of Pepys and Swift. The reason for the existing state of affairs does not, however, concern us, nor are we concerned with the nefarious system known in the servants' hall as "perks." What we have to reckon with is the servant's consistent disloyalty to the interests of her employer.

A house, therefore, which is to be run by some servants ought, in the first place, not to pursue any fetish of saving the servant trouble, for the servant will save herself all possible trouble without any help or suggestions from the architect: it is, on the contrary, necessary, in order to keep her from langour and boredom, that she should have plenty to do, and a firm mistress (preferably one armed with a hatpin) to see that she does it. In the second place, the house should not be equipped with any intricate or complex contrivances for quick and efficient performance, for that servant's stupidity, contempt for her work and indifference or almost hostility to the wishes and interests of her employer will lead to the patent teak sluice sink becoming caked with filth and the floor continually drenched with greasy water, and to the electric cooker involving criminal waste of current; the vacuum cleaners will be misused and broken and the plugs shorted, and gas cookers will be availed of to satisfy a passion for wasting gas and accumulating a thick crust of carbonized dirt and food-splashings.

It is now the fashion to make the modern kitchen rival in its niceties the operating room at a hospital. The idea seems to be to circumvent the slovenly, wasteful, disorderly and incompetent methods of the servants who will use it. Everyone will agree that, in spite of the great cost of the installation, with its tiled walls, nickel-plated gunmetal taps, dust-proof dressers and power plugs for freezers and whippers, the result is only in part effected, and that this partial success depends in great measure upon the extravagance of the equipment flattering the cook with an idea of her importance and so revitalizing her self-esteem and respect for her calling. It is, in fact, only because of the shortcomings of servants that these costly devices for checkmating them have come into existence. In my experience the kitchens which it has given me particular pleasure to view—and a well-ordered kitchen is a delightful spectacle—have not been those that reflected the ingenuity of the sanitary expert and recalled a laboratory for biological research, but those which have reflected the industry, orderliness, cheerfulness and capacity of their users and recalled the realities of homely English life.

Karsish.

# The R.I.B.A. Prizes and Studentships

## A Criticism of the Designs

THE exhibition of drawings at the R.I.B.A. Galleries shows that there is no falling off in the number of competitors for the Institute prizes. The level of draughtsmanship improves each year, and has this time reached quite a high standard. The Tite and the Saxon Snell prizes in particular have been keenly contested.

The subject for the Tite prize was an Italian Embassy The design of the winner, Mr. J. C. Shepherd, is shown by a most competent set of drawings. He has adopted a simple solution, making a monumental flight of steps the central motive, with the ballroom at the top, and with two fine suites of rooms arranged along the front and back of his building. The section shows a skilful disposition of terrace gardens. The ballroom opens on to the garden, and the ambassador's apartments are set back to allow for his separate roof garden above. The planning of the garden is admirable, although it might not be considered to be in scale with the house. The elevation, in common with those of all the other competitors, is probably the least successful part of the design. The detail of the central window of the principal floor is out of keeping with the loggia below, but the worst feature of the façade is the recess above the central window. The whole shows a good sense of scale not to be found in the other designs.

Miss Isabel M. Chambers receives a well-deserved honourable mention. The plan is distinctly graceful, and she unites the ballroom to the other rooms successfully, making a three-sided court — an arrangement which presents itself well on the garden side. The "parti" is similar to that of the winner, but by comparison the design fails in section. Miss Chambers does not get the maximum effect out of the fall of the land. The staircase rises rather steeply, and the service area is deep and not well lit or ventilated. The garden plan is not worthy of the building, but the skill shown in handling the plan of the latter deserves strong commendation. The elevation has character, is not forced, and is quite appropriate for a street façade.

"B.O." evidently remembers Genoa, and his blue sky is most appropriate. He gets a good effect by his central "cortile," but the general plan suffers in consequence. The ballroom is side-tracked, and the lighting of both it and the drawing-room partly by windows on to the staircase is inadequate. The elevation suffers through being cut by the superimposed order into two almost, but not quite, equal parts.

"Tishy's" design bears a family resemblance to the first two, but places the ballroom on the street, and the dining- and drawing-rooms at the head of the staircase. This is an equally good arrangement. The semi-circular projection on the garden side has little justification. Furthermore, the scheme is extravagant, for it entails an excavation of some 80 ft., as shown on the section, and finally, the elevation has more the character of a library than an Embassy. The design is well studied in its detail, and is probably next in merit to those of Mr. Shepherd and Miss Chambers.

"European" lacks imagination. His plan is poor and he has divided the garden into a monotonous succession of equal terraces. This design has no distinctive quality.

"Geneva" has an extravagant section. His scheme shows a lack of proportion between the cortile and the building proper. The elevation, though carefully drawn, looks like a fire station.

"Sebastian" has underestimated the importance of size in dealing with the reception rooms. The plan and elevation are lacking in a right sense of scale, and his garden is rather haphazard in design. His solution results in two courts which are too small and deep.

"Blue Square's" colour-scheme is so distressing that it is difficult to distinguish any merit that there may be in the design. One notices lavatories opening directly off the ballroom! The staircase is small, and he has cut away the ground too much.

"Utinam" has produced a plan with few good points. The kitchen and staff rooms are placed so as to overlook the ballroom garden court. The elevation is a disappointing piece of work. It shows no restraint and little understanding of composition, and is overloaded with heavy and inappropriate detail.

The measured drawings medal has been easily won by Mr. W. Dougill. He has chosen as his subject the Campidoglio, Rome, and has illustrated it by a large and careful set of drawings. These are well worth study, and are almost faultless in execution. His surveys show the conscientious way in which he has worked.

"Diligente" and "Cheddar" are not so fortunate in their subjects. In both cases the draughtsmanship is good, though they have not the finish of the winner.

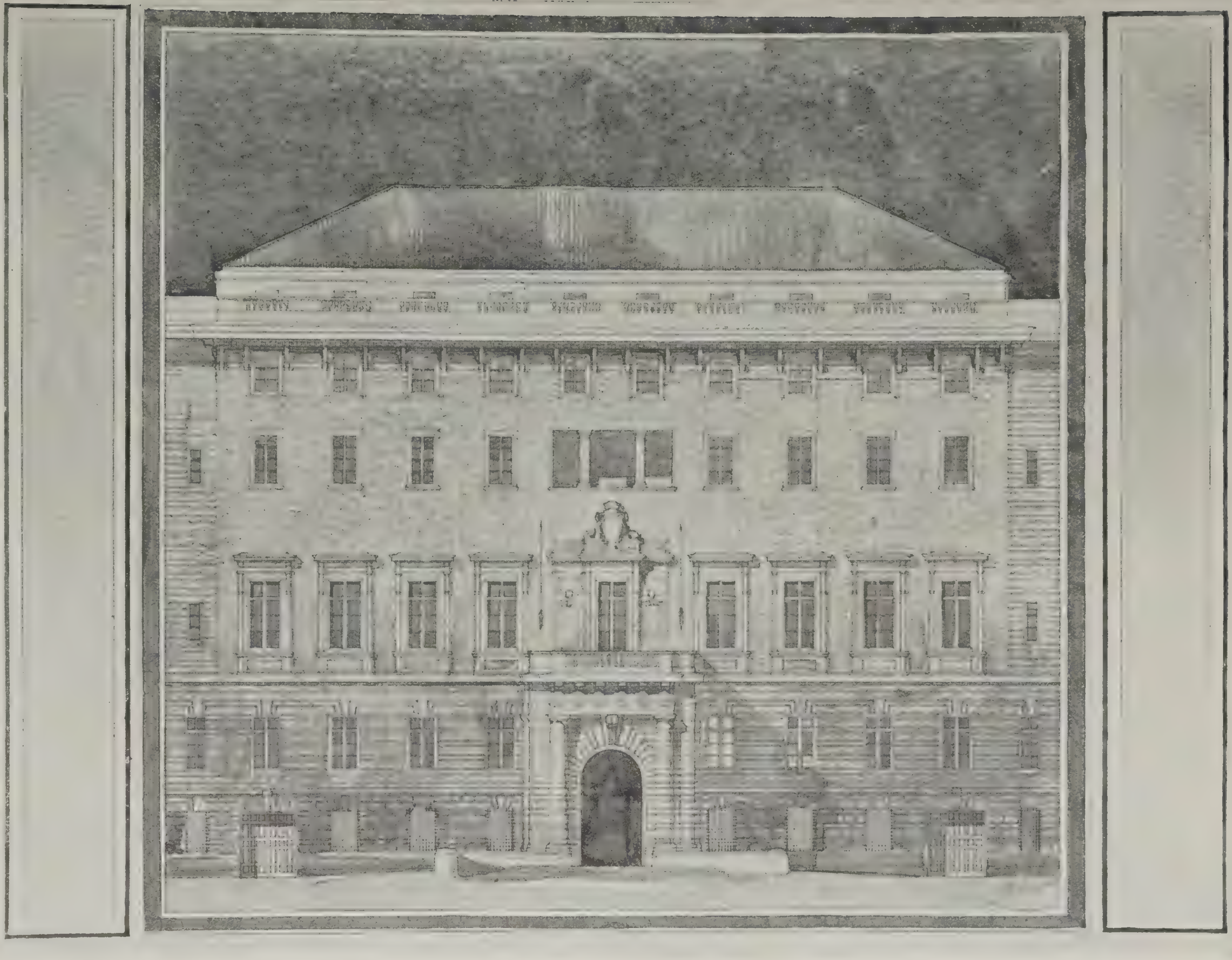
The Owen Jones studentship has been awarded to the only competitor—Mr. Cyril F. Filbey. He has done the usual prodigious amount of work, but we are doubtful as to its being a guarantee of his having any real appreciation of colour and its application to modern building. We fail to see the use of this realistic and laborious presentation of tiles and carved decoration. Moreover, the Shah Sham's house, apart from its archæological interest, has very little to commend it either in its design or for its treatment of colour. Why do not students study the polychromy of those civilizations which have influenced European art and architecture? We would suggest that much valuable time might be saved to the student by strictly limiting the number and size of drawings to be submitted. It would render the task of competing for this prize less formidable.

The Pugin studentship attracted two competitors. Mr. A. N. Thorpe has been placed first. His drawings are careful and well executed. Mr. Heritage must learn that poor draughtsmanship is a definite disqualification for this prize.

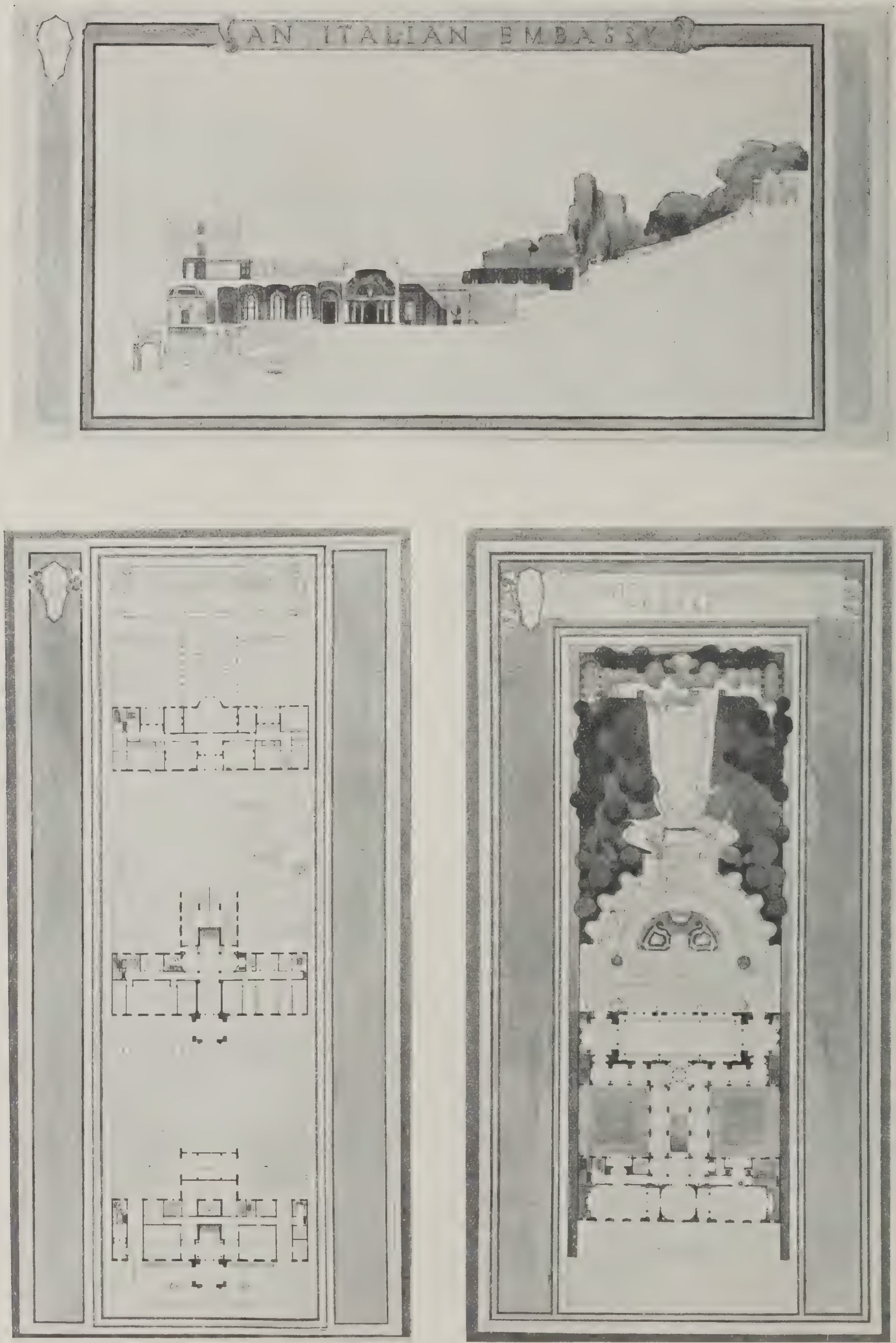
There is a good entry for the Grissell gold medal, and we notice with pleasure that the subject set this year (a warehouse) gave definite scope for architectural knowledge. Apart from conversance shown with the details of construction in steel the designs are not exciting. They lack imagination, and most of the competitors would profit by the study of contemporary examples on the Continent and in America. Mr. P. Morrey is placed first with a good design, and that of "Bluzz" is also interesting. "Syntithemi" and "Fleur-de-lis" have poor elevations.

There has been a record entry for the Henry Saxon Snell prize, probably due to the really sensible subject chosen (a maternity home). The jury has rightly been generous in its award of two honourable mentions as well as the prize. Mr. E. G. Theakston wins with the most centralized plan. We are doubtful about these long central corridors in many cases with borrowed light. Mr. A. J. Brown, (hon. mention), whose drawings are the best, suffers perhaps by having a less centralized plan, but it has to our mind many good points. Mr. G. Norburn (hon. mention) shows by elevations that it is not impossible to give charm to a building of this sort. "Knype," "Compass and Square," and "Solomon," are to be congratulated on the chance given to them to compare their designs with really good work.

The full list of awards appears on page 240.



"AN ITALIAN EMBASSY IN A EUROPEAN CAPITAL"
BY JOHN CHIENE SHEPHERD, A.R.I.B.A.
*(Tite Prizeman for 1923.)*



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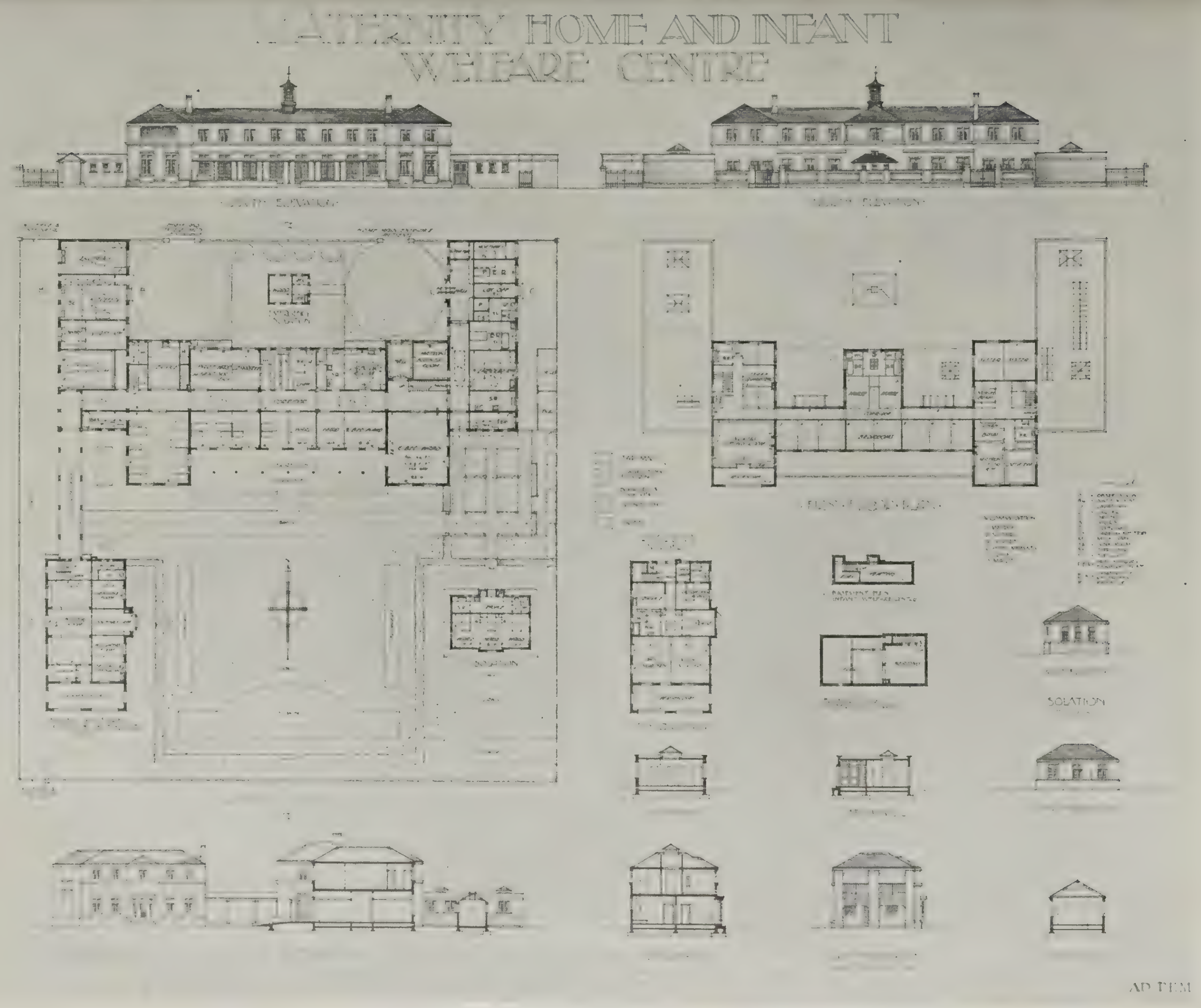
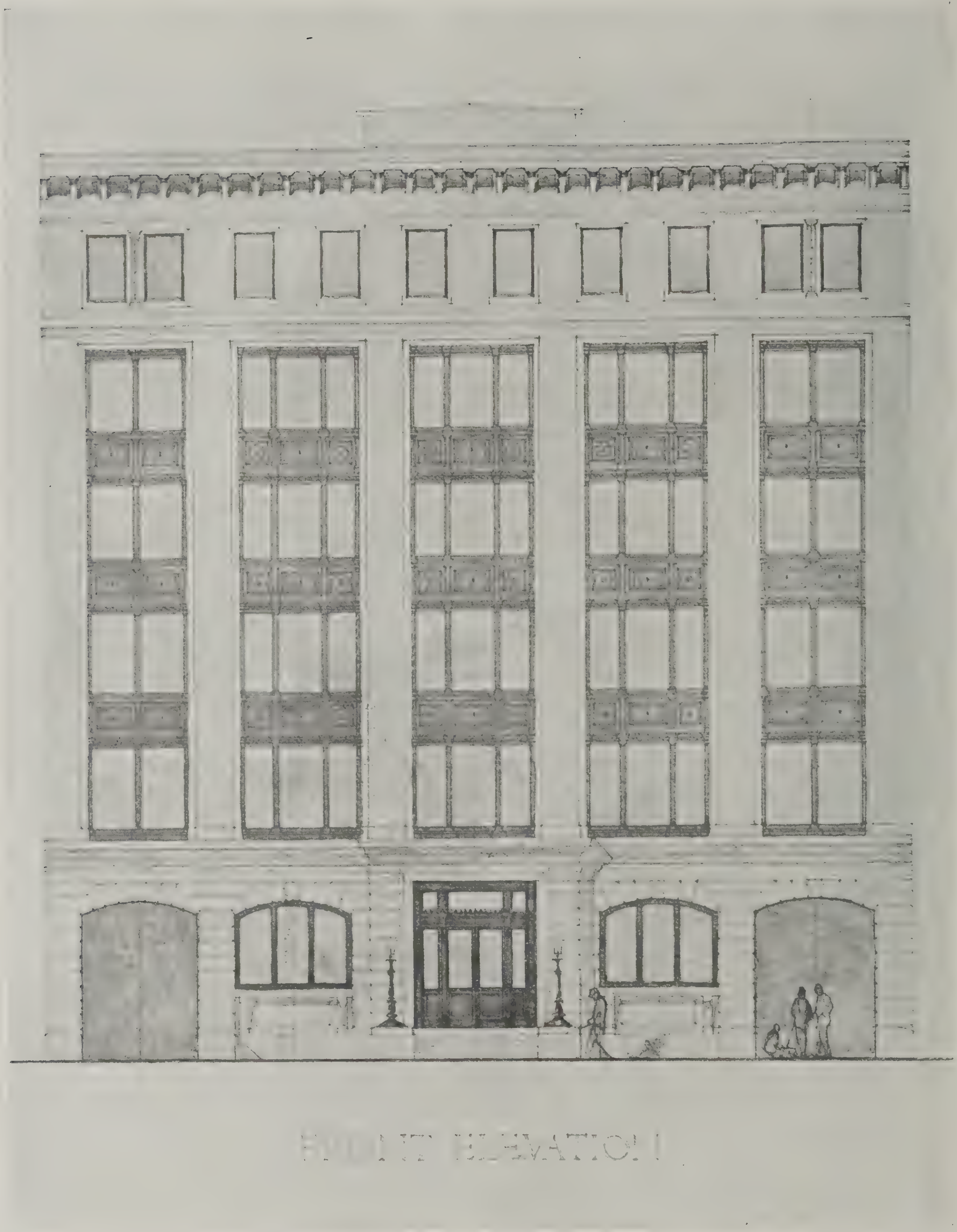

MATERNITY HOME AND INFANT WELFARE CENTRE
FIRST FLOOR PLAN
BASEMENT PLAN INFANT WELFARE CENTRE
ISOLATION
AD FEM

"A MATERNITY HOME AND INFANT WELFARE CENTRE. BY ERNEST G. THEAKSTON, F.R.I.B.A.

(*The Henry Saxon Snell Prize Winning Design.*)



"A WAREHOUSE." BY PERCY MORREY, M.B.E., A.R.I.B.A.

*(Grissell Gold Medallist for 1923.)*

# The Royal Academy Winter Exhibition

By W. W. SCOTT-MONCRIEFF

(*Concluded*)

PRESUMABLY a very important factor in decorative painting is the materials used. In the exhibition are frescoes by Messrs. F. E. Jackson, J. D. Batten, and Mrs. Sargant Florence. It will be noticed that the works shown by these painters have a clarity and texture such as can never be obtained with oil temperas or mediums, even including egg oil or what is known as "tempera" painting. In the South Kensington Museum are two pictures by Richard Evans painted about a hundred years ago. They are identical in subject and size, but one was painted with linseed oil tempera and the other is colour diluted with water (not "water colour," which has gum arabic in it) painted on to plaster *in secco*, i.e., after the plaster has dried. These two pictures are placed side by side for the purpose that one may be compared with the other. The linseed oil edition is nearly black, and the *in secco* looks as fresh as on the day it was painted. This is a most important point. That the frescoes, i.e., water and colour painted upon *wet* plaster, in the Houses of Parliament have proved a failure does not, to our mind, prove that frescoes will not stand in this climate or even in the soot-laden atmosphere of our cities. We feel sure that if the purest old run putty is mixed properly with clean sharp washed sand in the right proportions and applied to expanded metal or some sort of lathing so that the plaster does not come in contact with the wall behind, that fresco would stand for centuries in this climate. It has never been given a proper trial. For decorative purposes it is certain that fresco is far superior to oil painting on canvas stuck to the wall. This method allows the painter to do the job comfortably in his studio, but fresco must be done *in situ;* careful cartoons must be prepared, so that the painter must know how to draw, an accomplishment which few modern painters have taken the pains to acquire. The cartoon must be pricked through on to the wet plaster and the subject must be divided up into "day's work" areas, the new wet plaster being joined on to the previous day's work. These joins often show, but are constructional features, like lead in stained glass (see the joins in Mr. Batten's and Mrs. Florence's work. Mr. Jackson's is evidently done in a single day, because there are no joins). The work must be done upon a scaffold, often under trying circumstances.

A ROUND DISH, PAINTED IN BLACK AND SILVER LUSTRE AND COLOURS. BY LOUISE POWELL. POTTING BY J. SHAW

Now unless we are mistaken, easel picture painting and what we might describe as "fireside" decorative painting can be done by indifferent draughtsmen. An eye for tone matching may be a substitute for draughtsmanship, but it *is* a substitute, and one which cannot be indulged in by the fresco painter. Fresco painting demands more knowledge, more skill, more craftsmanship, and more love; it must be done on the wall itself next to the architecture it is to adorn. Fresco, in fact, cannot be humbugged, and some bold spirits might attempt to revive this ancient art.

We will now pass on to notice, briefly, some of the other exhibits of decorative painting and sculpture.

"Decoration for an Altar of the Sacred Heart" (283), Glyn Philpot, A.R.A., is the vista-piece opposite the staircase. Here we have fresh thought, and so must remember that Millet, Cézanne, Turner, Rembrandt, and a score of others were laughed at in their day. Because a thing is strange to our particular trend is no reason why it should be condemned offhand. On the contrary, like a guest travelled from a far country, we must get to know him before we jump to the conclusion that he is of evil character.

The L.C.C. decorations submitted by the Westminster School of Art are disappointing. The idea is, we suppose, that the L.C.C. corridors should be decorated with scenes from L.C.C. parks, but when the parks are filled with pseudo-John gipsies, and the whole treated rather like posters, a sense of lost opportunity is conveyed.

"Model of Council Room in a Ministry of Fine Arts" (440), showing the paintings in true fresco, by A. K. Lawrence, is a serious work treated seriously. This method of showing a decorative scheme is excellent and one which might be adopted in preliminary schemes and competitions. It is a mistake to have a continuous scheme of figures and landscape broken up by architectural pilasters, but otherwise this is a most interesting exhibit.

"War Memorial, St. Stephen's Church, Avenue Road, N.W." (453), by Sigismund Goetze, shows heads of modern-looking ladies, painted in oils. Some of them have real mother-o'-pearl halos inlaid in the paint; there is a great number of them, and they are surmounted by a very theatrical Christ.

"Model of Grand Staircase of H.M. Foreign Office" (426), showing frescoes and decorations, is by the same painter.

Rodin, some time ago, when he was asked what he thought of British sculpture, replied : "But you haven't got any." He was not far wrong then, and he would not have been far wrong now. The sculpture dotted about in this exhibition is good enough, we suppose, of its kind, but it is dead, dull, and disappointing. It is not the fault of the sculptors any more than some of the bad painting is the fault of the painters, or bad architecture is the architects' fault. The trouble is that people don't want good stuff—there is no national desire for these things, and so the nation doesn't get them. If the nation *really* wanted fine sculpture, painting, and architecture, it would soon have it; but no! cinemas, motors, and what is known as "a good time" is what is wanted, and so they have their "good time," and the arts dwindle—but the day of reckoning must come sooner or later.

The writer of this notice, during a misdirected holiday, spent days seated opposite statues on the pavements of Paris, with the idea that he would complete a series of drawings of Parisian sculpture. He had no idea that the sculpture in the French capital was so bad until he sat down to draw it, but he carried on, until one day, being an admirer of Maupassant, he went in search of his memorial. In the Park Monceau he found that awful thing, "Hommage à Maupassant." The great Guy is represented by a small bust stuck on a pedestal, while, below, sprawls a lady in mutton-chop sleeves fiddling with a fan. The whole is executed in best funeral marble. This was too much for him, and the rest of his holiday was spent in profound gloom and idleness.

No. 316, by Alfred Drury, R.A., "Even"—model for lamp standard, City Square, Leeds—strikes one as being on a par with the best sculpture of 1880–90 of Paris: it is sculpture of the Opéra type; it is like the work of Octobre and the older living Beaux Arts and Prix de Rome men, and we must say we do not care for this kind of thing.

"Diana" (6), "Juno" (19), "Venus" (31), "Ceres" (48), bronze niche figures, by F. Derwent Wood, R.A., are excellent in form and craftsmanship. With the exception of "Juno" (19) the faces are a trifle ordinary in expression, but "Juno" is a little beauty. As a suggestion we would say that the bronze is rather too highly polished.

"Figure Group," alabaster (323), Benjamin Clemens, gives a sense of repose, but it is too realistic in treatment to be quite successful. Mr. Fagan's "Startled Fawn" (324), garden statuette in lead, is a most excellent piece of work for its purpose. The coloured faïence of Mr. and Mrs. Stabler is well done with good colour blends and pleasing glazes, but with little or no soul in it; in fact, the sculpture part of the exhibition is very disappointing.

We cannot pass to the Arts and Crafts Section without a word upon Alfred Stevens. When we enter Gallery No. IV, which is entirely devoted to his work, we enter a different world. His manner may be a fusion of the manners of Raphael and of Michelangelo; his ideas of life may not have coincided with the particular code in fashion during the Victorian régime; red chalk may always look better than black chalk or lead pencil—it does not matter—he stands in this exhibition in splendid isolation. A great mind, whether he bases himself on Raphael or no, cannot help producing great work; a common mind may base itself on Raphael for three score years and ten with nothing but a common result. We look at these Beings by Stevens—they are not mortals but gods. They pose before us with the dignity of superior creatures belonging to a more superior hierarchy than any in this sphere of twisted activity. His bambini are age-old souls in comparison with our wiseacres, and most of the eyes in his heads appear to be gazing at wonderful visions, and to be reflecting the light from a faraway and most beautiful country—the country of his own mind.

COVERED POTPOURRI BOWL. BY ALFRED H. POWELL. POTTING BY J DURRANT.

SILVER TEAPOT. BY J. PAUL COOPER.

The Arts and Crafts Society are to be congratulated for the arrangement of their section of the exhibition, which must have meant days of arduous labour for the individuals who gave up their time to it. Quite frankly we feel that there is far more art in their section than in the other. Such a society as the Arts and Crafts, which, in effect, exists to keep alive the creative spirit of man, deserves far more respect from the community.

We do not think we are exaggerating when we say that a selection from these exhibits would make a collection of things as fine as has ever been made by the hand of man. The works of Mr. Paul Cooper, Mr. and Mrs. Powell, Mr. W. Moss, Mr. William G. Simmonds, the late William de Morgan and Ernest Gimson, to name only a few, are superb pieces of craftsmanship and fit to rank with anything in the South Kensington Museum. To see their work and then to walk up some of the London streets is an object lesson, for by comparison the modern work in many of the shops is rubbish. The lesson is one which we pointed out at the beginning of this notice. The aim of such men is, or was, to make fine things; the aim of some shops is to "produce" showy, shiny stuff to put in the windows and to sell at exorbitant profits. The result of the two ideals is painfully apparent. We understand that Mr. Gimson's furniture is not to be had at any price. Some of the papers have already started the cry that he was a second Chippendale. Such men as he are a national pride and a national glory, for, against every possible disability, they have held fast to their creed, and their work lives to cry shame upon their commercial compatriots. By their sacrifice they have given real wealth to their country. They have left the love of their life in the things which they have made with their hands—a love which shall be a joy as long as their work remains to us.

Here, in these galleries, we realize who are the most intelligent class in the community. Beside these craftsmen, politicians, lawyers, "business men," Trust magnates, and the "cultured" are people of the third order.

At the present moment the world is paying homage, not to the body of a dead king, but to the works of humble men found in his tomb, and there is much chatter about cash values.

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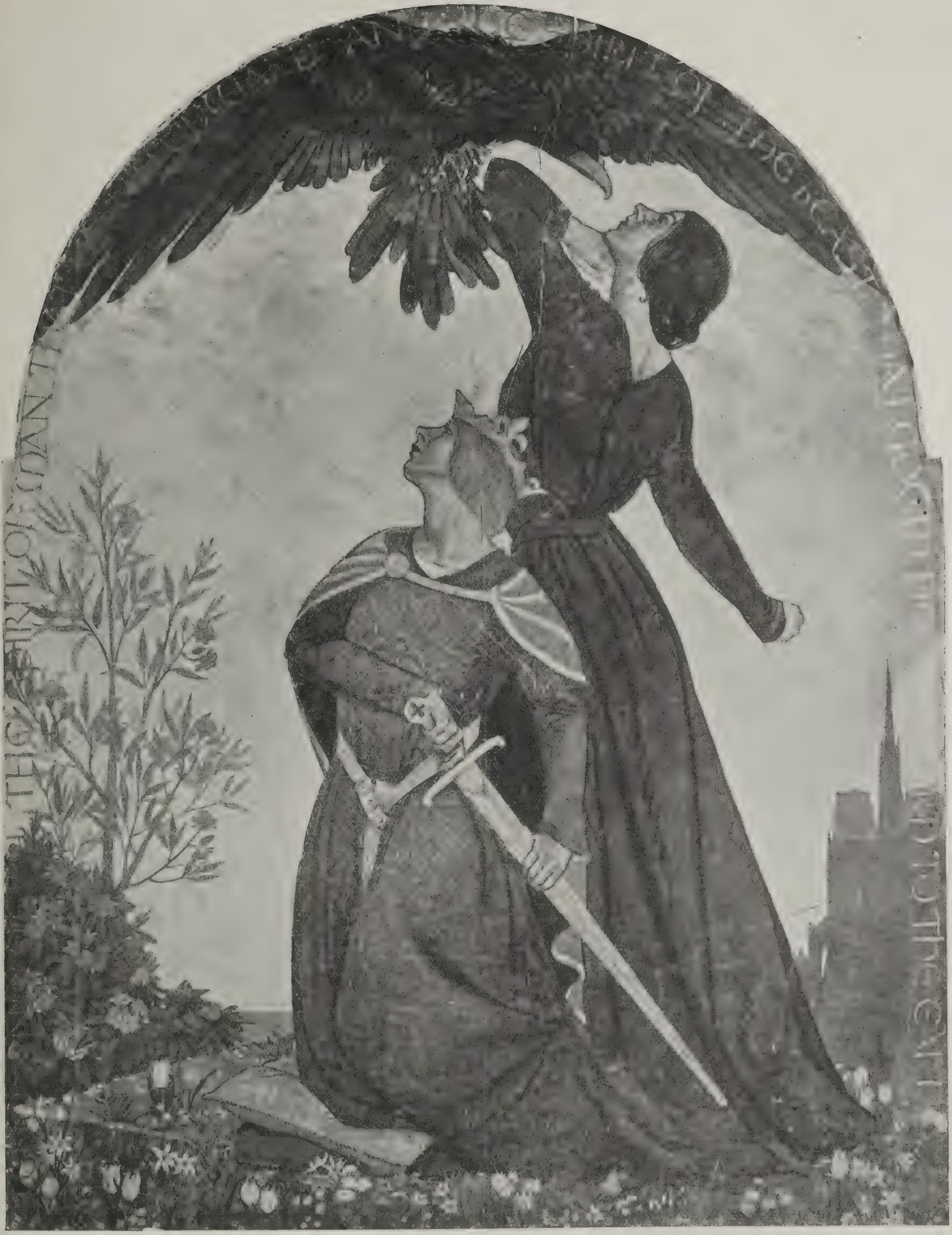
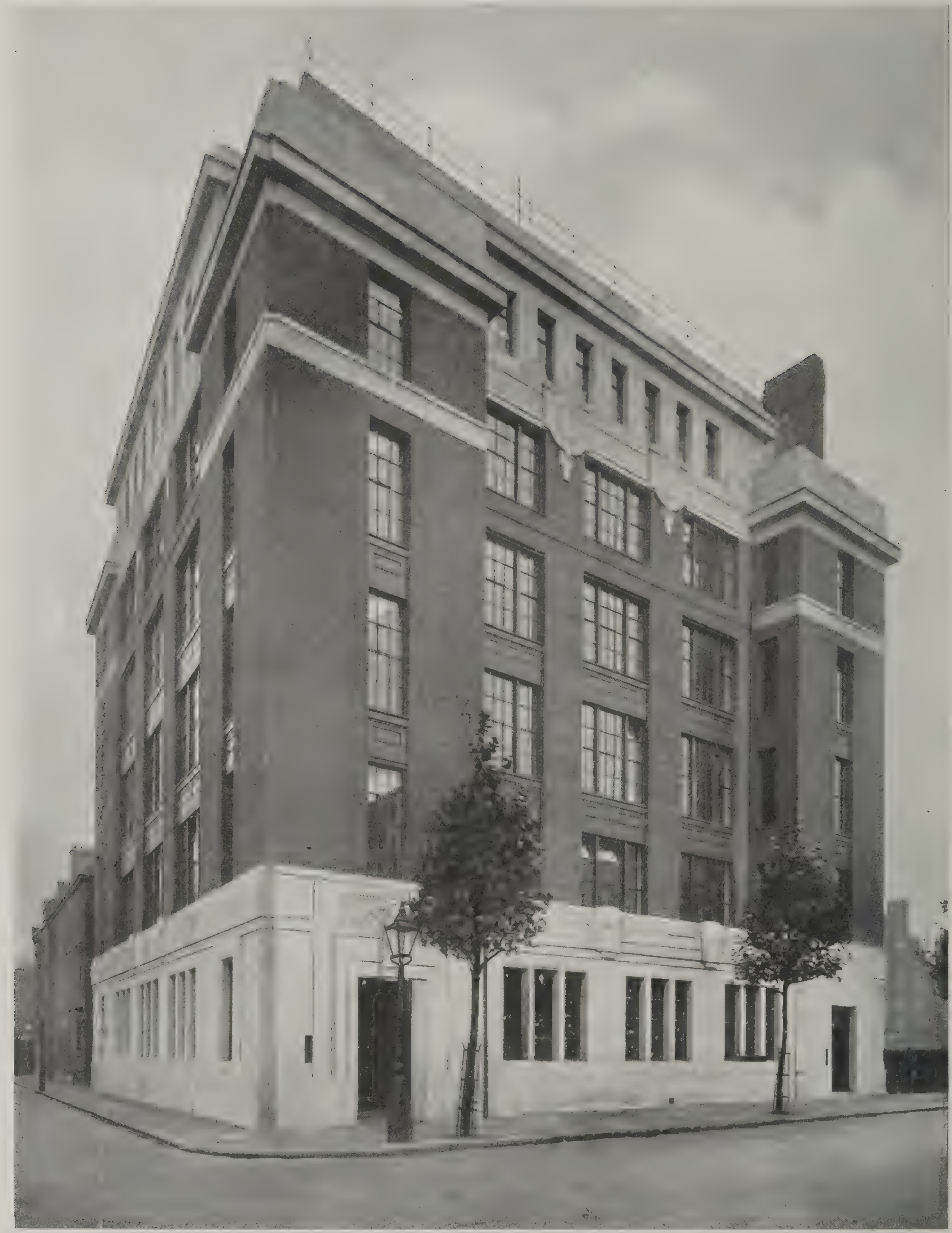
[We should like to point out that the final paragraph of the first part of Mr. Scott Moncrieff's article (published in our last issue) was an editorial addendum, and should have been printed as such. The fact that it appeared as part of Mr. Scott Moncrieff's contribution was due to a regrettable oversight.—Eds.]



"ENGLAND AND FRANCE." A DECORATIVE PAINTING BY F. ERNEST JACKSON.

*(R.A. Exhibition of Decorative Art.)*



THORNYCROFT HOUSE, SMITH SQUARE, WESTMINSTER.
A. ALBAN H. SCOTT, ARCHITECT.

# Thornycroft House, Westminster

## A. ALBAN H. SCOTT, Architect

THE above building contains eight floors, all of which with the exception of the basement and sixth floor are used for office purposes. These latter are utilized respectively for filing purposes and canteen. In addition to this canteen on the sixth floor provision has been made for a photographic department, including dark rooms, enlarging rooms, etc. The caretaker's quarters are also provided on this floor.

By means of areas on the north and west sides and large window spaces, it has been possible to obtain an exceptionally good distribution of light and air.

Lavatory blocks for male and female staffs are arranged alternately on all floors next the main staircase, this method when considered from all points of view being found to give the easiest and most direct means of access.

The building has been provided with an electrically operated vacuum cleaning nstallation which serves all parts of each ndividual floor.

The first floor being considered of premier importance contains the board room, private office, waiting-rooms, etc.

The walls to the board room are divided up with plaster panelling and the floor is of teak blocks.

The floor of the private office is treated in a similar way as the walls, which are panelled out, and the attached fittings are executed in specially selected walnut.

The main staircase, counters, waiting-hall fittings, and all fire-resisting doors and lobbies have been executed in Moulmein teak finished in oil, as have also the main doors, screens, revolving doors, etc., at the entrance.

The flooring to the main entrance hall, in addition to that of the first floor landing and corridors, is finished in Ruboleum tiling and laid out in architectural patterns coloured in green, black, and white.

Generally speaking the floors are covered with linoleum on a specially prepared surface.

Fire-resisting materials have been used throughout in the general construction.

With regard to the external elevations a brick and stone treatment on broad lines has been employed. The roof is covered with Westmoreland green slating, the facing bricks are "Lawrences" sand-faced bricks of a purple tint, and the masonry is executed in best Whitbed Portland stone.

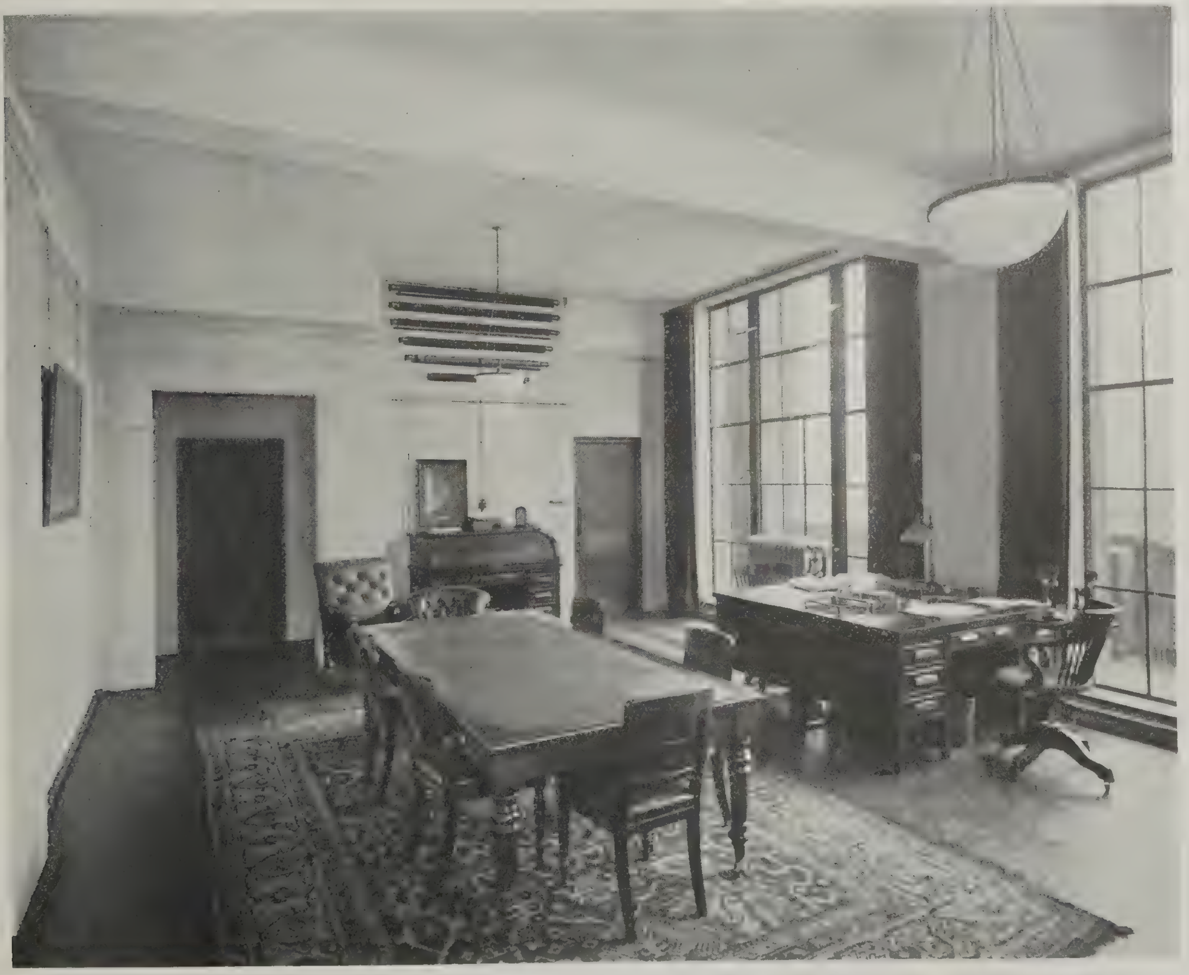
Window openings on all fronts are fitted with steel casements. On the main elevations the lights are grouped together vertically with metal panels between each. The stonework is carried through horizontally at top and bottom.

The stone panels appearing over the entrance doorways are carved and symbolize the business activities of Messrs. J. I. Thornycroft & Co., Ltd., who are the owners and occupiers.

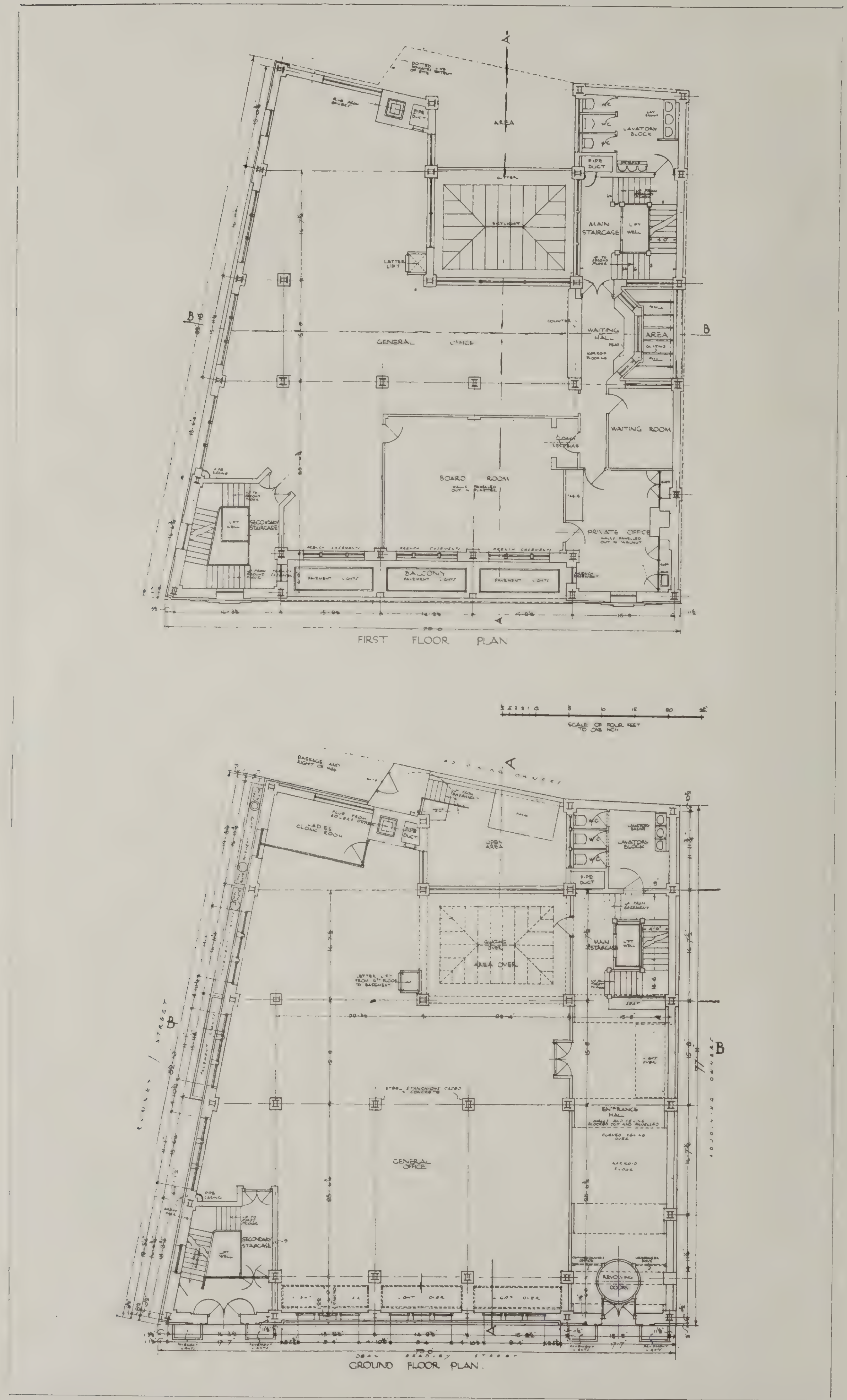
Messrs. Patman and Fotheringham were the contractors, and the sub-contractors were as follows: La Brea Asphalte Co. (asphalt lining work); T. Lawrence and Sons, Bracknell, Berks (bricks, red facings); Mr. Frith (carved stonework); Drew, Bear, Perks & Co., Ltd. (steelwork); H.W. Cullum & Co. (fireproof floors, partitions); Carter & Co. (wall and floor tiles and Terrazzo floors); Nethercot and Sons, Stratford (slates); H. Pontifex and Sons (sanitary ware and fittings); Korkoid and Ruboleum Tile Co., Ltd. (Ruboleum floors); G. W. Franklin and Sons (electric wiring); T. B. Colman and Sons, Brighton (special doors, revolving); Wilmer & Co. (art metal work (special designs), cast metal panels); Yanedis & Co. (Locks); Waygood-Otis & Co. (lifts); J. Slater & Co. (heating and ventilating, heating apparatus and boilers); C. Isler & Co. (wells and well-sinking); Scammell and Nephew (Vacuum cleaning installation).

The floors, flat roofs, mansard slopes, dormer tops and sides, were all carried out by Horace W. Cullum & Co., Ltd., 50–2 Britannia Street, King's Cross, W.C.1.

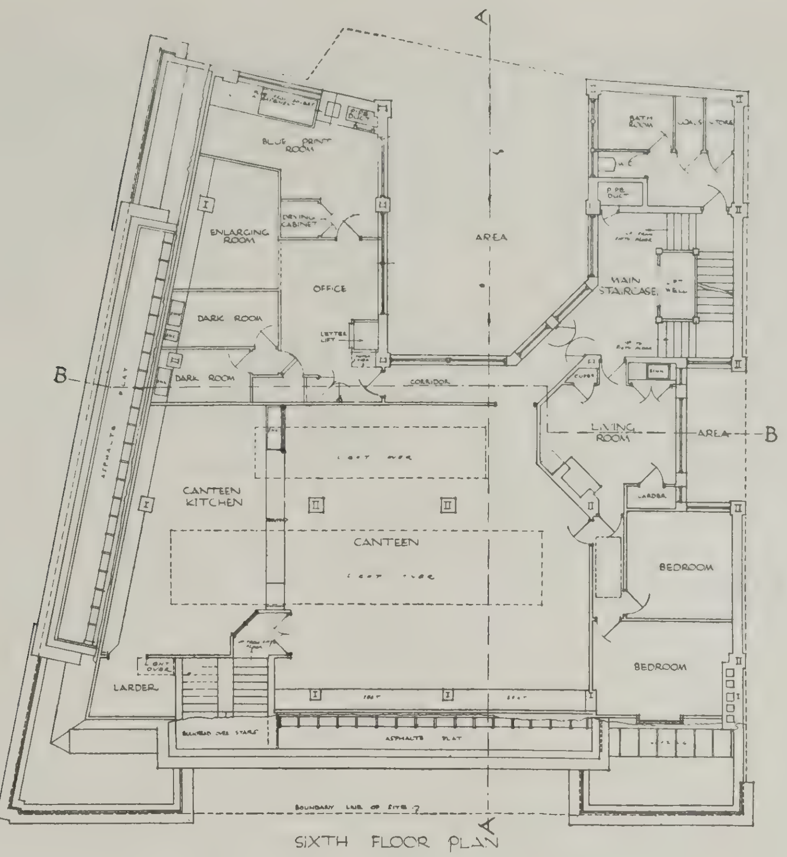
A description of the electrical switchboard appears on page 244.



THE BOARD ROOM.

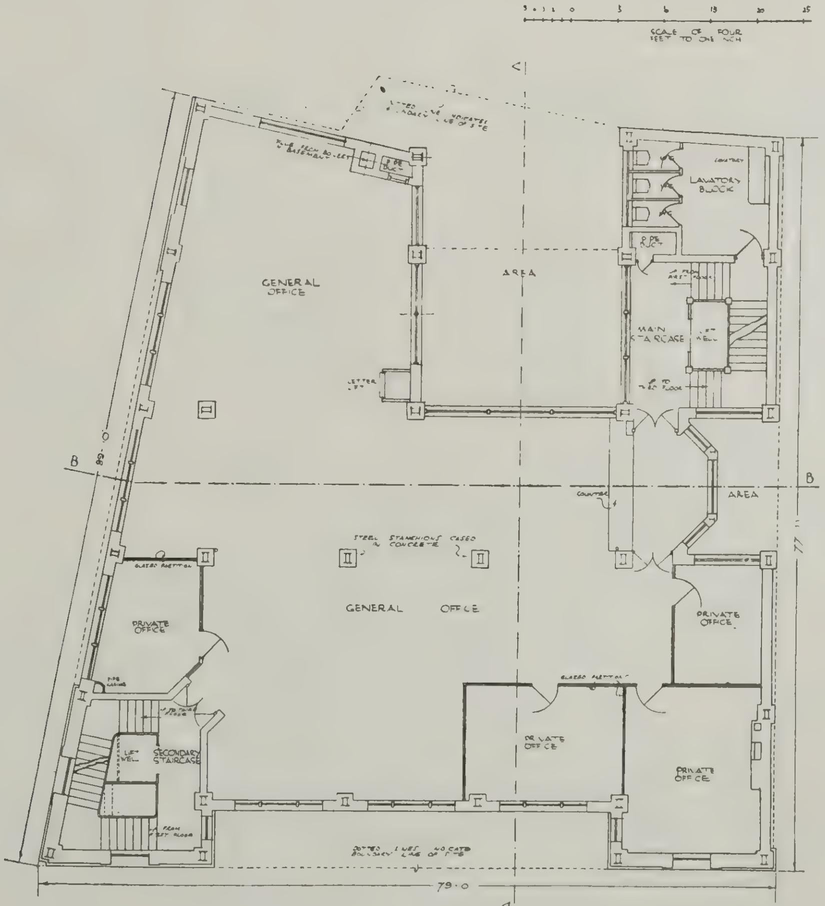


THORNYCROFT HOUSE, SMITH SQUARE, WESTMINSTER.
A. ALBAN H. SCOTT, ARCHITECT.



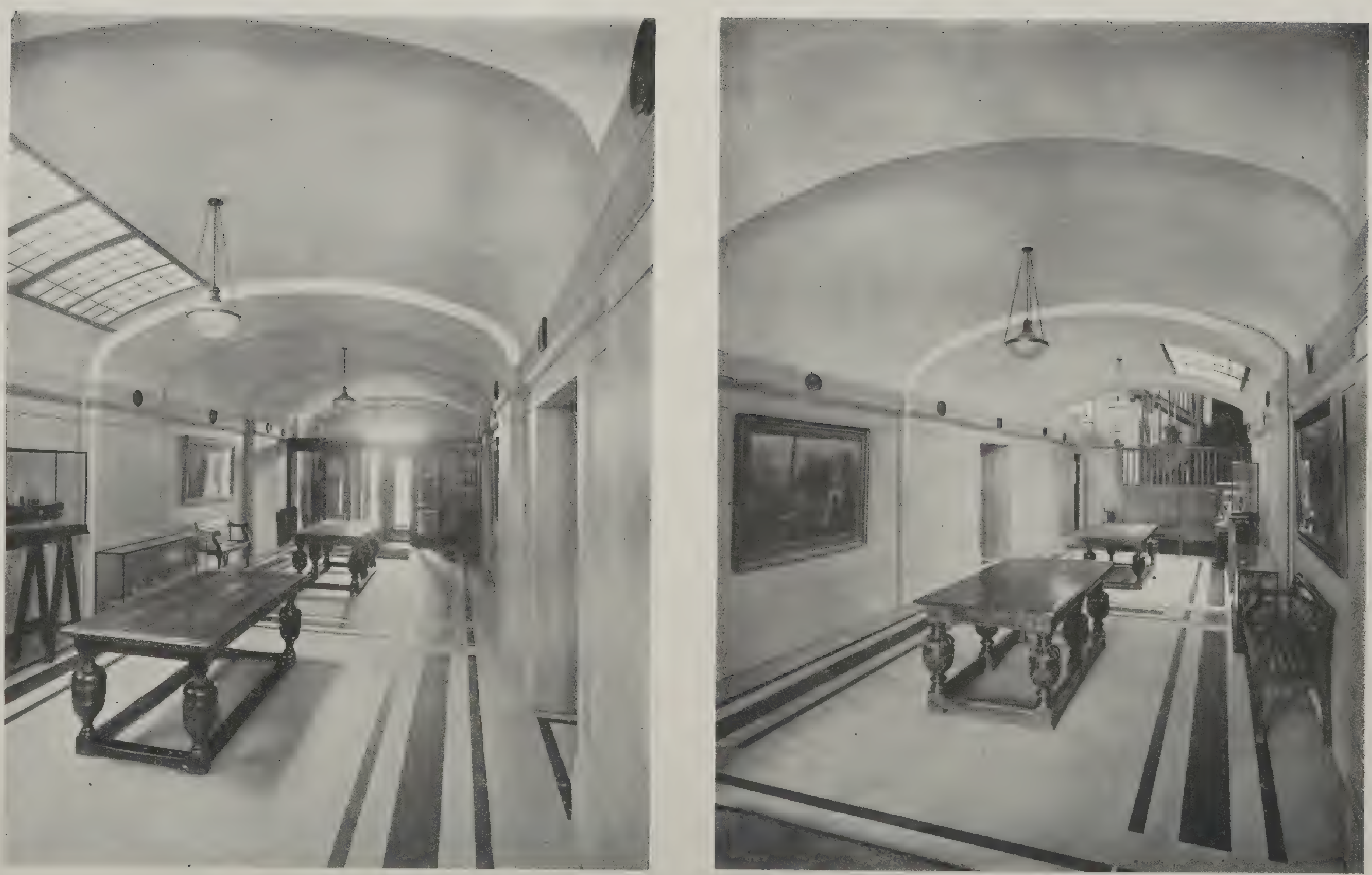
DRAWING No 14859

SIXTH FLOOR PLAN



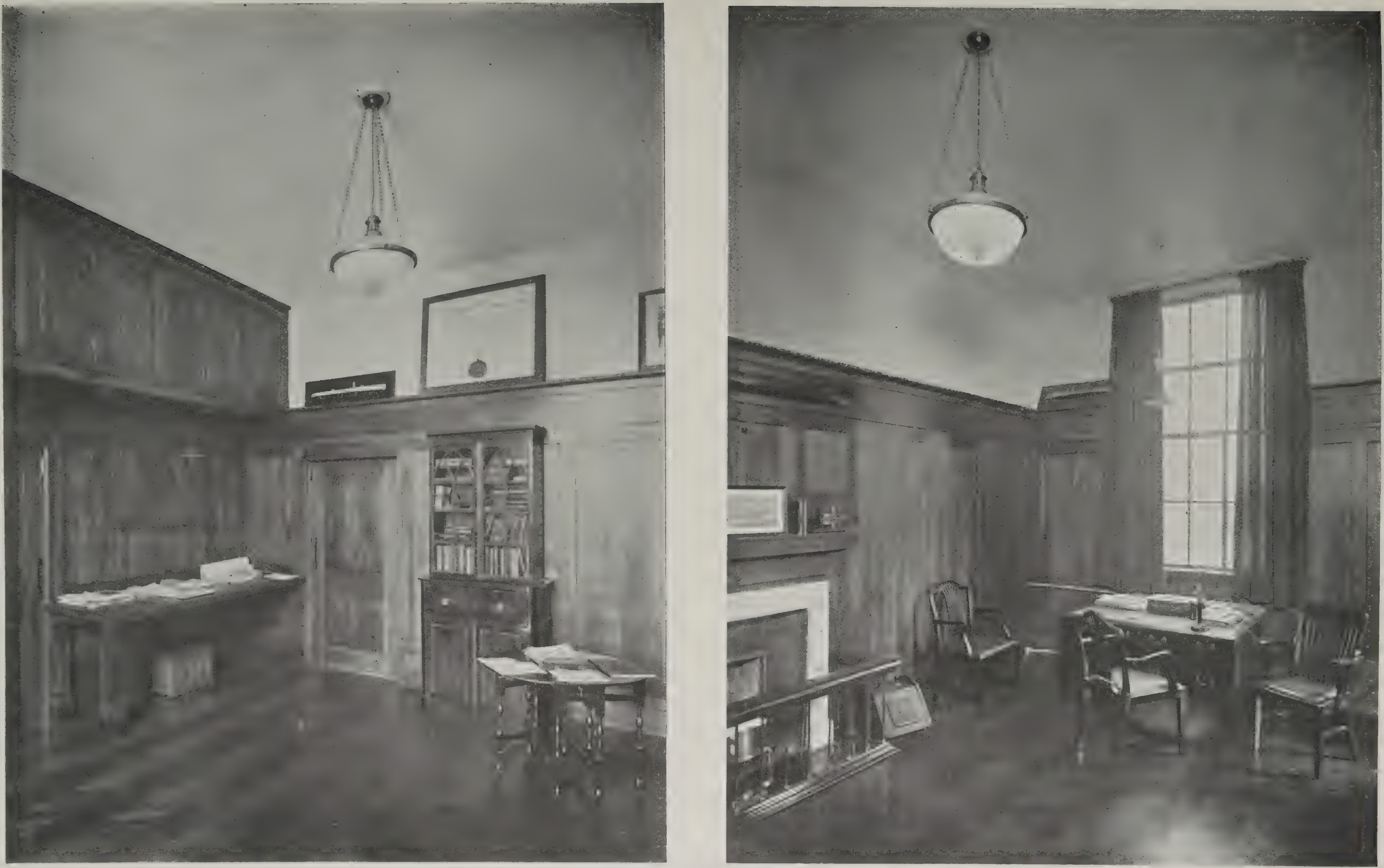
SECOND FLOOR PLAN

THORNYCROFT HOUSE, SMITH SQUARE, WESTMINSTER.
A. ALBAN H. SCOTT, ARCHITECT.



TWO VIEWS OF THE ENTRANCE HALL.

THORNYCROFT HOUSE, SMITH SQUARE, WESTMINSTER. A. ALBAN H. SCOTT, ARCHITECT



TWO VIEWS IN THE PRIVATE OFFICE.

THORNYCROFT HOUSE, SMITH SQUARE, WESTMINSTER. A. ALBAN H. SCOTT, ARCHITECT.

# Birkenhead War Memorial Competition

## Mr. LIONEL B. BUDDEN'S WINNING DESIGN

MR. GILBERT FRASER, F.R.I.B.A., the assessor in the Birkenhead War Memorial Competition, has awarded first place to the design (No. 17) of Mr. Lionel B. Budden, M.A., A.R.I.B.A. Twenty-one designs were submitted. The designs are of great merit and disclose a great amount of thought and work on the part of the authors.

Mr. Fraser, in his report, says design number 17 provides a memorial in the form of a cenotaph, being a rectangular stone monument with battered sides set upon a heavily moulded base and crowned with a sarcophagus top. The six panels with the names of the fallen are placed upon the north-east and south-west sides respectively, and are surmounted by carved laurel swags. These panels are to be carried out in green Westmorland stone, and provision is made for 210 names in each panel, making a total provision for 1,260 names in all.

The space allowed for each name is, in my opinion, sufficient, and the lettering should be easily decipherable at a distance of 15 ft. and at a height of 8 ft. above the eye-level.

Above the panels on the north-east side is the inscription, "In Memory of the Men of Birkenhead who gave their lives in the Great War." On the south-west side this inscription is balanced by the legend, taken from the Apocrypha (Ecclesiasticus xliv, 7): "All these were honoured in their generations, and were the glory of their times." Below the panels, on each of the two fronts, are the four shields of the Empire, representing the Army, Navy, Air Force, and Merchant Service, each one being depicted by symbolic crests mounted on the shields. On the south-east and north-west sides the monument is marked by two mourning figures carved in relief, above which the civic arms of Birkenhead are embossed upon oval escutcheons, and below which the dates 1914–1919 are incised.

In order to meet the occasion of commemorative ceremonial which at various periods will concentrate about the memorial the author has provided an adequate platform to meet this demand, and flag standards with bronze bases have been introduced as appropriate features.

The monument itself rests upon three broad steps, giving an impression of stability and affording a suitable place on which wreaths and floral tributes may be laid without obscuring the monument.

The general lay-out of the surround is low in character and does not in any way compete with the present character of Hamilton Square. The height of the monument has been kept relatively low and is developed in a classic form which will harmonize with the environment the square provides.

The work is to be carried out in Portland stone with panels in relief of green Westmorland stone, with the steps and pavings in Yorkshire stone and the bases of flag standards in cast iron treated in a bronze finish.

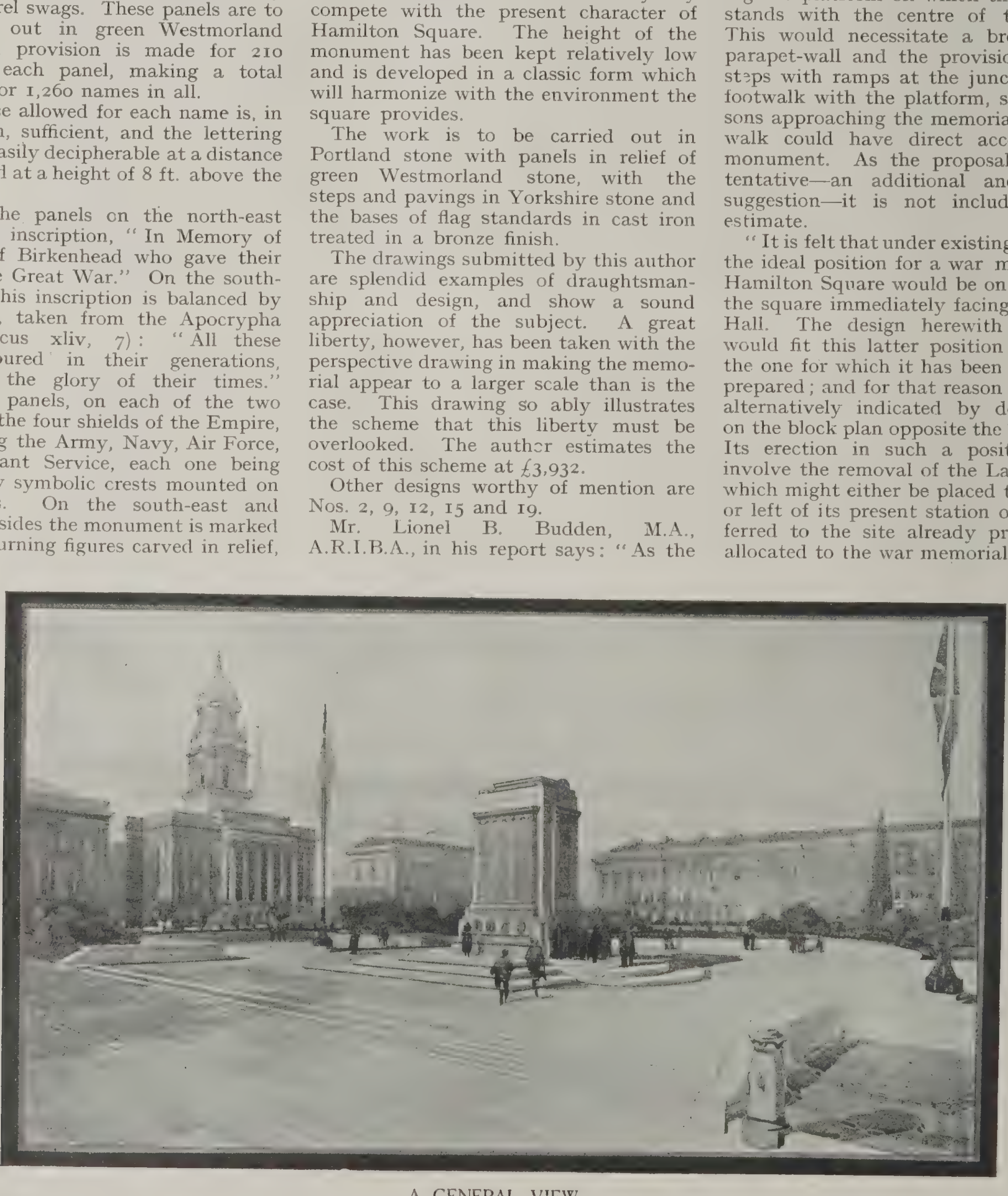
The drawings submitted by this author are splendid examples of draughtsmanship and design, and show a sound appreciation of the subject. A great liberty, however, has been taken with the perspective drawing in making the memorial appear to a larger scale than is the case. This drawing so ably illustrates the scheme that this liberty must be overlooked. The author estimates the cost of this scheme at £3,932.

Other designs worthy of mention are Nos. 2, 9, 12, 15 and 19.

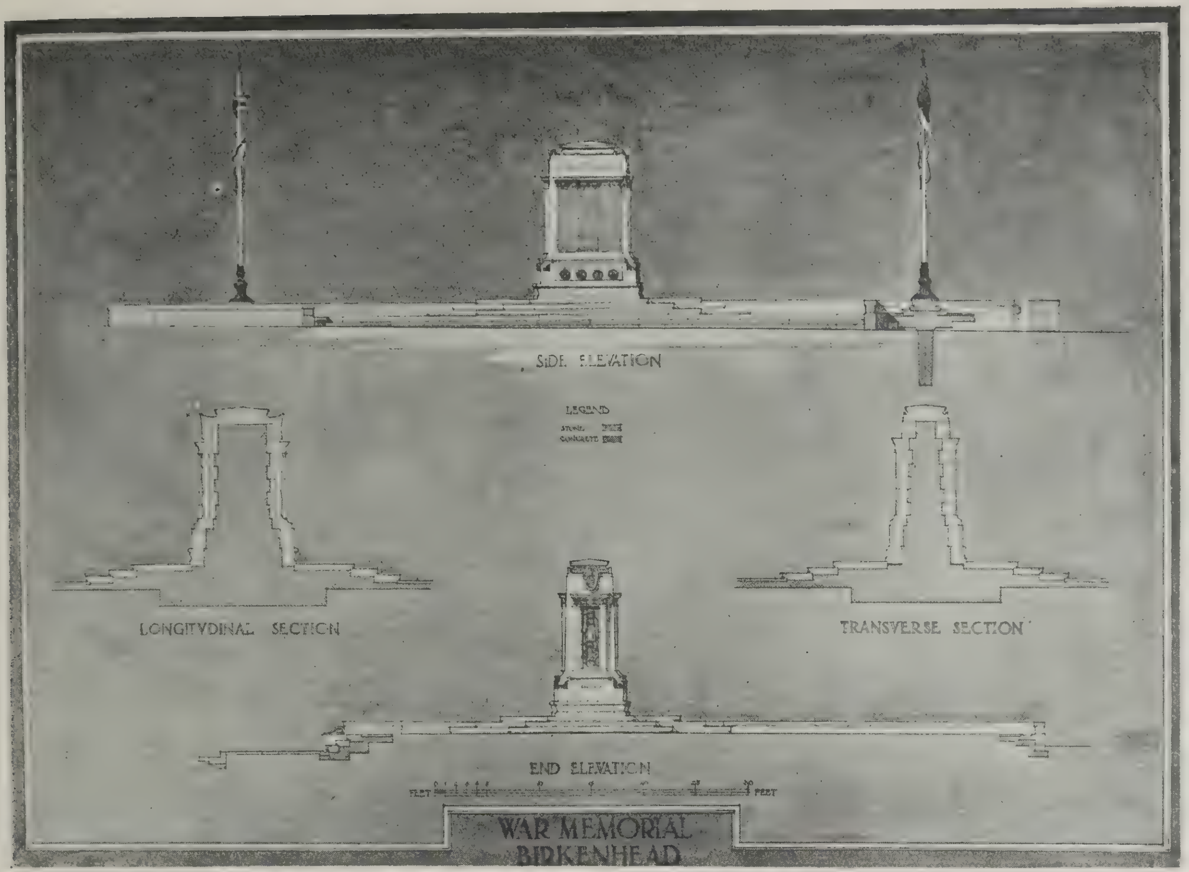
Mr. Lionel B. Budden, M.A., A.R.I.B.A., in his report says: "As the site chosen for the memorial is an ope one, the memorial will in consequenc be seen from all sides, both by person walking along the enclosing streets o Hamilton Square and by those who dail cross the square on the diagonal footwalks which bisect it. It has, therefore been considered essential to prepare scheme that does not face on to on street only, but is presentable from ever point of view, since all points are o nearly equal value in the case of such site. The two longer sides of the memorial receive the same treatment and the shorter ends also echo each other in thei design.

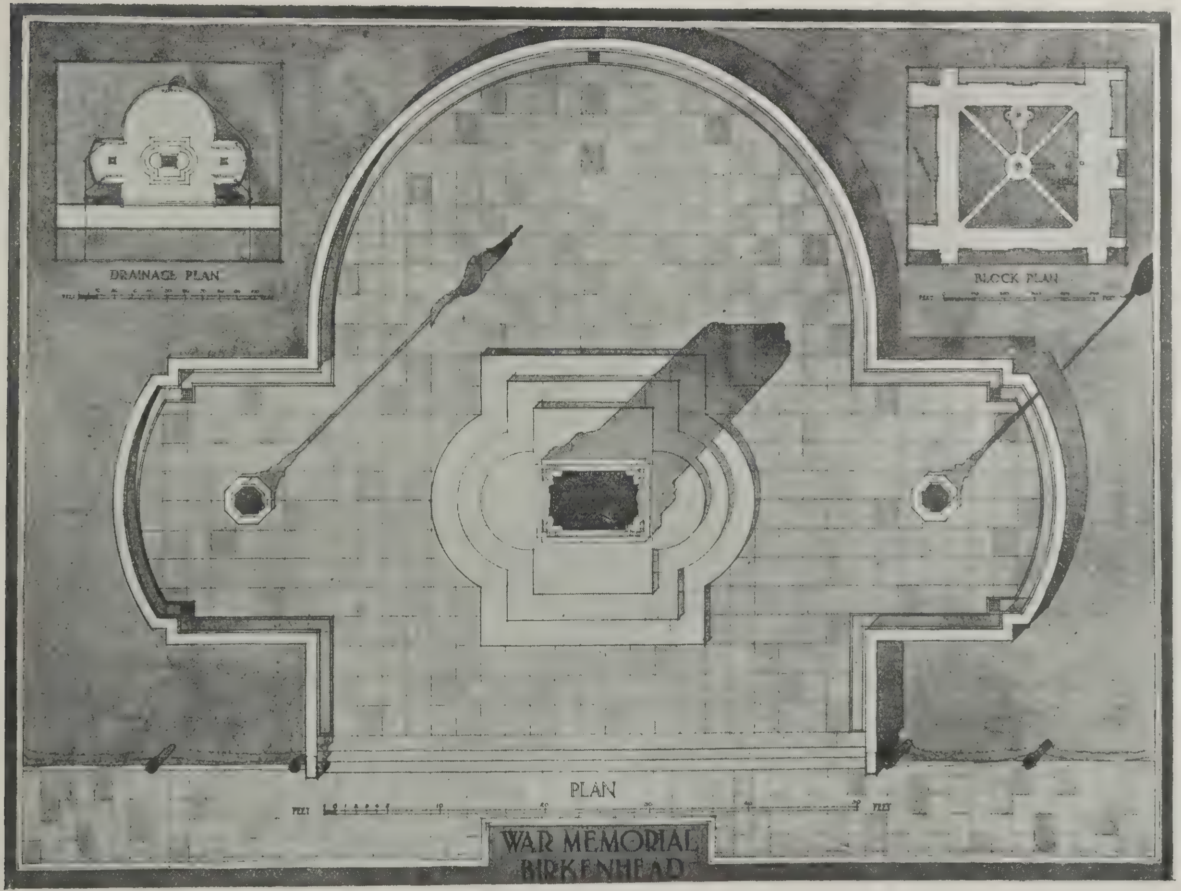
"On the block-plan a new footwalk ha been indicated by dotted lines, connecting the platform on which the memoria stands with the centre of the square This would necessitate a break in the parapet-wall and the provision of three steps with ramps at the junction of the footwalk with the platform, so that persons approaching the memorial along the walk could have direct access to the monument. As the proposal is merely tentative—an additional and optional suggestion—it is not included in the estimate.

"It is felt that under existing conditions the ideal position for a war memorial in Hamilton Square would be on the side of the square immediately facing the Town Hall. The design herewith submitted would fit this latter position as well as the one for which it has been specifically prepared; and for that reason it has been alternatively indicated by dotted lines on the block plan opposite the Town Hall. Its erection in such a position would involve the removal of the Laird Statue, which might either be placed to the right or left of its present station or be transferred to the site already prospectively allocated to the war memorial."

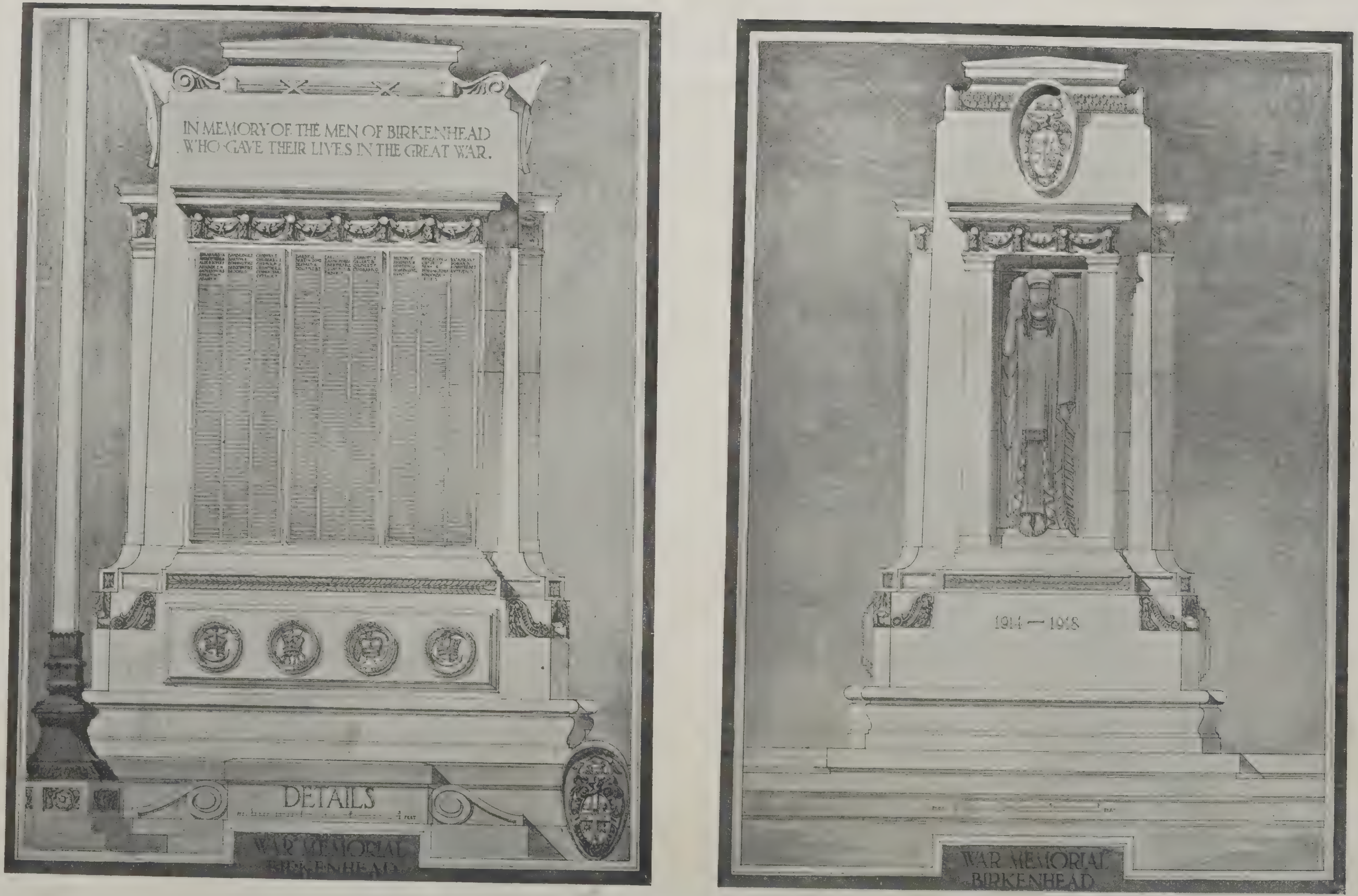


A GENERAL VIEW.





BIRKENHEAD WAR MEMORIAL COMPETITION: WINNING DESIGN
LIONEL B. BUDDEN, M.A., A.R.I.B.A., ARCHITECT.


IN MEMORY OF THE MEN OF BIRKENHEAD
WHO GAVE THEIR LIVES IN THE GREAT WAR.
DETAILS
WAR MEMORIAL
BIRKENHEAD
1914 — 1918
WAR MEMORIAL
BIRKENHEAD

BIRKENHEAD WAR MEMORIAL COMPETITION: WINNING DESIGN. LIONEL B. BUDDEN, M.A., A.R.I.B.A., ARCHITECT.

# The New London County Hall

MR. W. E. RILEY, F.R.I.B.A., R.B.A., in the course of a paper on the new London County Hall, read before the R.I.B.A., said: It can well be imagined that the discharge of all the multifarious responsibilities that are borne by the London County Council involves the employment of a large staff, and that if these functions are to be efficiently and conveniently discharged it is almost a necessity that such a staff should be suitably housed in one building, which would also include proper provision for the civic representatives.

The L.C.C., many years ago, set itself to deal with the problem of accommodation, and considered the suitability of various sites for the building of a new County Hall that would accommodate representatives and official staff in a suitable way. Sites were considered in Parliament Street, Trafalgar Square and the Adelphi, all eventually abandoned in favour of one adjacent to the Thames and the southern approach to Westminster Bridge. This site was acquired in April, 1905, at an approximate cost of £600,000, and as its area—including 2½ acres of reclaimed foreshore—was about 6½ acres, such cost works out at a figure approaching £100,000 an acre—a relatively cheap price as compared with the cost of other sites considered.

A good deal of credit attaches to Mr. J. D. Gilbert for the acquisition of the river site, for as far back as the year 1898 he advocated—as a part of his proposal for a southern river embankment between Westminster and Blackfriars Bridges—the erection of a new County Hall and offices on land that would become surplus from such an improvement if carried out.

A site having been acquired in 1906, steps were taken to hold, in the following year, an international competition for designs for the new building. Mr. Ralph Knott was the author of the successful design, which was described as being a forcible and artistic suggestion which conveyed the purpose for which it was to be erected.

In order to fix a reasonable standard of accommodation, much attention was paid to the amount of floor space which should be allowed for officials of the various classes, and with this object several large blocks of modern offices, both public and commercial, were inspected. Although the standard varies slightly in the different departments, the undermentioned approximate areas generally obtain :—

| | Square ft. |
|---|---|
| Heads of departments.. .. | 400 |
| Chief assistants .. .. | 250 |
| Heads of sections .. .. | 150 |
| Draughtsmen .. .. .. | 120 |
| Clerks engaged on committee work and clerks dealing with plans .. .. .. | 100 |
| Ordinary clerks .. .. | 80 |
| Typists and assistants engaged on routine work .. .. | 50 |

These superficial areas in a well-lighted and ventilated building will be quite adequate for the efficiency of the work and the health of the staff.

Another question which the Council had to consider was whether a completed building should be erected on the portion of the new site excluding Messrs. Holloway's premises, or whether so much of Mr. Knott's whole design, with any necessary modifications, as would extend from Westminster Bridge to those premises should be erected. Accommodation was required for a minimum of 137 members and a staff of 2,100. On the site—less Messrs. Holloway's premises—accommodation could be provided for 200 members and a staff of 2,270, and on the whole site for 200 members and a staff of 2,850. The Council was advised that not less than seven years would elapse before the whole of the staff could be housed in the new building. By that time the Council would be in a position to take over Messrs. Holloway's premises if it so desired, and the Council would have the choice—according as the experience gained in the construction of the new building and the variation in its work dictated—either of holding its hand or of proceeding with the building on the rest of the site. It was accordingly decided to proceed with so much of Mr. Knott's scheme as related to the portion of the site excluding Messrs. Holloway's premises.

Tenders were invited from selected firms for the construction of the embankment wall, and the lowest, which was submitted by Messrs. Price and Reeves, was accepted. The engineering work was designed by and executed under the supervision of the Council's chief engineer, Mr. (now Sir) Maurice Fitzmaurice, C.M.G. The architectural features of the central part of the wall were designed by the architects. The construction of the wall was started in January, 1909, and completed in September, 1910. The total cost amounted to £58,000.

As soon as practicable, arrangements were made for the construction of the substructure of the new building, viz., from the top of the concrete raft to the ground floor level, a height of 24 ft. 6 in. Tenders were invited from selected firms, and the lowest, amounting to £47,738, which was submitted by Messrs. Chas. Wall, Ltd., was accepted. For convenience of construction the building was divided into three sections: A, central; B, southern; C, northern. The tender comprised the construction of the substructure of the first section, A, and the completion of the raft foundation work and retaining wall in Belvedere Road to the north of Guildford Street. The Council decided, in accordance with the conditions of tender, to require Messrs. Wall to construct the remaining two sections, B and C, at the schedule of prices included in the original contract. Messrs. Wall's contract was completed in March, 1913.

The plan adopted for the building embodies various features that were subsequently considered desirable to produce a satisfactory arrangement of plan, including the straightening up of the old irregular Belvedere Road frontage to a new improvement line.

The accommodation, after full consideration, was arranged as follows: the representatives have accommodation assigned to them around the Council Chamber. It was, therefore, necessary to decide where the main entrance could be most conveniently arranged, and Westminster Bridge Road was fixed upon as the principal business entrance, and Belvedere Road for the ceremonial entrance. The accommodation required for the representatives comprises cloak rooms, committee rooms and private rooms for the chairmen of committees, and in the centre of the crescent are placed the chairman, the vice-chairman, the deputy chairman of the Council, and the whips of the parties. The reading room, library and refreshment rooms are also on the river front.

It was found essential that certain chief officers (with their personnel) should be on the same floor, and this formed a key for placing the staff of each department, which is either below or superimposed, having ready access from the head of the department.

On completion of the substructure the main contract for the superstructure commenced in August of 1913, and was timed to be completed in three years, the contractors being Messrs. Holland and Hannen and Cubitts, Ltd., of Gray's Inn Road. As will be readily understood, the intervention of the war upset all calculations of time, and otherwise, with this as with other undertakings of a similar kind. Work was eventually stopped, and only resumed in the summer of 1919.

The walling generally is of London stock bricks, strengthened where unusual loads are encountered with blue brickwork in cement. Floor and flat roofs generally are of the usual steel joist and concrete construction. The structural work includes built-up steel stanchions where required by the planning of the building; and the steel framing for the roof, which includes two floors of offices, has required special treatment, owing to its somewhat unusual form and the heavy loads to be carried.

Mr. F. R. Anderton, chairman of the London County Council, moved a vote of thanks to the architects. He said that Londoners were proud of the Hall and owed a debt of gratitude to its designers and to the men who had carried out the building. With regard to complaints that had been made of the acoustic qualities of the council chamber the same thing had happened before when the Council had moved to new quarters. It was a matter that would right itself with time. The size of the building was justified, there was no space wasted, and nothing unworthy of London.

Mr. Andrew Taylor seconding, said that the County Hall was a triumph for unlimited competitions, for the architecture of the building was expressive of its civic and municipal purpose. Massiveness and strength were the great qualities of Mr. Knott's work, and they were symbolical of London. The County Hall was an incentive to administer the services of London better than before.

Mr. Knott, who received an enthusiastic ovation, expressed his gratitude to Mr. Riley and to Mr. Collins for their support and assistance.

# The Roman Point of View in Architecture

MR. W. G. NEWTON, M.C., A.R.I.B.A., in the course of a lecture on "The Roman Point of View in Architecture," at Oxford (the Provost of Oxford in the chair), said: In this learned city, largely devoted, and rightly so, to the study of Greek and Roman literature, philosophy, and history, the word "architecture" connotes mediæval building. Such is the power of John Ruskin. But if there is one thing more certain than any other, it is that building was a cardinal expression of the Roman genius. Their armies might be recruited more and more from foreigners, their language fade into the "pidgin-Roman" of Gaul and Spaniard, even the throne itself of the Cæsars be occupied by an Arab, a Thracian peasant, or a priest from Asia, yet everywhere and all the time, whenever occasion served or materials were obtainable, whether in Mesopotamia, or Africa, or Spain, or Gaul, they were building great aqueducts and amphitheatres, ordered towns and porticoes, baths and bridges and temples, to the same tremendous pattern. The most jealously guarded title of the imperial master himself was "Pontifex maximus," the "chief of the builders of bridges." No view of the Roman genius can be complete which leaves this manifestation on one side; and no view of architectural development can even begin to be held.

The only contemporary account we have of the Roman architectural point of view is to be found in the ten books "De Architectura" of Vitruvius, round whose name is ranged all the architectural inspiration of the Italian Renaissance. But the prophet of the Reisoni was of little account in his own country. In the whole of Latin literature there is hardly a reference to him. The design of but one building, and that a provincial basilica, can with certainty be ascribed to him. His system of proportions for the orders of architecture was in his own day disregarded. He complains in his preface to Book III that Rome is overrun with a crowd of amateur architects and advertising charlatans. For such a field his own inconspicuous gifts are little fitted. He can only hope to be known by his writings to posterity. And no one can surely have achieved so markedly the esteem of a later age and the neglect of his own. But the secret of his impotence is largely that he stands between the old and the new. With the supremacy of Augustus, to whom Vitruvius dedicates his work, Rome gradually ceased to be a city and became a civilization. The ten books of Vitruvius are, in the words of M. Choisy, the last will and testament of the Hellenic world.

And the world of Imperial Rome was a very different one. Athens, it is true, was an imperial city, the centre of the commerce of her day, the school of Hellas, the champion of the west against the east, the despotic mistress of those she liberated. And yet, in spite of the great intellectual and artistic achievements of historic Greece, it is sometimes difficult to feel that it was ever more than the nursery of Europe, a nursery where the finest thoughts of Europe were matured, but where the actors themselves were little more than children.

But our estimate of Greece can never be quantitative. Small as was her sphere, she contributed something of undying value to the development of art, and this was a spontaneity, a natural and unselfconscious joy in creating. In the report of the building committee on the state of the Erechtheum in 409 B.C., there are no high-flown phrases about the aims of art, the glory of the achievement: "to Antiphane, who carved the chariot, and the young man, and the pair of horses, 240 drachmæ." Art was never spelt by the Greeks with a capital A.

In architecture their aim seems to have been the rigorous following out to an ever greater perfection of the lintel motive, the grove of columns fencing a simple cell. They refine on the proportions of the columns, on their spacing, on the apparent droop of the horizontal lines, on the sculpture that lies in direct light and the sculpture that catches reflected light. "They alone have seen how much pleasure might be called forth by perfectly defined strength exerted upon an exactly adequate burden." And no less does this hard-thinking Greek spirit in after years follow up and work out the principle of arched construction into the full and balanced perfection of Sta. Sophia.

It was more than two centuries after the building of the Parthenon that the Romans came into touch with the Greek genius. Plutarch tells us that it was after the capture of Syracuse in 212 B.C. that the consul Marcelius first taught the Romans to admire the exquisite performances of Greece, which were hitherto unknown to them. With all the eager insincerity of the man of action who sees in art the criterion of a culture which is not his, but which he determines to assume, the Roman becomes a collector of curios, a connoisseur of Greek marbles and Corinthian bronzes, a patron of art. The Roman treatment of Greek beauty is neatly summarized in a sentence of Plutarch's description of the Temple of Jupiter Capitolinus, when he saw it after its opulent rebuilding by the Emperor Domitian about the year A.D. 80: "The Pillars are of Pentelic marble, and the thickness was in excellent proportion to their length when we saw them at Athens; but when they were cut and polished anew at Rome, they gained not so much in polish as they lost in proportion."

Art, in a word, is no longer spontaneous; it has become self-conscious. "Architecture" is distinguished from "building" by Vitruvius. Design has tabulated rules and elaborate systems of proportion.

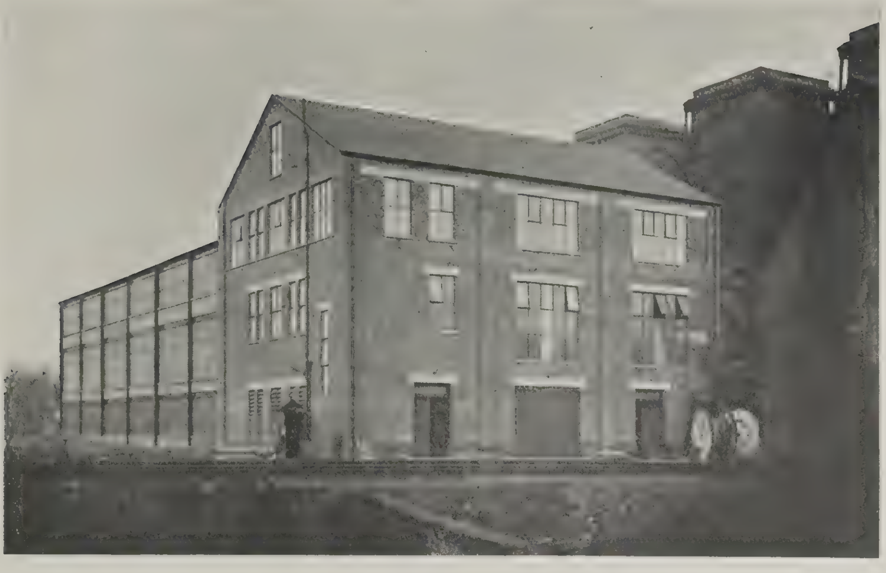
But this is only true of the part which was the Greek heritage. There is another side of Roman architecture. It is not all self-conscious and unreal. "The Romans built like the bees," says Viollet le Duc. And M. Guadet, in an illuminating passage which is worth quoting in full, writes: "Ancient architecture is a single verity. And nowhere will you find this characteristic more striking than in the Baths. Ancient architecture has two constituent elements: the colonnade or entablature with the architecture of th orders, the arcade or vault with the architecture of the great monuments of Rome. The colonnade, the older form, consecrated by tradition, finds its perfec expression in the temples; here it i diverted from its original use, and in the Roman monuments we often find the orders purely decorative. . . . But in the Baths, in view of the demand fo public utility, with proportions of bays and vaults passing the accepted dimensions, there was nothing to appeal to bu reason, logic, and truth. . . . The Baths have the definiteness, the frankness, the rigorous candour of a Doric temple."

And not the Baths only. What we are first of all struck with in considering the Roman contribution to the development of architecture is the astonishing mass of Roman building work. For three centuries and more the system of civilization which was the Roman Empire enjoyed, apart from frontier wars, profound peace. Everywhere cities grew and flourished, built on similar plans, governed on similar lines. It has been calculated that there were more than two thousand of them. The Pax Romana and the increasing ease and even luxury of travel drew all parts of the civilized world together. It was a social obligation, understood and accepted, that the wealthy should spend their wealth in glorifying their own town, especially by building. Countless inscriptions have been found all over the empire recording gifts and bequests, and the greatest part of them are objects of public utility—baths, theatres, aqueducts, roads, and market-places. As Professor Dill says: "There was in those days an immense civic ardour, an almost passionate rivalry, to make the mother city a more pleasant and more splendid home. . . . There is an almost monotonous sameness in the stiff conventional record of this vast mass of lavish generosity."

The perfection of the Roman system of centralization diffused a uniformity of design and construction everywhere. The aqueducts of the Campagna are repeated at Segovia, the colonnades of Baalbek in the streets of Milan.

And so this great system of the past life of man has, like some perished mammoth, left everywhere its bones, which we may see and handle and reconstruct. A vast deal has perished in the earthquakes and wars and spoliation of 1,700 years. But so solidly and universally did they build that we can still study over most of Europe, and much of Asia and Africa, what manner of men they were and what they made of life. When I look at the great remains of the Roman Empire I am reminded of Watts's picture of the minotaur. A great hand seems to be laid, almost unconscious of its weight, on the peoples. The individual sinks out of sight. The remains are the remains of cities then built, and armies. Not here is the simple freshness of the Greek, chiselling his marble in the sunshine, or the exuberance of the mediæval builder, balancing vault against buttress. As we stand by a Roman ruin we seem to hear a sound of many voices, the

"Smoke and wealth and roar of Rome."



A GENERAL VIEW.

# A New Switch House, at Neasden

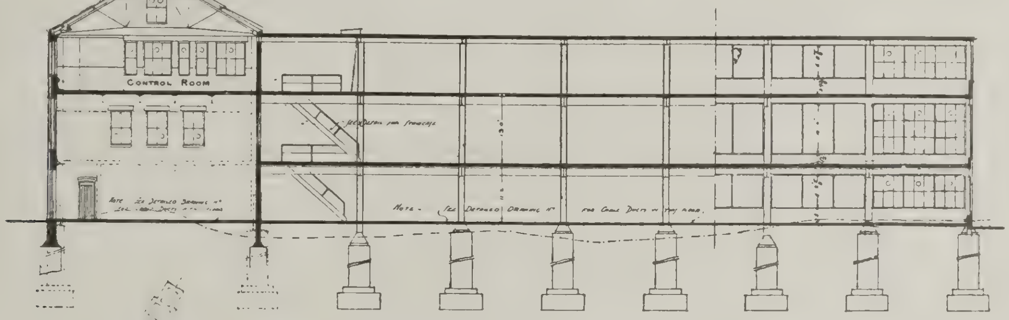
THE accompanying plans illustrate what is a novel building to many engineers and architects. The letropolitan Railway Company are xtending their power-house at Neasden, nd are taking the opportunity to ouse all their switch gear in a eparate building in which all apparatus onnected to the main high-tension lectricity supply is to be kept entirely solated from the occupied chambers, hus ensuring the safety of the staff under ll conditions.

This apparatus has been designed to distribute an ultimate station capacity of 60,000 kva.; the system being a three-phase alternating current, operating at 11,000 volts with a periodicity of 33⅓ cycles per second.

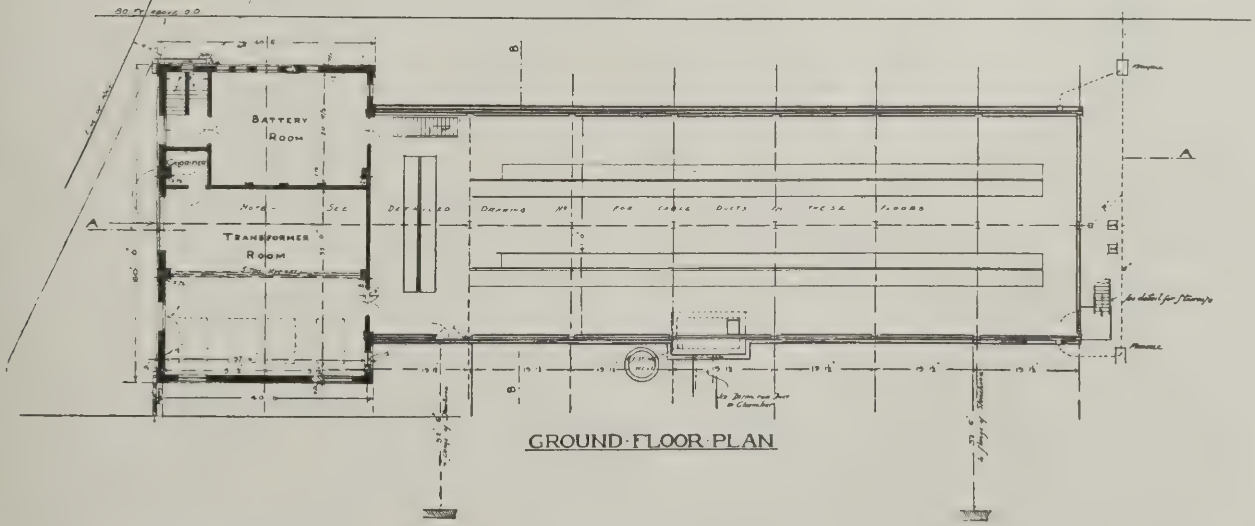
Special brickwork cubicles are provided for each incoming and outgoing cable, and these cubicles are divided vertically by brickwork phase barriers, and again horizontally by moulded stone slabs into compartments, entirely isolating each item of apparatus, the entire cubicles being closed when "alive" by steel plate doors.

The dimensions and equipment of these cubicles have, of course, very largely governed the size and shape of the building, but a separate control room from which the various switches can be suitably controlled has also been provided.

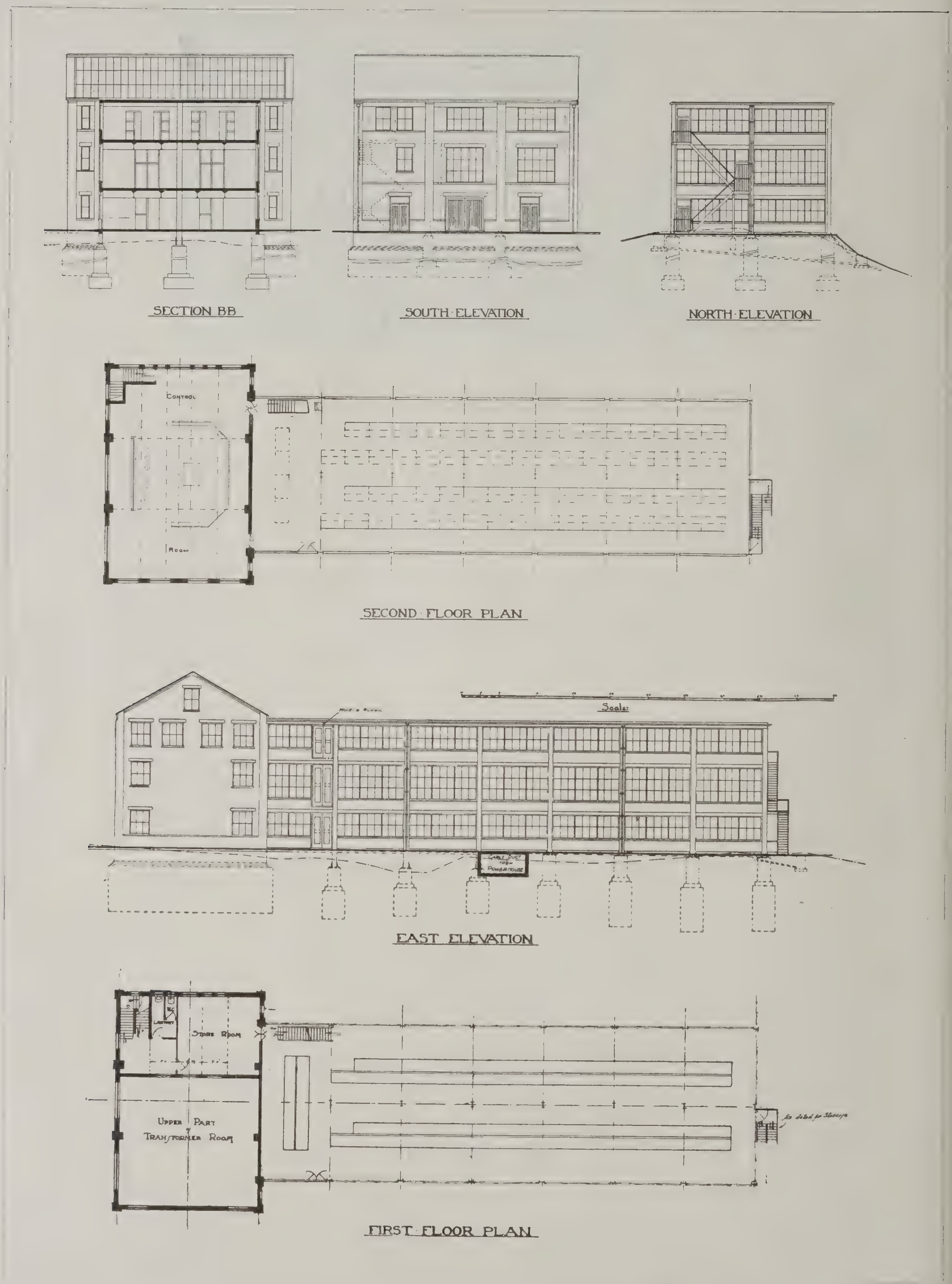
This contains only the low-tension switch operating panels and battery controls, and is equipped with a complete installation of "ships'" telegraphs and loud-speaking telephones in order that communication between the turbine drivers and switchboard operators shall be as simple as possible.



SECTION. A.A.



GROUND·FLOOR·PLAN



PLANS, ELEVATIONS, AND SECTION OF THE SWITCH HOUSE AT NEASDEN.

The turbine governor and all electrical controls are also installed in the control room so that the operator is unaffected in any way by the distance separating him from the machines.

The building, which is **T** shape on plan, the cross line of which represents the south front of the building, contains on the second floor the control room and on the ground floor the transformer and battery rooms, with lavatories and store room on the mezzanine floor. The back wing, which is the switch house proper, contains on the ground floor the distributing ducts, cable trifurcating boxes, isolating switches and potential transformers; the first floor contains the automatic oil switches, series transformers, and busbar isolators, while the top floor is occupied by the busbar chambers. The cables are brought from the power-house between the cooling towers in a series of waterproof ducts into a large manhole on the east side of the new building underneath the ground floor—from this point they radiate under the floor to the various cubicles and rise vertically through the floors to the busbar chambers.

The site is a difficult one, being composed for a depth of 20 ft. of made ground, the building is therefore carried on a series of piers on which is erected the steel-framed building with reinforced concrete floors, and as ample light is essential for examination of the gear the steelwork is filled in with iron-glazed sashes.

The work has been carried out by Messrs. Perry & Co., of Bow, as contractors, to the design and under the supervision of Mr. E. A. Wilson, the chief engineer of the Railway Company.

The electrical installation is being carried out by the General Electric Company, of Witton, Birmingham, to the design and under the supervision of Mr. C. Jones, the chief electrical engineer of the Railway Company.

The steelwork is being supplied by Messrs. Lambourne & Co., sub-contractors to Messrs. Perry & Co.; the steel windows by Messrs. Williams Gamon & Co., of Chester; the patent glazing by the British Challenge Glazing Co.; the glazed bricks by Messrs. Brookes & Co., of Halifax; the electrical conduits by Messrs. Doulton. The general bricks are Ibstocks, and the facings Southwaters, manufactured by the Sussex Brick and Tile Co. The heating installation has been carried out by Messrs. Comyn Ching & Co., and is a low-pressure natural circulation worked from a calorifier heated by steam supplied from the power-house.

# The Architect and Engineer

## By W. J. H. LEVERTON, F.S.Arc., Licentiate R.I.B.A.

MR. W. J. H. LEVERTON, addressing a meeting of the Institution of Structural Engineers on Thursday evening last week, took as his subject " The Architect and Engineer."

The engineer, said Mr. Leverton, is utilitarian; his sole object generally is efficient construction. Science is his mistress. If he pays any court to Art it is by applying ornament after the form of his structure has been settled, for good or ill, merely by the claims of construction.

The architect in designing his building endeavours to gain a satisfactory effect by means of good grouping, a fine outline, and a proper disposition of the parts. He then adds ornament if the purpose of the building and the purse permit. The ornament, which is an accessory—a desirable one frequently—is not, of course, applied indiscriminately, but in the best works emphasizes the construction and the important lines of the building.

To give an erection architectural character does not by any means involve making it more ornate or costly. It is important to emphasize this, because there is an idea that an architect is only necessary when an ornate building is required; that he is an individual who playfully peppers a façade with pilasters and adds carving *ad libitum*, possibly *ad nauseam*. There is a fine passage in Viollet-le-duc's lectures, in which he shows that the smallest buildings in Pompeii, built of the cheapest materials, were, owing to their treatment, quite as much works of art as the ornate public buildings of the city.

As architectural treatment does not necessarily involve additional expense, there is no reason why every erection should not possess it, and give delight to the beholder; instead of having a similar effect on a man, or woman, of taste as a rough channel passage. A writer on design said one of its qualities was politeness. He said when a building was erected it blocked out a certain amount of light and air (some advocates of higher buildings would block it all out), and, possibly, a view, so out of common politeness to the passer-by he ought to make it presentable and pleasing.

Granting that architectural treatment should be given to all erections, how is it to be obtained? By referring to the methods of Sir Christopher Wren, healing the unnatural divorce between architecture and construction, now called engineering, placing the architect in his proper position as general director, and to avoid the troubles that previously occurred through the architect being overburdened with work, he should depute to others such duties of detail as can be devolved without upsetting the success of the scheme.

What an impetus it would give to the advancement of architecture if all new methods of construction were handled by men who had been artistically trained. A cry goes up at times for a new style. If architectural design was once more based on construction and full advantage taken of new methods, something fresh might result.

Many of the men of old would have gloried in reinforced concrete. What would the builders of Beauvais have given for such a material? It would have enabled them to erect a central tower a thousand feet high! Few of the larger French Cathedrals have a central tower that dominates the church like the towers of Canterbury, York and Lincoln. The fleche of Amiens, although higher than the spire of Salisbury, is a mere turret compared with the great height of the nave. A central spire for Amiens to hold its own would have to be at least 700 feet high. It could be constructed in reinforced concrete with ease, but anything of that height in stone would require supporting piers so enormously large that the centre of the church, the most useful part, would be practically blocked up.

Westminster Abbey badly wants a central tower; this is particularly noticeable as you approach it from the east. I suggested some time since that one might be erected in reinforced concrete. It was at a dinner of the London Society. I was afterwards asked what specialist firm I represented!

Seriously speaking, a design modelled on the much abused Western Towers would be very suitable for erection in reinforced concrete. The existing piers would probably take the additional weight; they are considered to be too slight for the weight of a stone tower.

It is most certainly a mistake to hide the concrete construction behind a veneer of anything. The concrete building should not be a frame building, that is a mere skeleton put up and cased afterwards with something or other. The piers, instead of being bald squares, should be treated as architectural columns or piers, and the beams as entablatures with cornices cast on properly designed for concrete, not simply stone imitations.

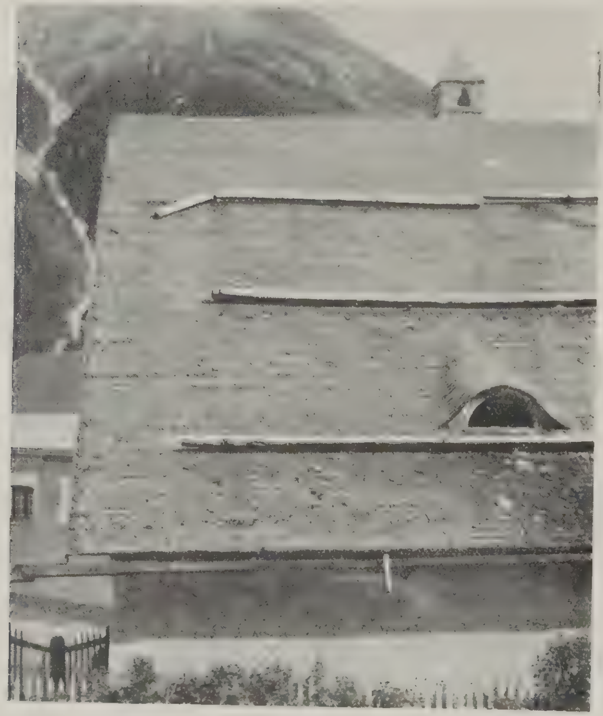
A very fine building, one of the most magnificent designs of the age, was recently described in a paper before the Royal Institute of British Architects. It has a cornice in stone of Corinthian type. The modillions, it appeared, were suspended to conceal reinforced concrete cantilevers by dovetailed plugs. The effect was fine, but one does not feel happy when one knows how it has been obtained.

Some may possibly consider I have laid too much stress on the artistic side of the relations and unduly magnified the importance of architecture. We are all, engineers and architects alike, I think, citizens first and professional men afterwards; and are therefore fully agreed that everything erected should be, at least, unobjectionable in appearance. The only way to achieve that desirable result is to have some one in charge who has had proper training in architectural matters. Many of the earlier engineering works were of a high standard—any age might be proud of them. The divorce between engineering and architecture had not fully taken place—Sir John Rennie was a Fellow of the Royal Institute of British Architects. Some later works, alas, are blots on the fair face of city and country alike. Two Thames bridges may be instanced, Hampton Court and Charing Cross: the former is by far the worst. It is assumed in some quarters that because the latter is not what it might be a railway bridge is necessarily ugly; but that, of course, is a ridiculous heresy. A railway bridge might be as fine a structure as a Roman aqueduct, and what could be grander?

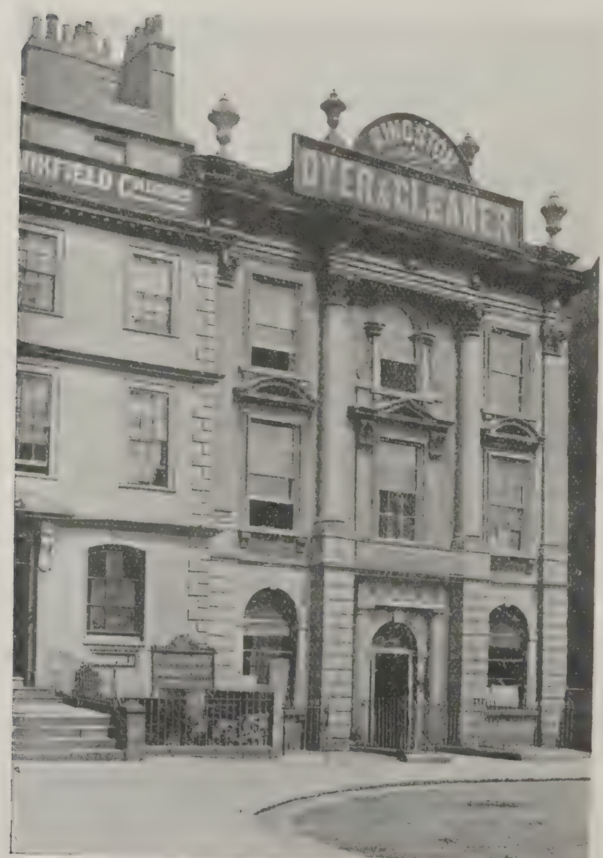
# A Pictorial Review

## Illustrations of Topical, Practical, or Curious Interest

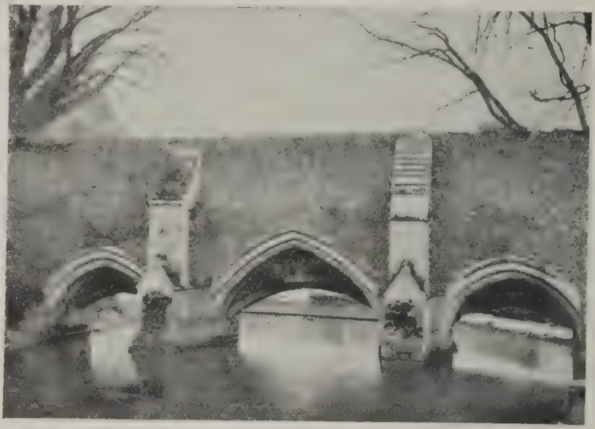
*Readers are invited to send in sketches and photographs for publication in these pages. A fee of 2s. 6d. will be paid for each illustration accepted. Contributions should be accompanied by short explanatory notes.*



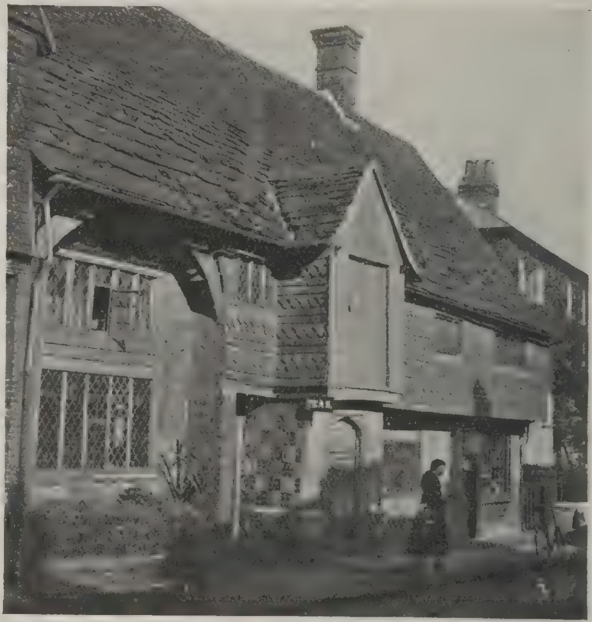
A curious dormer on a house at Maduleine, Lower Ingledene, Switzerland. The roof is constructed of shingles, and is fitted with snow-guards, which can be clearly seen in the accompanying snapshot.—H. A. J. L.



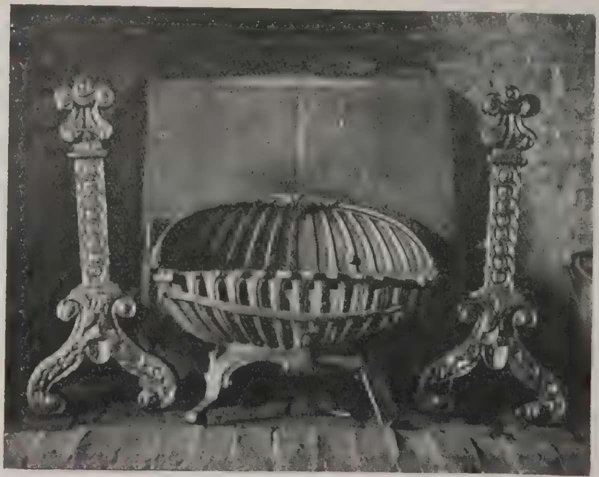
Nassau House (now demolished), Orange Grove, Bath. The house was designed and built about 1730 by the Earl of Cork and Burlington.—E. M. H.



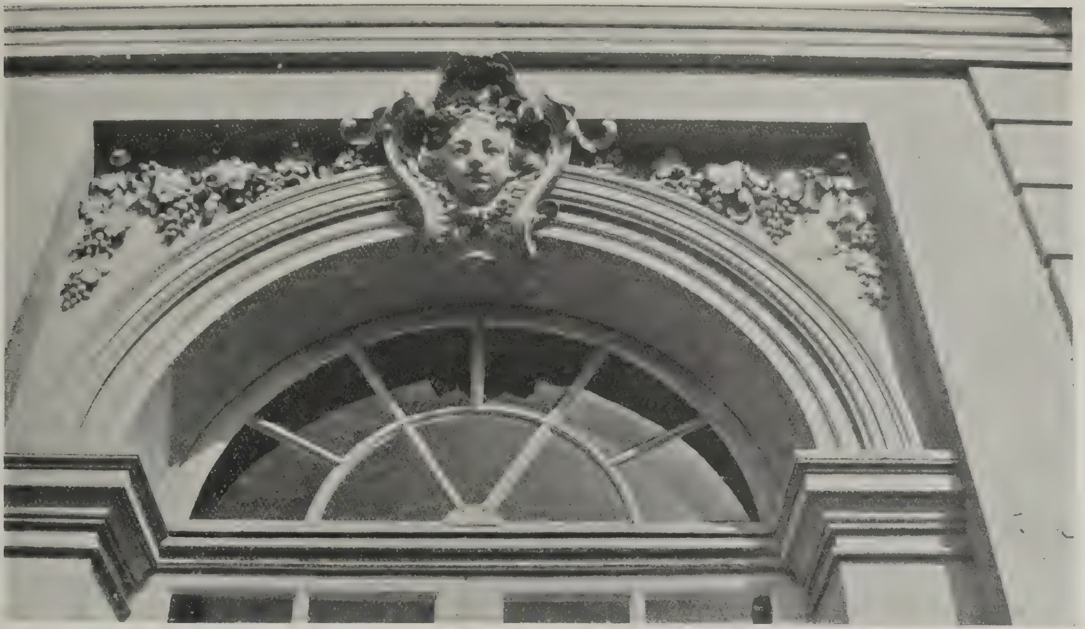
Abbot's Bridge over the Lark at Bury St. Edmunds. It dates from the twelfth century, and is so narrow that its builders could not have known of, or anticipated, wheeled vehicles.—J. B. T.



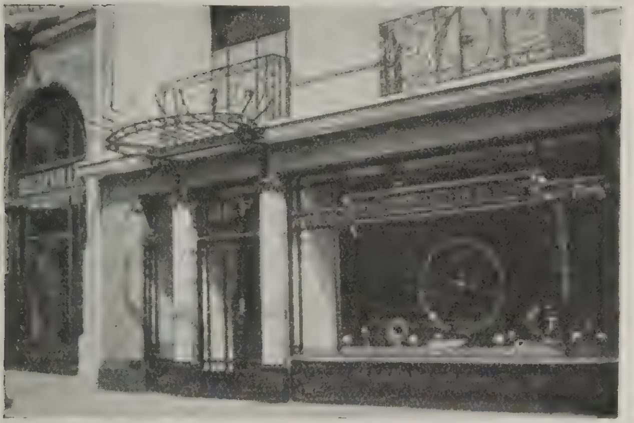
The "Old House" near Southover Church, Lewes. It is reputed to have been the residence of Anne of Cleves.—J. B. T.

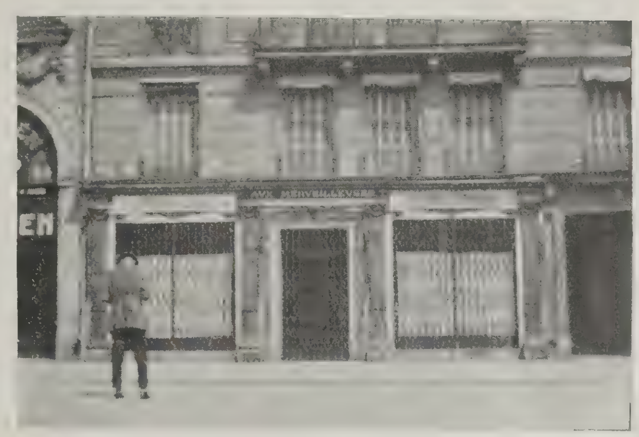


Old Sussex iron cradle grate (or nest) and dogs in the village Institute at Heyshott. Near by lies Dunford House, the birthplace of Richard Cobden, the free trader.—J. H.

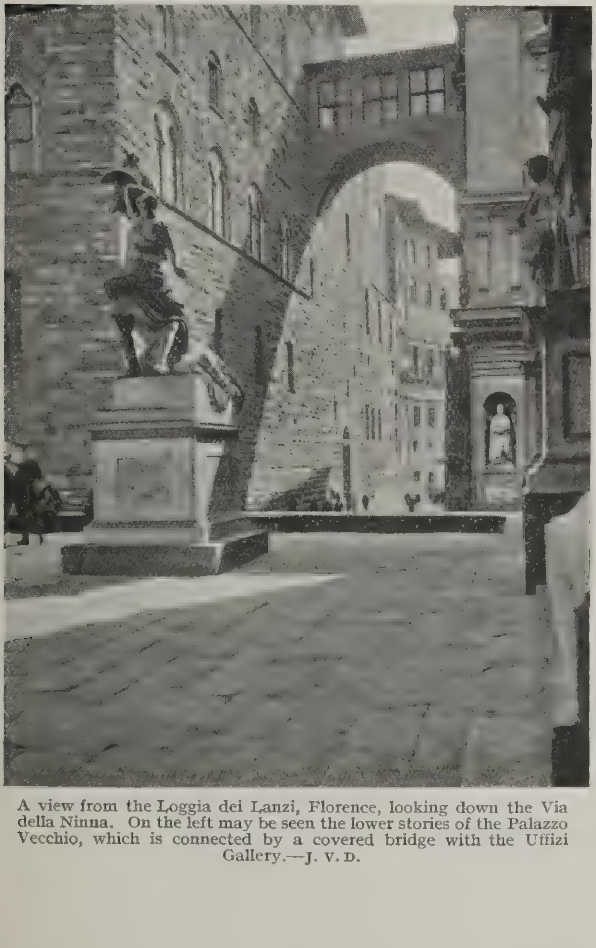


This semi-circular-headed window forms part of the Pavillon Français—a small summer dining-room in the Gardens of the Petit-Trianon, Versailles. The Pavillon was built by Gabriel in 1766 for Louis XV.—B.

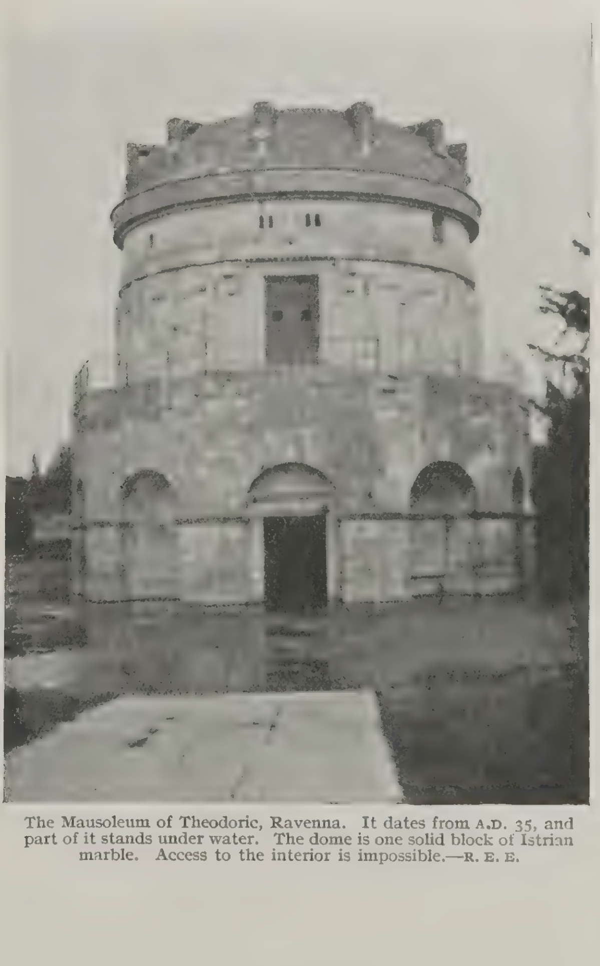




These two shop-fronts are in the Champs Elysées, Paris. The pilaster caps, window frame, and ornament of that shown on the left are of bronze. Ball-bearing wheels are exhibited in the window and repeated as an ornamental motif in the caps of the two pilasters and in the window base. In the other window the pilasters are of yellow marble and have bronze caps and polished brass bases. The shop-facing is of white marble, and all the ornament is of bronze.—E. D. A.



A view from the Loggia dei Lanzi, Florence, looking down the Via della Ninna. On the left may be seen the lower stories of the Palazzo Vecchio, which is connected by a covered bridge with the Uffizi Gallery.—J. V. D.



The Mausoleum of Theodoric, Ravenna. It dates from A.D. 35, and part of it stands under water. The dome is one solid block of Istrian marble. Access to the interior is impossible.—R. E. E.

# The Housing Problem

## A Suggested National Programme

SOME interesting suggestions for a National Housing Programme have been made by the National Federation of House Builders. In putting forward the suggestions the object of the Federation is to outline a practicable solution of the housing difficulty which can be put into operation and produce the largest possible number of houses with the minimum of expense to the country. The Federation, in putting forward their suggestions, state : The house building trade has been suspended because investors have ceased to buy cottage property, and until houses can be sold to the investor the house builder cannot build and the great and growing shortage will continue. The main object of any national policy, therefore, should be to restore economic conditions in housing, in other words to restore such a position that the rent and cost shall bear an economic relation to each other. A revival of the housing industry would operate as a powerful stimulus to employment, not only in the actual building trades but in all allied trades, and in such trades as furniture making, etc. The amount saved in unemployment doles would go far towards meeting any expenses incurred in granting aid for housing. No heroic measures of wholesale building with public money will meet the difficulty; experience has already shown that such a line of action only intensifies the shortage. We consider that the only way is to restore house building as an industry, and this can be accomplished by a National Housing Programme on the following lines.

### The Withdrawal of Legislation

1. All legislation which unduly penalizes the owners of house property should be withdrawn at the earliest possible date. The first step towards a resumption of building is to restore the confidence of investors in house property, and this can only be restored when house property is free from the onerous and exacting restrictions which are now imposed by the Rents Restriction Act. The withdrawal of the Act would not lead to unduly high rents, for the resumption of buying by the public would cause activity in building, and the free competition would rapidly restore an economic position of rents and costs. The Rents Restriction Act has intensified the housing shortage.

### Investment in Property

2. Every endeavour should be made to encourage the people to invest their savings once more in house property. An active market for the sale of cottage property in small lots existed before the war. In this way the people were supplied with houses. House property still remains the soundest form of investment if it is secure from political attacks. The confidence of investors will be restored when a strong Government declares its intention of fostering and encouraging the investment of the people's savings in house property. When investors buy houses they can be built in great numbers.

### Economic Rents

3. All local authorities which build houses in the future should be required to charge economic rents except where the houses are erected for the clearing of congested areas. If the local authorities can build houses and let them at any rent which the council think fit, it means a loss to the general tax-payer and ratepayer, it pauperizes the tenants, it encourages jobbery in local elections, and it prevents private enterprise from building similar houses in the same district.

### State Assistance for All

4. If any State assistance is granted for housing it should be granted equally to municipalities and to private enterprise building houses of a good type. Some form of assistance is absolutely necessary to build houses for the working classes. The considered opinion of the Federation is that the most efficient and economical method of affording the necessary assistance is by a cash subsidy to the owner of all new houses of an approved type. An alternative method in some districts might be found by exemption of new houses from local rates for a period of years. Unless State assistance is extended equally to all agencies private enterprise cannot compete on equal terms with local authorities, the house builder will not be able to build, and the whole burden of finding the houses will be thrown on to the rates and taxes. The system of cash subsidies has already proved to be the best and most economical method of granting assistance. A cash subsidy will reduce the cost to the investor and by drawing capital to the industry it will rapidly bring cottage property to its proper position as one of the most desirable investments in the country.

The exemption of new houses from local rates has been tried in other countries with great success. There need be no additional expense thrown on the existing ratepayer by this method of assistance. No increase in the education and poor rate need be anticipated by a distribution of the population through the reduction of over-crowding, and the inevitable expense of cleansing and lighting could be covered by a grant from the national exchequer to the local authorities of an amount equal to the property tax received from the new houses. This would not cause any additional expense to the national exchequer. The profits from the public supply of gas, electricity and water should also tend to defray any small expenses caused through the exemption of new houses from local rates.

### Encouragement to Purchase

5. Every method of encouraging the citizen to purchase his own house should be examined and adopted if it promises to increase the available housing accommodation. The following matters will assist those who desire to buy their own houses :—

(*a*) The further revision of the Small Dwellings Acquisition Act, 1899, as amended by the Housing, etc., Act, 1919, and the liberal working of that Act.

(*b*) The extension of assistance to building societies to enable them to lend a larger proportion of th cost of a house than they ar willing to do at present. Thi would enable those with sma capital to secure a house of thei own.

(*c*) The exemption of new propert from local rates for a period o years. This could be applied wit equal advantage to encourage th owner occupier as to induce th investment of capital in houses t rent.

### Revision of By-Laws

6. Local authorities should revise thei by-laws in order to cheapen the cost o building and roadmaking so that houses can be let or sold at a reasonable figure The building regulations in many districts are out of date and increase the cost of houses and rents unnecessarily They should be made uniform throughout the country as far as possible and the most economical standard should be adopted consistent with sound construction. A wide discretion should be given to local authorities to permit of building by new methods, and to do this the provisions of Section 25 of the Housing, etc., Act, 1919, enabling local authorities to permit building by new methods, could be made permanent.

### Advancing of Capital

7. Local authorities should be empowered to lend money on mortgage to responsible builders developing estates and erecting houses of approved types.

Under this system the local authorities could advance capital to builders developing estates which would be repaid on the completion and sale of the houses, or transferred to the purchaser as a repayment mortgage. Local authorities would thus control the development of their areas without expense and builders would be enabled to undertake large schemes. This system has been worked with great success by one or two local authorities in the country under private Acts of Parliament.

### No Trusts and Combines

8. Prompt and decided action should be taken by the Government to counteract the operations of the trusts and combines in building materials.

The cost of building is being maintained at an unduly high figure largely by the unreasonably high prices of building materials. Light iron castings, lime, earthenware goods, white lead, bricks and other materials are controlled by combines of manufacturers.

Following are the signatories for the National Federation of House Builders to the suggestions : J. Squires, Nottingham, president; H. R. Selley, London, vice-president; G. F. Darbyshire, Manchester, vice-president; C. H. Oldham, Manchester, past-president; Geo. Sadler, Nottingham, past-president; R. A. Costain, Liverpool, past-president; A. Waddington, Sheffield, past-president; H. M. Grant, Birmingham, past-president; G. H. Brown, Manchester, treasurer; Norman McKellen, secretary.

# Correspondence

## The R.I.B.A. Registration Bill

*To the Editors of* THE ARCHITECTS' JOURNAL.

SIRS,—I am afraid the gentleman who wrote your leading article, published on the 24th inst., does not read the R.I.B.A. Journal, or else he has a very short memory. He states "the old Council . . . had a strong case . . . but they never put it before the electors, and it was not until Major Harry Barnes made his famous speech at Cardiff that we knew what the Institute really meant by its registration policy."

You really are very unkind to the late Council and to the late President (Mr. Simpson) in particular. Major Barnes's address is reported in the "Journal" of July, 1922, and Mr. Simpson chose the subject of the scheme for his Presidential address at the Liverpool Congress in June, 1921 ("Journal," Vol. xxviii, p. 497). Then, again, we had the advantage of reading very many letters from Mr. Keen, our Hon. Secretary, who explained so lucidly that "all the architects" did not mean "all the architects." There were also many articles and letters in the professional Press explaining the policy of the scheme.

You also state that, in your opinion, if the late Council had "put their case properly before the members of the Institute, we believe the result of the elections would have been very different." Come, come! Is that really fair to the late Council? Surely you know that at least one very important member visited the provinces and spoke on several occasions in favour of the scheme, and that there were many meetings in and out of London conducted by Associates at the expense of the Institute to further the scheme; and, finally, the late Council issued an official statement in the "Journal" of May 6th, 1922, in many eye-catching varieties of electioneering type. By an extraordinary coincidence that number of the "Journal" also contained the nominations for the Council election.

I submit that no scheme ever had more advertisement or more support from the Press, and surely no scheme was ever so enthusiastically rejected by the general body of the R.I.B.A. At, I believe, the largest poll ever recorded, twenty-five men out of twenty-eight were elected pledged to oppose the scheme to the utmost of their power; but it was the general body that called it, and the present Council was elected to bury it! R.I.P. SIDNEY PERKS.

## "Architect and Engineer" in Collaboration

*To the Editors of* THE ARCHITECTS' JOURNAL.

SIRS,—I have read the article in your issue for Jan. 17 on the above subject with the greatest interest. It has been my contention for a long time that this subject requires urgent and serious consideration, and during my editorship of a monthly illustrated journal devoted to architecture and the allied arts, I advocated not only the collaboration of architects and engineers, but architects and sculptors, and, further, architects and building contractors. The latter may appear an anomaly, but seriously I advance such a contention. Architects may be considered the masters of the building contractors, and to a great extent, of course, they are. The architect's conception is on behalf of a third party, undertaken to be carried to fruition and completion by the building contractor, faithfully and in accordance with ideas preconceived, and expressed in the architect's drawings, details, and specifications. A hard and fast binding contract is made to this end, and, if possible, such contract is so framed that it shall not be possible for the building contractor to deviate from his agreed course of procedure. This is all right, and so far is as it should be, but in many cases the building contractor does not trouble himself to look further than to do as he is told. For a successful building to be evolved the contractor must have far more sympathetic views. For proof of this we need go no further than the times of our great-grandfathers when collaboration was perfect. The results and the legacies left us from these times are subjects for our admiration and envy.

I cannot but feel that a system or mode of working should be established whereby the building contractor is in closer touch and harmony with the architect. The American has solved this in his own direct commercial method by reason of the fact that an architect's office of any importance in America is organized and run upon a scale much as is a large commercial business. The departments are defined and conducted by a skilled head who is absolutely responsible for all the departments' transactions. The establishment, in fact, is a veritable "sausage machine," the whole process from raw material to the finished article being produced in order of sequence. I am unable to admit that such a system is possible in this country, but I do contend that something to take its place is every year more in evidence, and that this is brought about by the ever-increasing size, magnificence, and importance of modern edifices.

The modern building contractor of any importance is, or should be, or should have as an integral part of his establishment, a man of matured knowledge and experience, educated and brought up as an architect, and holding in that firm or business a position of directorship. He should, if possible, have practical architectural knowledge, gained by practising and having carried out works of importance. A building contractor having this knowledge would be more conversant with the architect's drawings, details, and the multitudinous ideas and conceptions he wishes carried out, and the contractor would be able to read these in the spirit in which they were conceived. He would have a sympathetic influence over the entire work, he would be in a better position to decide points of doubt and to discuss these with the architect to advantage. He would undoubtedly bring an atmosphere of greater confidence and reliability which would all tend for the betterment of workmanship, satisfactory working conditions to the firms' employés, harmony of business associations, and complete satisfaction to all concerned, with the consequent prosperity to follow. CECIL A. SHARP.

## Architects and Colour

*To the Editors of* THE ARCHITECTS' JOURNAL.

SIRS,—At a recent conference of public men, called to consider a rebuilding scheme, it was affirmed with general agreement that architects are less susceptible to public opinion than the members of other professions, and that more than any other they impose their judgments, whether right or wrong, upon their clients.

The occasion of the remark was a proposal to embody in the scheme certain frontages in dull-glazed coloured terra-cotta, with a view to brightening a dull locality—as Mr. J. M. Hogge, M.P., in a letter to the Press, has since advocated.

It was objected that the architects would lack the courage to depart from the brick and stone convention and, notwithstanding the admirable use of such material in various buildings up and down the country, would succeed in overruling their clients' preference.

A friend connected with the building trade assures me that many architects fail to keep abreast of the times and are ignorant of the properties and uses of new materials. Thus, one, when supplying formal data on London buildings, described Pagani's restaurant as built of "coloured tiles," and the popular restaurants known as the Corner Houses as of "glazed tiles"; whereas the former is of constructional faïence and terra-cotta, and the latter of terra-cotta ashlars with a matt vitreous surface.

Is this general accusation justified? *Do* architects neglect to acquaint themselves with new methods and materials? *Are* they indifferent to what Mr. Hogge describes as the "æsthetic and moral value of colour in buildings"? The views of your readers would be interesting. NOËL INCHCAPE.

## R.I.B.A. Code of Professional Conduct and Practice

*To the Editors of* THE ARCHITECTS' JOURNAL.

SIRS,—As questions have been asked with reference to the omission of the Code from the Kalendar, your readers might like to know the facts. It has been assumed that the code printed in the Kalendar for 1920–21 was omitted from the present Kalendar by order of the present Council. That is not so; it was omitted by order of the late Council.

When the draft of the code was submitted to the Practice Standing Committee in 1920, it passed resolutions on April 7 and April 28 that "the publication of any such document would not be in the interests of the Institute" and "they fear it would be liable to be made use of adversely to Architects in Courts of Law," but the Council of that date did not accept the advice of the Committee.

In October of last year the Practice Standing Committee submitted a resolution to the Council as follows :—

"The Committee note with satisfaction the decision of the Council not to publish the existing Code in the Kalendar for the coming year. It is the opinion of the Committee that the Code of Professional Conduct and Practice as at present published should not again be printed in the Kalendar. Further, the Council are recommended to rescind the present Code as an official document of the R.I.B.A."

The Council accepted the advice and resolved accordingly.

At the present moment the Practice Standing Committee is considering whether a code should be printed in the Kalendar, and if so, what that code should be.

It is interesting to note that as f back as 1916 the Practice Standing Co mittee resolved that the previous co should be omitted from the Kalendar, tl resolution was as follows :—

"The Committee are of opinion th with a view to strengthening the pow of the Council to deal with all matters Professional Conduct it would be advi able to omit the contents of page 70 of tl Kalendar from all future publications."

SYDNEY PERKS.

# R.I.B.A. Prizes and Studentships

## The Awards

As briefly announced last week the prizes and studentships of the R.I.B.A. were awarded as follows :—

### *The Tite Prize and £100 for Design.*

The subject set for this year was "An Italian Embassy in a European Capital." The prize was awarded to: Mr. John Chiene Shepherd, A.R.I.B.A., of 51 Torrington Square, London, W.C.1, and a certificate of honourable mention was awarded to Miss Isabel Maud Chambers, of "The Priory," Roehampton, S.W.15.

Nine designs were submitted under the following mottoes :—

(1) "B.O.": three strainers; (2) "Utinam": three strainers; (3) "Sebastian": three strainers; (4) "Poffergy": four strainers; (5) "Geneva": three strainers; (6) "European": three strainers; (7) "Tishy": five strainers; (8) "Blue Square": four strainers; (9) "Tujja": four strainers.

The Council have awarded the certificate, and, subject to the specified conditions, the sum of £100 to the author of the design submitted under the motto "Tujja"; and a certificate of hon. mention to the author of the design submitted under the motto "Poffergy."

### *The Owen Jones Studentship.*

A certificate and £100 for ornament and coloured decoration: awarded to Mr. Cyril Forbes Filbey, of 123 Crystal Palace Road, E. Dulwich, S.E.22.

One application was received from the following gentleman: C. F. Filbey: six strainers.

### *The Godwin Bursary and Wimperis Bequest.*

A silver medal and £130 for the study of works of modern architecture abroad: awarded to Mr. William Thomas Benslyn, A.R.I.B.A., of 42 West Side, Wandsworth Common, S.W.

Six applications were received for the Bequest from the following gentlemen :—

(1) W. T. Benslyn (A); (2) L. H. Bucknell (A); (3) S. W. Milburn (A); (4) W. S. Purchon (A); (5) E. W. B. Scott (A); (6) A. F. Wickenden (A).

### *The Pugin Studentship—A Silver Medal and £75.*

For the study of the mediæval architecture of Great Britain and Ireland: awarded to Mr. A. Newton Thorpe, of Cemetery Lodge, Fulford, York.

Two applications were received for the Studentship from the following gentlemen :—

(1) G. W. R. Heritage: four strainers; (2) A. Newton Thorpe: four strainers.

### *The Henry Saxon Snell Prize and £50.*

Increased on this occasion to £60 owing to the generosity of Mr. A. Saxon Snell, for the study of the design and construction of hospitals, convalescent homes and asylums. "A Maternity Home and Infant Welfare Centre" for an industrial town was the design subject for this year. The prize was awarded to Mr. Ernest G. Theakston, F.R.I.B.A., of 12 New Court, Lincoln's Inn, London, W.C., and certificates of honourable mention were awarded to Mr. George Bertram Edward Norburn, A.R.I.B.A., of "The Crossways," Northwood, Ramsgate, Kent, and to Mr. Alfred John Brown, A.R.I.B.A., of 35 Handside Lane, Welwyn Garden City, Herts.

Eight designs for a maternity home and infant welfare centre were submitted under the following mottoes :—

(1) "Ad Rem": one strainer; (2) "Roona": one strainer; (3) Crane (device): two strainers; (4) Three Diamonds (device): two sheets; (5) "Knype": four sheets; (6) "Solomon": two strainers; (7) Square and Compass (device): three strainers; (8) "Ursa": four strainers.

The Council have awarded, subject to the specified conditions, the prize of £60 to the author of the design submitted under the motto "Ad Rem," and certificates of hon. mention to the authors of the designs submitted under the motto of "Roona" and the device of a crane.

### *The Grissell Gold Medal and £50.*

For the encouragement of the study of construction. The subject set for this year was "A Warehouse," and the prize was awarded to Mr. Percy Morrey, M.B.E., A.R.I.B.A., of Wynhill, Bramhall, Cheshire.

Four designs for a warehouse were submitted under the following mottoes :—

(1) "Rivet": two strainers; (2) "Syntithemi": six strainers; (3) Fleur de Lys (device): five strainers; (4) "Bluzz": two strainers.

The Council have awarded the medal and £50 to the author of the design submitted under the motto "Rivet."

### *The R.I.B.A. Essay Silver Medal and Twenty-five Guineas.*

This is awarded for the best essay on a subject of architectural interest which may be chosen by each competitor: Awarded to Mr. Lionel B. Budden, M.A A.R.I.B.A., of Withinfield, Heswal Cheshire, for his essay on "An Introdu tion to the Theory of Architecture."

Five essays were received for the silve medal under the following mottoes :—

(1) "Argumentum ad Judicium" "The Architectural Problem of th Modern Shop"; (2) "Aristus": "A Introduction to the Theory of Architec ture"; (3) "Korea": "The Study o Sound in its relation to the Design o Buildings"; (4) "Petivi": "The Mos Genial Artist of his time: Pirro Ligorio of Naples, Rome, and Ferrara"; (5 "Poffergy": "Flats."

The Council have awarded the silve medal and twenty-five guineas to th author of the essay submitted under th motto "Aristus."

### *The R.I.B.A. Measured Drawings Silve Medal and £50.*

This is awarded for the best set o measured drawings of an existing building which may be chosen by each competitor: Awarded to Mr. Wesley Dougill, B.Arch. Liverpool, of "The Lees," 58 Calthorpe Road, Edgbaston, Birmingham, for his measured drawings of "The Campidoglio," Rome.

Three sets of drawings were sent in of the several buildings enumerated under mottoes as follows :—

(1) "Cheddar": two strainers (Chapel of St. Anselm, Chester); (2) "Diligente": four strainers (the Palazzo Horne, Firenze); (3) "Oxnop": eight strainers (Campidoglio, Rome).

The Council have awarded the silver medal and £50 to the delineator of the drawings submitted under the motto "Oxnop."

### *The Ashpitel Prize.*

The Council have, on the recommendation of the Board of Architectural Education, awarded the Ashpitel Prize (which is a prize of books value £10, awarded to the candidate who has most highly distinguished himself among the candidates in the final examinations of the year) to Mr. Alexander Simpson Reid (A), of 221 Clifton Road, Aberdeen, probationer, 1921; student, 1921; and who passed the final examination July 1922.

The competition drawings are on exhibition in the Galleries of the Royal Institute of British Architects, 9 Conduit Street, W.1, until February 5, 1923, between the hours of 10 a.m. and 8 p.m. (Saturdays 10 a.m.–5 p.m.)

[A specially contributed critique of the Prizes and Scholarships appears on page 214.]

# The Draft Registration Bill

The following correspondence has passed between the Councils of the R.I.B.A. and of the Society of Architects:

*From the R.I.B.A.*

January 23, 1923.

The Secretary,
The Society of Architects.

REGISTRATION OF ARCHITECTS.

Dear Sir,—I am directed by the Council of the Royal Institute of British Architects to send you the enclosed copy of a Bill for the Registration of Architects, which will be introduced in the House of Lords next month.

Faithfully yours,
(Signed) IAN MACALISTER,
Secretary.

*From the Society of Architects.*

January 26, 1923.

The Secretary,
The Royal Institute of British Architects, 9 Conduit Street, W.1.

*Re* REGISTRATION OF ARCHITECTS.

Dear Sir,—I am desired by my Council to acknowledge the receipt of your letter of January 23 enclosing on behalf of the Council of the Royal Institute of British Architects a copy of a Bill for the Registration of Architects which will be introduced into the House of Lords next month. In reply I am directed to ask you to be so kind as to convey to your Council the intimation that the Council of the Society of Architects is unable to support the R.I.B.A. Registration Bill in its present form.

Yours faithfully,
(Signed) C. MCARTHUR BUTLER.
Secretary.

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We have received the following copy of a letter sent on behalf of the Executive Council of the Architects' and Surveyors' Assistants' Professional Union to the Secretary of the Royal Institute of British Architects, in reference to the above Bill.

In forwarding the correspondence to us it is pointed out that the Council are not opposed to the principle of Registration, but are determined that no measure which proposes to legislate for Architectural Assistants, their status, their conditions of employment, their existence as a body within the profession, and which does withhold from them adequate and just representation on the bodies (i.e. the Tribunal and the Board) set up under this Draft Bill, shall receive its support, but will, on the contrary, be strenuously opposed at every stage until the amendments herein proposed are incorporated in the Bill.

Dear Mr. MacAlister,—My Executive Council had before it at its meeting last Monday the above Draft Bill for consideration, and I am directed to ask you to put the following before your Council at its next meeting, and, if possible, before the General Meeting of the Institute called to consider it on the 29th inst.

At the beginning of 1920 the then Council of the Institute on its own initiative invited the Architects' and Surveyors' Assistants' Professional Union to send a representative to a Committee which it had set up to consider the question of Unification of Architects. Later in the same year this committee was remodelled on a larger scale with the President of the Institute as its chairman, and was known as the Unification and Registration Committee. To this the Architects' and Surveyors' Assistants' Professional Union was invited to send two representatives. A sub-committee was formed, and a representative of the Union was elected to this. It is assumed that the policy of the Institute was then to recognize that the body of assistant architects in the profession had its place in the profession as well as the body of practising architects.

My Executive Council observes with regret that the present Council, in the Draft Bill now before us, has completely overlooked the rights of assistant architects. The Bill, in fact, is a measure for the protection of architects in their capacity as practitioners on their own account, but it allows bona fide architects' assistants of certain qualifications to be registered as architects. It follows that every architect's assistant so qualified must in his own interests apply for registration, and that such assistants will probably form a majority of architects registered, and the total amount of fees accruing from such registration will be in like proportion. However, the tribunal which is to be set up to examine the applications for registration, and the Board which is to advise the Council of the Institute as to all future qualifications for registration, are to have no representation from any organized body representing assistant architects, and, moreover, it is specifically laid down that all architects who are members of either body representing different societies must be practising architects.

It is true that the word "practising" has not been defined in the bill, but the term "practising architect" is usually understood in the profession to mean an architect in practice on his own account; moreover, if it were meant to be inclusive of the assistant architect in this case, there would not appear to be any reason for this qualification of the term "Architect." It seems doubtful, indeed, whether the term "practising architect," as ordinarily understood in the profession, can be meant to include any salaried official architect, even although employed as principal. The Draft Bill, therefore, proposes that fees should be taken from a large body of assistant architects without allowing them any chance of saying how such sums shall be expended, which is the antithesis of all democratic principle. My Executive Council will therefore demand before it can give any support to the measure, that the Union which it represents shall be given adequate representation on both the Board and the Tribunal, and that the qualification of an architect being a practising architect in order to enable him to hold a seat on either of these bodies be eliminated from the Bill.

My Executive Council further notices that the Bill does not propose to set up any Register of Architectural Assistants supplementary to the Register of Architects, and must insist that such is also included. It proposes that all persons at present bona fide employed as architects' assistants, but not qualified to be registered under the Bill as architects, all students in recognized schools of architecture on completing their courses, and all pupils in the offices of architects on completing their period of indenture, shall, on application and subject to their qualifications being approved by the tribunal, have their names entered on the register of architectural assistants, and that no person shall be employed by any registered architect except his name be on the register.

I am sending a copy of this letter to each of the members of the Council of the Royal Institute, to the Press, and to the branches of the union throughout the country.

Yours faithfully,
(Signed) JOHN MITCHELL,
General Secretary.

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# R.I.B.A.

## *Council Meeting.*

The following notes are from the minutes of the last meeting of the Council of the R.I.B.A.:—

Congress on Architectural Education.—On the recommendation of the Board of Architectural Education it was decided that an International Congress on Architectural Education should be held in London in 1924.

R.I.B.A. Conference at Edinburgh.—The provisional programme of the conference to be held at Edinburgh, June 13 to 16, 1923, was approved.

Board of Architectural Education.—Mr. Rodney H. Alsop (F.) was appointed to represent Victoria, Australia, as Advisory Member of the Board of Architectural Education.

Reinstatements.—The following reinstatements were made: As Fellow, T. Butler Wilson; as Associate, Harry Thomas Bill; as Licentiate, Hugh Campbell.

## *The R.I.B.A. Kalendar.*

The R.I.B.A. Kalendar for 1922–1923, of which we have received a copy, is an indispensable handbook for all who have an interest in the practice of architecture. No other year-book contains so full and so varied a mass of information on matters of professional interest at home and abroad. It is thoroughly up-to-date, and reflects great credit upon the compilers. The omission from the current number of the Code of Professional Ethics is explained by Mr. Sydney Perks in a letter which we publish in this issue.

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# The Fate of the Registration Bill

On Monday evening the Registration Bill was considered by a Special General Meeting of the R.I.B.A.

Mr. Sydney Perks proposed the adoption of the Bill, and a heated discussion took place.

Mr. Guy Dawber moved as an amendment that the Bill be not considered until the other professional societies and other interests affected be consulted, and a general consensus of professional opinion obtained in favour of the Bill. This was carried by 149 to 74.

Put again as a substantive motion, it was carried by 166 to 83, the necessary two-thirds majority being just obtained.

## Leicester Society of Architects

Splendid tributes and hearty congratulations were accorded the Leicester and Leicestershire Society of Architects at their jubilee celebration dinner, held at Leicester. Mr. Paul Waterhouse, M.A. Oxon, P.R.I.B.A., was the chief guest. Mr. Wm. Keay (President of the local Society) occupied the chair, and among the guests present were Sir Arthur and Lady Wheeler, Mr. R. Savage, F.R.I.B.A. (President, Birmingham Society of Architects), Mr. Stimpson (President, Building Trade Employers), Mr. J. Alfred Hopps (representing the accountants), Mr. Robert Holt (representing insurance societies) and Mrs. Holt, Mr. Ian MacAlister, B.A. Oxon (Secretary, R.I.B.A.), Mr. and Mrs. Chas. Bennion, Mr. and Mrs. C. Geoffrey Barradale, Mrs. Robert Harvey, Mr. J. Russell Gimson, Mr. and Mrs. W. M. Robinson, and Mr. Higginson (Nottingham).

Following the loyal toast the President extended words of warm welcome to all, and in doing so asked to be permitted to mention the names of their guests. At their jubilee celebration they could not help but recall those who had gone before and who had served them well. They thought of such men as Ordish, Pick, Thompson and Tait, architects who were with them in spirit though not in the flesh. In passing, he also mentioned Mr. Everard and Alderman Sawday, both of whom were held in great esteem, but who were unable to join with them in their celebrations owing to illness. In the name of those present he would send a message of sympathy from that gathering.

Mr. W. K. Bedingfield submitted the toast of "The Royal Institute of British Architects," and in doing so in the absence of Alderman A. E. Sawday—who, he said, was a man deeply respected among architects and one who, as a citizen of Leicester, had given more self-sacrificing time to the benefit of the city than any other man—said that it gave him especial pleasure because he had to couple with it the name of Mr. Paul Waterhouse, a man honoured by the profession. In submitting this toast, the speaker said it gave him an opportunity of a little friendly criticism. The R.I.B.A. was a powerful body, and it was doing a wonderful work towards consolidating the business and profession of an architect. One thing, however, it had not done; it had not, for the want of a better expression, taken up the trade union side of the movement. There was the question of registration. The Institute did not represent the whole of the profession, for there were 40 per cent. outside. He said that the Institute would not be able to rise to the height of its influence, until it embraced the whole of that profession. Another point, the Institute was centred in London. They were apt to make London a fetish and were suffering from centralization.

Mr. Paul Waterhouse, in responding, congratulated the society on attaining its jubilee, and said that if any society ought to celebrate a jubilee it should certainly be an architects' society. There were great factors about their Institute, factors they were apt to forget. One was education. The architects' education and its growth during the past two generations was one of the most remarkable things in England. This had been brought about by the generosity of their forefathers. Another thing was affection. It had an enormous value to the architect. More than that, he had learned the love and affection for architects all over the world. No architect in their so-called centre of London thought that the work of the architect in the provinces was not as good as that in London, or that their societies were not as good as in London. There was a growing feeling in their institution that they owed an immense debt to those in non-metropolitan districts. He hoped no one would think London was diminutive in its esteem.

The toast of "Leicester City and Trade" was submitted by Mr. R. Savage, F.R.I.B.A. (President of the Birmingham Society). He said that Leicester ranked very high among provincial cities as a progressive city, not only in its manufactures, but it had a reputation of turning out good architects and good architecture. Leicester architects stood high in the esteem of their professional brethren in the rest of the country.

Mr. Charles Bennion, in responding, congratulated the Association on having attained its jubilee, and expressed the wish that their organization would not only help to lift up the status of the architect, but that of the work being done by the members of the Association.

Mr. Stockdale Harrison, A.R.I.B.A., proposed the toast of "The Guests," which was responded to by Sir Arthur Wheeler. The toast of "The President," submitted by Mr. W. M. Cowdell, F.R.I.B.A., was responded to by Mr. William Keay.

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## The New English Art Club

Mr. Robin C. Guthrie's "Sermon on the Mount," in the present New English Art Club's exhibition, is a remarkable painting. The artist has literally flung figures into this canvas; he seems to have set himself a difficult figure problem to solve, and he has tackled it with imagination and daring. The tones throughout the painting are low, yet it is a brilliant piece of colour; and there is a certain detached glow of poetry in the treatment of it which is delicate and beautiful. This sort of painting provokes a good deal of criticism because it is rather obscure in its meaning. The "every-picture-tells-a-story" people complain that they cannot follow the action of the characters; they are unable to comprehend what everyone in the picture is doing. One cannot argue about this. One can only say that a certain mystery in the action of a picture is rather stimulating than otherwise. Indeed, the people who complain that they cannot understand what a picture means might just as well complain, as some of them do, that they cannot penetrate the inner mysteries of "Alice in Wonderland."

"But what does it mean?" they say. "It seems mere nonsense." You cannot talk or argue with those sort of people.

There are many other interesting paintings in this exhibition. Of portraiture there is the very best by Augustus John, W. Rothenstein, Wilson Steer, Neville Lewis, and Henry Tonks ("The Unknown God," 86).

The water-colours and drawings are especially interesting; in fact, there are so many very good ones that one finds it impossible to look at them all. Mention must be made, however, of two by Miss S. M. Adshead—"The Kitchen Garden" (189) and "Grands Bains de Mer de Marseilles" (187). Here we have a particular kind of art at its best. Victor Hugo says somewhere that at one time or another we have all had in our lives a "delightful attic." Miss Adshead draws as if her life were spent in a delightful attic amongst boxes and books of adventure—a combination which makes the most monstrous impossibilities possible. In her "Grands Bains de Mer de Marseilles" everything is gayer and more grotesque than life; "curiouser and curiouser." The creatures plunging in the water are human by courtesy only. They are really fantastic attic-livers whose little boxes can be seen perched on absurd promontories climbing into the sky. Washing blows on lines before the front doors of the houses; and trams dash up and down hills like the scenic railway at the White City. It is full of colour, and there is an abandon about it.

This gift of spontaneous fantastic humour is rare, and, one would say, very English. For that reason it is always welcome. If Miss Adshead will do us some more pictures of a similar nature we will promise to applaud. H. DE C.

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## Competition News

### *Cranleigh Pavilion Competition.*

Messrs. Hendry and Schooling, AA.R.I.B.A., have been awarded second premium in the Cranleigh Pavilion Competition. Sixty-nine designs were submitted. The winning design, as announced last week, was that of Mr. W. S. Masters.

### *The International Labour Office, Geneva.*

Owing to the extreme urgency of the matter the competition for the International Labour Office at Geneva will be limited to Swiss architects and to those already established in Switzerland. The plans, however, will be assessed by an international jury. The premises now leased by the International Labour Office have become quite inadequate, and various proposals were made to the Third Assembly of the League of Nations last September. The question was referred to the Fourth (Finance) Commission of the Assembly, and during the discussions the Swiss Government offered, through their representative on the Commission, to give a site, subject to ratification by the two Swiss Chambers. The Commission recommended to the Assembly the acceptance of this offer, and stated their opinion that for a building of this importance an architects' competition was desirable. Owing to the urgency of the matter the Commission were forced to recommend that the competition should be limited as above, but that the jury which was to judge the plans submitted should be of an international character. All these recommendations were accepted by the Assembly, and immediate steps were taken to get nominations for the jury. The latter is now complete, the British representative being Mr. E. P. Warren, F.S.A., F.R.I.B.A.

[*For List of Competitions Open see page* xxxii.]

## Coming Events

*Wednesday, January* 31.

Royal Academy.—"The Rise, Aims, nd Early Days of the Arts and rafts Movement." By Selwyn Image, .30 p.m.

*Thursday, February* 1.

R.I.B.A.—Chadwick Public Lecture. London's Unhealthy Areas." By G. opham Forrest, F.R.I.B.A. 8 p.m.

Sheffield, South Yorks, and District ociety of Architects and Surveyors.—nnual Dinner.

Birmingham.—Town Planning Lecures. "The Health Aspects of Town Planning." By John Robertson, C.B.E., M.D., B.Sc.

*Friday, February* 2.

Art Workers' Guild.—Paper Making Demonstration.

*Monday, February* 5.

R.I.B.A.—President's Address to Stuients. Presentation of Prizes. 8 p.m.

Central Library, Finchley Road.—Lecure on the "Atmosphere of the Pictursque." By Maurice B. Adams.

*Tuesday, February* 6.

Liverpool Architectural Society.—'Some Byzantine Churches in Central Syria." Professor A. C. Dickie, M.A. A.R.I.B.A.

Institute of Mechanical Engineers, Midland Branch.—Annual Dinner.

Institute of Heating and Ventilating Engineers.—Annual General Meeting.

## The Status of the American Architect

Mr. Moritz Kahn has some interesting comments on the status of the American architect in the January-February issue of "Kahncrete Engineering."

Because architecture is considered to be a great influence in the education and refinement of the public, writes Mr. Kahn, the profession receives much encouragement.

For evidence of this fact one need only point out the manner in which philanthropists lavishly spend their wealth on architectural monuments. Or let us refer to so prosaic a man as a practical manufacturer. He will erect a factory which is planned for the greatest productive efficiency, but at the same time he will instruct his architect to design it with a pleasing elevation. He appreciates the beneficial effect it will have on his employees and consequently on their work.

It must be admitted that this careful attention to the subject of architecture in America is somewhat of a recent development. The profession has come to the forefront very much during the past twenty years, but the hold which it has already taken on the public is greater than we in this country generally realize.

A visitor to the States will be impressed by the interest taken in architecture by the American lay public. It is no unusual experience to be shown around a city by a host who will, with pride, point out the more important buildings of his city and name the architects who designed those buildings.

One day when crossing 42nd Street, New York, in a street car with Mrs. Kahn, I pointed out to her, as we passed 5th Avenue, that stately building, the new Public Library. A man sitting next to us, a total stranger, leaned over and said to me, "Yes, that is one of our best buildings. It was designed by Carrère and Hastings." Merely to confirm my impression of the layman's interest in architecture, I asked him whether he was connected with the profession, and I was not surprised when he replied that he had no connection with it whatsoever.

I believe that the important architects in America, as professional men, are lionized even as we in this country lionize popular authors or artists of the day. Men like McKim, Hastings, Goodhue, or Willis Polk are looked upon with as much deference and respect as we here pay to Meredith, Hardy, and Kipling; Orpen, Sargent or Brangwyn. The names of important American architects are as a rule very well known to the public.

## Age in Architecture

Lecturing on "Modern Building" at the Manchester University, Mr. H. S. Goodhart-Rendel declared that at the Renaissance the living art of architecture had looked back and had become a pillar of salt. Tradition in technique we English had lost altogether, but tradition strongly ruled our tastes and our prejudices. We could, however, contribute something valuable to the architecture of Europe which could be contributed by us alone. We had, in fact, done so already in the small domestic architecture upon which other nations had bestowed so much of the sincerest form of flattery.

In the course of further remarks the lecturer said that he thought he could undertake to guess correctly within ten years or so the date of almost any nineteenth-century building. He asked his audience to look in Manchester at the marked difference between the Assize Courts and the Town Hall, both works of the same designer, though some years elapsed between their construction. He also instanced the difference in the architectural "idiom" between the old and the new parts of the Royal Exchange, and to differences in style between certain well-known Manchester warehouses. The sovereign remedy for the architectural ills to which we were more subject than some other nations, said Mr. Goodhart-Rendel, was the acquisition of good technique. It was unnecessary to give instances of our lack of this quality, since the thing was notorious. The mere application of columns and pilasters to a building of broken plan was to the average English architect a perilous adventure of doubtful issue. We were no longer satisfied with the grand gesture with which the school of Norman Shaw, having made a mistake somewhere, made it again on purpose in several places, and called it a free variation of detail. In the technique which was necessary for the expressive design of small houses we had little to learn. In ecclesiastical design we had apparently come to the end of our course, and must embark on a new. In those fields we were confronted constantly with the need for choice of "style." In making this choice we would run no risk if we determined to be sincere at all costs, to learn all that we could of the pleasure-giving power of architecture, and then to pursue that which pleased us most. In doing this we should leave faithful records of ourselves, our creeds, and our hopes, and perhaps among those records there might be some which the future would hail as imperishable works of art.

The lecture, which was presided over by Mr. Francis Jones, president of the Manchester Society of Architects, was the second of a series arranged by the extra-mural department of the University in conjunction with the Institute of Builders, the Manchester Society of Architects, and the Manchester Royal Institution.

## Publications Received

Victoria and Albert Museum, Department of Woodwork: "The Panelled Rooms. II.—The Clifford's Inn Room." Price 1s. 6d. net; by post 1s. 8d. H.M. Stationery Office.

British Engineering Standards Association. "British Standard Specification for Copper-alloy Pipe Fittings." Price 1s. net. Crosby Lockwood and Son, 7 Stationers' Hall Court, Ludgate Hill, E.C.4.

"English Decoration and Furniture of the Later Eighteenth Century, 1760–1820." By H. Jourdain. Price £3 3s. net. B. T. Batsford, Ltd., 94 High Holborn, London, W.C.1.

"Wenceslaus Hollar and His Views of London and Windsor in the Seventeenth Century." By Arthur M. Hind. Price 31s. 6d. net. John Lane, The Bodley Head, Ltd., London.

"Architects' and Surveyors' Pocket Diary for 1923." Price 1s. net. The Architects' and Surveyors' Assistants' Professional Union, 36 Victoria Street, Westminster, London, S.W.1.

"Life and Work a Century Ago: An Outline of the Career of Sir John Soane, R.A., F.R.S., F.S.A. By Arthur T. Bolton, F.S.A., F.R.I.B.A. Price 6d. net. Sir John Soane's Museum, 13 Lincoln's Inn Fields, W.C.2.

"Housing Betterment, November 1922." The National Housing Association, 105 East Twenty-second Street, New York City.

Journal of the National Association of Master Heating and Domestic Engineers. Issued by the Council, 12 Great James Street, Bedford Row, W.C.1.

## London County Westminster and Parr's Bank, Ltd.

An extraordinary general meeting of the above company will be held at the head office of the Bank, 41 Lothbury, London, E.C., on Thursday, February 1, at 12.45 p.m., when the following resolution will be submitted as an extraordinary resolution: "Resolved that the name of the Company be and is hereby changed to 'Westminster Bank, Limited.'"

Should the above resolution be passed by the requisite majority it will be submitted for confirmation as a special resolution to a further extraordinary general meeting of the company which will be held at the same place on Friday, February 16, at 1 o'clock p.m.

## Builders' Hours and Wages

The dispute in the building trade on the question of hours and wages has reached an acute stage. Last week the General Council of the Trades Union Congress issued a manifesto calling upon "the workers to offer united resistance to the attempts which are now being made to degrade a labour standard intimately affecting the physical and general welfare of the workers."

At the recent meeting of the National Federation of Building Trade Operatives, called to consider the situation which had arisen through the workmen's representatives on the Wages and Conditions Council for the industry having refused to concede the employers' demands for an extension of working hours from forty-four to forty-seven per week during eight months of the year, and a reduction of 20 per cent. in wages, it was arranged that a deputation from the Federation should place the case of the operatives before the Trades Union General Council. The interview took place last week, and the following official statement was afterwards issued :—

The Trades Union Congress General Council having considered a report from a deputation representing building trade workers relating to the attempt now being made to increase the hours of labour, declares its approval of the resistance now being offered by the trade unions representing the building industry. The Council view with deep concern the attempt on the part of the federated employers in the building trades to abolish the most vital of all labour standards, namely, a reasonable, normal, working day or week. We declare that the reduction in the hours of labour obtained during the last sixty years of trade union activity is the most important change in the conditions of employment secured by trade union effort, and the Council therefore pledges its support to the building trade workers in their efforts to prevent any increase in the hours of labour.

The Council also urges all the organizations affiliated to the Trades Union Congress to render to the building trade workers all the assistance available in support of their efforts to protect a condition of employment of vital importance to the entire wage-earning community, and calls upon the workers to offer united resistance to the attempts which are now being made to degrade a labour standard intimately affecting the physical and general welfare of the workers.

The National Federation of Building Trades Employers of Great Britain and Ireland, at a largely-attended annual general meeting last week, completed their consideration of the position which has arisen in regard to hours of labour and rates of wages and unanimously adopted the following resolution :—

That this meeting, having heard the various opinions of representatives from all parts of the Federation, hereby expresses its entire confidence in its representatives upon the National Wages and Conditions Council, and places the negotiations unreservedly in their hands, with the hope that a speedy and definite decision may be arrived at.

Commenting upon the employers' decision, Mr. R. Coppock, the secretary of the Federation of Building Trade Operatives, said to a Press representative last week, "The terms of the employers' resolution seem to render the position more hopeful. The Wages and Conditions Council will probably resume negotiations very shortly."

## "Modern Transport"

"O.K.ed a Catena of Confirmation" is the title of an interesting brochure which has just been issued to give in brief some corroboration of the claims of "Modern Transport," as the leading journal dealing with transportation. "Modern Transport" is a weekly journal for all interested in travel by land, sea, and air. It has now reached its fourth year of publication. In the brochure there are many highly coloured illustrations, and congratulatory letters are reprinted from the pages of the journal from eminent men concerned with transportation, together with some of the many favourable notices of important newspapers.

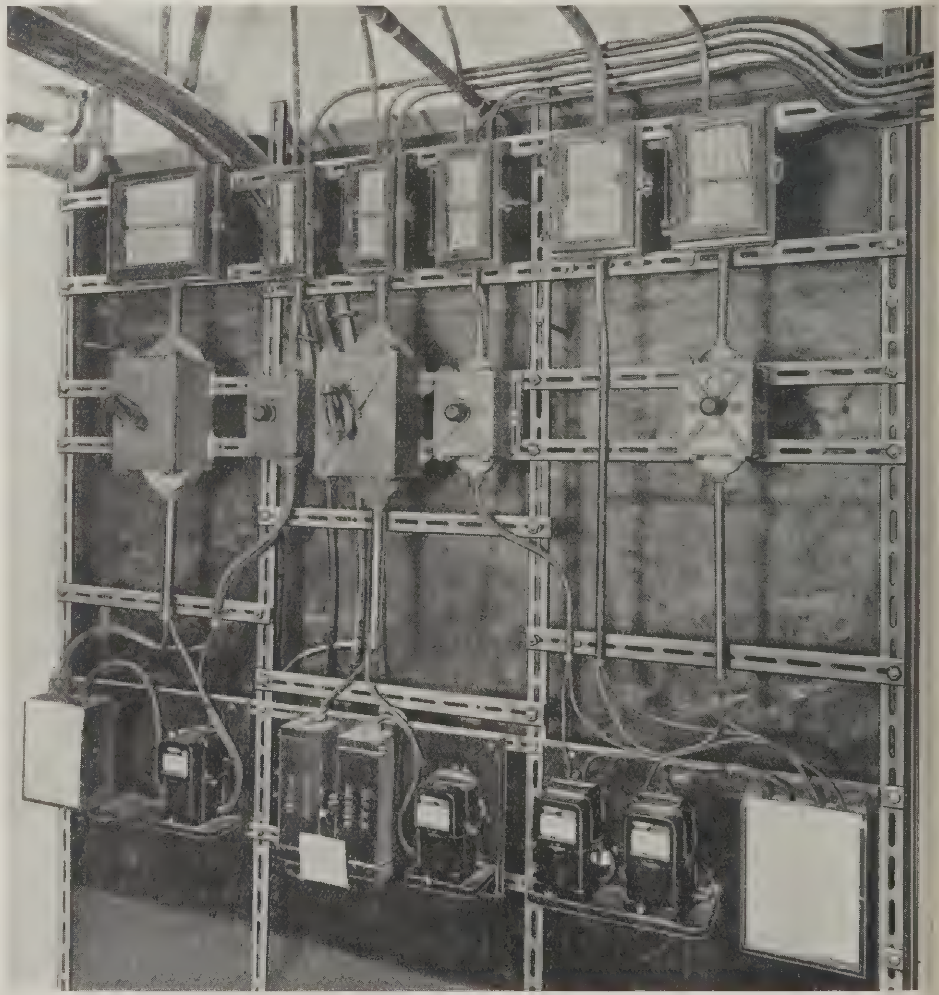
## Trade and Craft

### *"Atlas White" Cement.*

We learn that Mr. Frederic Coleman has been appointed sole authorized representative of the Atlas Portland Cement Company's "Atlas White" for this country. Mr. Coleman has done much to promote the use of stucco in modern building; and a good deal of his success is undoubtedly due to an ably conducted advertising campaign. His announcements strike a strong personal note, and are uniform only in their typography, variety, and interest.

## The Switchboard in Thornycroft House

In Thornycroft House, Westminster (an illustrated description of which appears on page 223) the electrical switchboard is built up with Welconstruct patent slotted mild-steel bars. By means of this ingenious system any required framework can be readily constructed from standard slotted steel bars, angle and channel pieces, and any necessary switchgear, instruments or other apparatus attached by bolts. Alterations and additions to the framework can be carried out with the greatest ease, the only tool required being a spanner. This type of framework marks an entirely new development in steel construction and entirely eliminates the need for accurately setting out, drilling, tapping and forging the work, thus bringing the cost of labour to a minimum. The switchboard in Thornycroft House was carried out by Messrs. G. W. Franklin & Son, electrical contractors, of 45 Buchanan Gardens, Willesden, N.W.10, and is shown in the accompanying illustration. Welconstruct patent slotted mild-steel bars are manufactured by Messrs. Constructors (Trading Company), Ltd., of 4 Brook Street, St. Paul's, Birmingham. In addition to their electrical application the bars can be used for the construction of transformer chambers, fireproof partitions, sheds, bungalows, racks, bins and signs—in fact, for anything where a sound framework is required to withstand weight and strain.



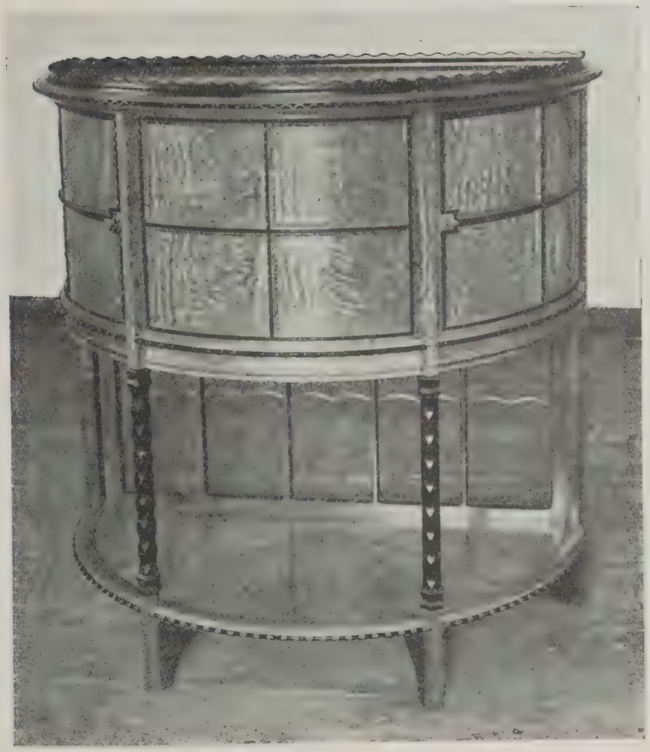
THE ELECTRICAL SWITCHBOARD IN THORNYCROFT HOUSE, WESTMINSTER.

Wednesday, February 7, 1923

Vol. LVII. No. 1466

# THE ARCHITECTS' JOURNAL & Architectural Engineer

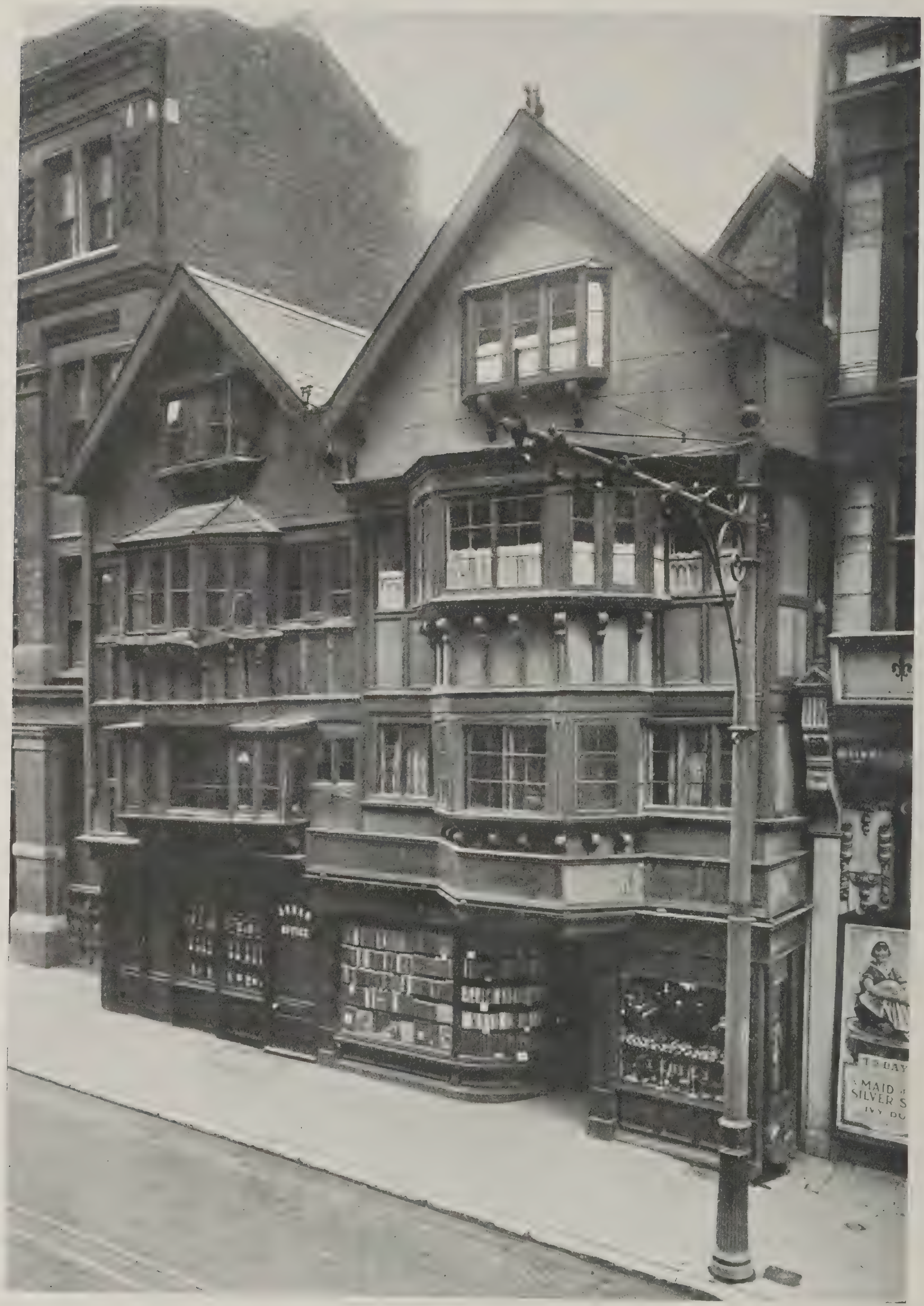
*With which is incorporated "The Builders' Journal."*



A CABINET OF SATINWOOD VENEERS AND EBONY.
BY ERNEST GIMSON.
*(See also page 249.)*

27-29 Tothill Street, Westminster, S.W.1.

# The Chevalier's House, Exeter



This house (which is now for sale) was built, it is believed, between 1607 and 1612, and during the Civil War was for some time the headquarters of Prince Charles. It derives its name from the mounted "Chevalier," an emblem of the Royal cause, upon the gable. A number of other buildings were occupied by the Prince during the campaign, and these he decorated in a similar manner. The interior is described on page 278

THE

ARCHITECTS' JOURNAL

27-29 Tothill Street, Westminster, S.W.1.

Vednesday, February 7, 1923

Volume LVII. No. 1466

# Waste

SURVEYING the field of architectural activity to-day, the impartial observer will see waste in every direction. With the waste of materials, due to bad design, we are not at the moment concerned (that is a subject for separate consideration); it is the waste of architectural talent that arouses apprehension. The tendency of the time is more and more to eliminate the general practitioner. Government itself has shown a bad example by setting up its own architectural departments; an example that has been followed by municipal authorities, who make the additional mistake of placing the direction of architectural work in the hands of the local surveyor—an excellent man at his own job, but often enough knowing little or nothing of architecture. Railway companies, owners of big estates, banking corporations, insurance companies and other important commercial undertakings mostly have their own architectural (should we say "building"?) departments, and seldom invite the services of outside architects. This tendency to eliminate the general practitioner cannot be for the good of architecture, and certainly it involves the waste of much first-rate talent.

We do not mean to imply that official architecture is necessarily bad; some of it, indeed, is very good. But official architecture, by the very fact of its being "official," must inevitably tend towards stereotyped design. Having established a satisfactory type of building, the official architect is loth to depart from it. Conservatism soon claims him for its own, and he may be generally expected to "play for safety." The conditions of his work obviously cannot conduce to the production of the best architecture, and in this sense the interests of the community are not so well served as they would be if the different architectural problems arising were tackled by different men.

Of course, among the small army of official architects up and down the country there are some men of exceptional ability who are doing excellent work. From them credit is not withheld. But as one swallow does not make a summer, neither do a few able men justify an unsatisfactory system. Official departments are so firmly established, however, that no useful purpose would be served by discussing the matter further at the present moment.

Then, over and above the complication of official and semi-official departments, we have what may be called the architectural "factory," presided over by one man (often enough an indifferent architect), who, by some means or other, manages to effect a "corner" in some particular class of building. The private practitioner who is unable to pull strings finds that his chance of designing certain kinds of building is exactly *nil*.

We have no grievance against the specialist; specialization in some particular branch of activity is more or less compulsory upon everybody in these highly competitive days. But when specialization degenerates into the wholesale production of inferior designs it is time to see whether better results may not be obtained by a more even distribution of work.

The conditions of architectural practice to-day are such as to fill the thoughtful with misgiving. It is a striking commentary upon the wastefulness and inefficiency of our methods that, at a time when the standard of architectural design is remarkably low, there should be a surplus of highly skilled ability in this country such as we have never had before. Many first-rate firms of architects are to-day either unemployed or running their offices at a loss; and year by year the schools are adding hundreds of well-qualified men to the professional army. How is advantage best to be taken of this wealth of talent?

It is economically bad, as well as bad for art, that a mere handful of men (especially men of indifferent ability) should have a superabundance of work while many others (some of very high ability) have little or nothing at all.

What is the cause of this most unsatisfactory condition of affairs, and what the remedy?

The root cause is undoubtedly the inability of building owners to select the right architect. In the main they have an extraordinary knack of selecting the wrong one. This is not entirely their fault. The ordinary layman knows very little about architecture, and is often quite unable to tell a good building from a bad one. Primarily, therefore, it is a matter of education; and here we must sound a note of hope. The public is undoubtedly taking a far more intelligent interest in architecture than has been the case for years past, and for this we have in large measure to thank the Press (especially the daily newspapers and certain of the monthly magazines) and the Architecture Club. All are doing excellent work and deserve the best thanks of those who have the interests of architecture at heart. May they continue their good work!

We are convinced that improvement, not only in architecture, but in the professional prospects of architects, will come about mainly by the effort of the general public itself. It is unreasonable to expect architects to improve taste by their own effort; with architecture, as with shoes and ships and sealing-wax, supply is conditioned by demand. Then, too, the architect has a sense of professional dignity, and must not be blamed for a disinclination to cry his wares in the market-place. For all this, we are strongly opposed to a policy of inaction, dictated by too acute a sense of refinement. We do not charge the R.I.B.A. or any other organized body of architects with over-coyness in the matter of their own interests; but we do feel that much may still be done for architecture by way of publicity and propaganda. Let the public be told as frequently and as clearly as possible who the architect is, why his services are indispensable to the community, and why it is essential that a good man should be employed for every job.

The future of architecture is ultimately in the hands of the public. When the public is at last fully alive to the importance of good architecture, then shall we find the right men getting the work; and for this consummation the auguries are by no means unfavourable.

# Notes and Comments

## Unification by Federation?

All who have thought for the true welfare of the architectural profession will approve the decision of last Monday week's Special General Meeting of the R.I.B.A.—to defer taking Parliamentary action in the matter of the Registration Bill until other professional societies and affected interests have been consulted. The Bill was far too much an Institute measure to receive the united support of the profession, or to stand any chance of becoming a Statute of the Realm. The primary requirement is unanimity within the profession, with or without Unification. Some solution of this very difficult problem may come, as Mr. McArthur Butler has frequently urged, on the lines of federation; for to achieve unanimity on a question of principle it is not necessary to band all architects within a single organization: such a step, indeed, would have serious disadvantages, not the least of which would be the loss of that spirit of independence and healthy rivalry which the present order of things most certainly preserves. "Unification by Federation" seems destined to become the password that will open the portals of Parliament to a measure of Registration.

## Buckfast Abbey

The partial completion of the rebuilding of Buckfast Abbey (concerning which an illustrated article appears in this issue) is a unique event in modern building history. At a time when the generality of mankind have lost touch with the most humane of the arts, it has been left to a community of Benedictine monks to recapture its spirit in the true manner of the great cathedral builders of mediæval times. Every stone has been wrought and put in place by the monks themselves, under the direction, for the most part, of a distinguished architect, Mr. Frederick A. Walters, F.S.A. The whole work is remarkable—as much as an archæological study as an achievement in building.

## The Press and the Architect

In spite of the recent very marked improvement in the treatment of architecture by the popular Press, one cause of dissatisfaction still persists: that is, the failure to give architects' names in connection with buildings dealt with. It would be an interesting study in psychology to trace the cause of this peculiar omission. Painting, sculpture, music, the drama—all are consistently identified with persons; but architecture, to the average journalist, is apparently a sort of vague abstraction that happens of its own accord. We take it that the subject of architecture has so long been regarded by the journalist as having no interest for the general public that the omission of architects' names has become a habit. Can it be that journalists, despite their hold upon the pulse of public opinion, have not yet realized that architecture has definitely become a matter of interest for the man-in-the-street? Perhaps Mr. Squire, in his capacity of Chairman of the Architecture Club, could have a discreet word with erring editors.

## "The Surrey Side"

The grouping of the L. & S.W. Rly., the S.E. & C. Rly. and the L.B. & S.C. Rly. has brought a step nearer the possibility of fulfilment of that cherished dream of architects and town-planners—the abolition of Charing Cross railway bridge and the remodelling of the "Surrey Side." The Southern Railway Company (as the southern group is now known) may find it a very definite advantage to dispense with its assorted stations on the northern side and combine them in a new central terminus on the southern side, Waterloo Station forming the nucleus. As Mr. John Murray has pointed out in "The Daily News," it is likely that enough capital would be realized by the sale of sites and property on the northern side to cover the cost of extensions and developments on the other side of the water. The Southern Railway Company has now an excellent opportunity to effect, or cause to be effected, two very desirable improvements—one private, one public—namely, the centralization and co-ordination of their three systems at the London end, and the creation of a new embankment roadway on the southern side of the Thames, with a bridge for vehicular traffic and pedestrians at Charing Cross. Such an opportunity should not be lost.

## Town Planning on the Cheap

We note that the East Barnet Valley Urban District Council is advertising for a town-planning assistant at a salary of £5 per week. What sort of an assistant does it expect to get for such a salary? And what sort of town planning does it expect of such an assistant? The East Barnet Valley U.D.C. apparently fails to realize that town planning is a highly specialized subject, and one, it is fairly safe to assert, that is beyond the capacity of "an assistant at a salary of £5 per week." Cheapness never has been synonymous with efficiency, as the East Barnet Valley U.D.C. will find to its cost unless it has the good sense to abandon its £5 a week project and get into touch with a qualified expert.

## The City Churches

The National Assembly of the Church of England has just given general approval to the Union of Benefices and Disposal of Churches (Metropolis) Measure, 1923, which cumbrous title, being interpreted, meaneth: "How to demolish a number of the City churches for the sake of the money that can be got for their sites." The main reason advanced by the clergy for the destruction of these churches is that for thousands of people in the suburbs there are no churches at all. Here in the City, it is remarked, are many old buildings attended by few worshippers, but occupying sites to the value of hundreds of thousands of pounds. Obviously, Peter must be robbed to pay Paul. But why? If new parishes need new churches why should not the parishioners find the money themselves? If they are not prepared to find the money, then let them do without the churches. Lord Phillimore's commission, it may be recalled, recommended the removal of nineteen City churches, the capital value of whose sites was estimated at £1,695,000. Quite a respectable sum of money, of course, but of trifling account in the wealthiest city of the world. But surely the financial aspect of the question is over-emphasized. What should be remembered above all other considerations is that these churches are national monuments, of historic interest and æsthetic value, and for these reasons alone they should be retained. Far too many of our rarest national possessions, including City churches, have been already destroyed. Instead of planning the destruction of still more, let us direct our efforts to seeing how they may best be preserved. And let the leaders of the Church be on their guard in this matter of the demolition of old buildings. To grow indignant over the threat to the Whitgift Hospital one day, and calmly to decree the obliteration of a score of venerable churches the next, is to lay themselves open to the charge of inconsistency.

## Rents and Houses

If the forecasts of the rent-decontrol proposals are correct, householders will be entirely at the mercy of landlords within the space of a couple of years—that is, unless enough houses are built in the meantime to enable tenants to have an alternative choice of residence. Obviously housing must be got on with at once if a situation full of ugly possibilities is to be avoided. The Government must be urged to produce their scheme with the least possible delay.

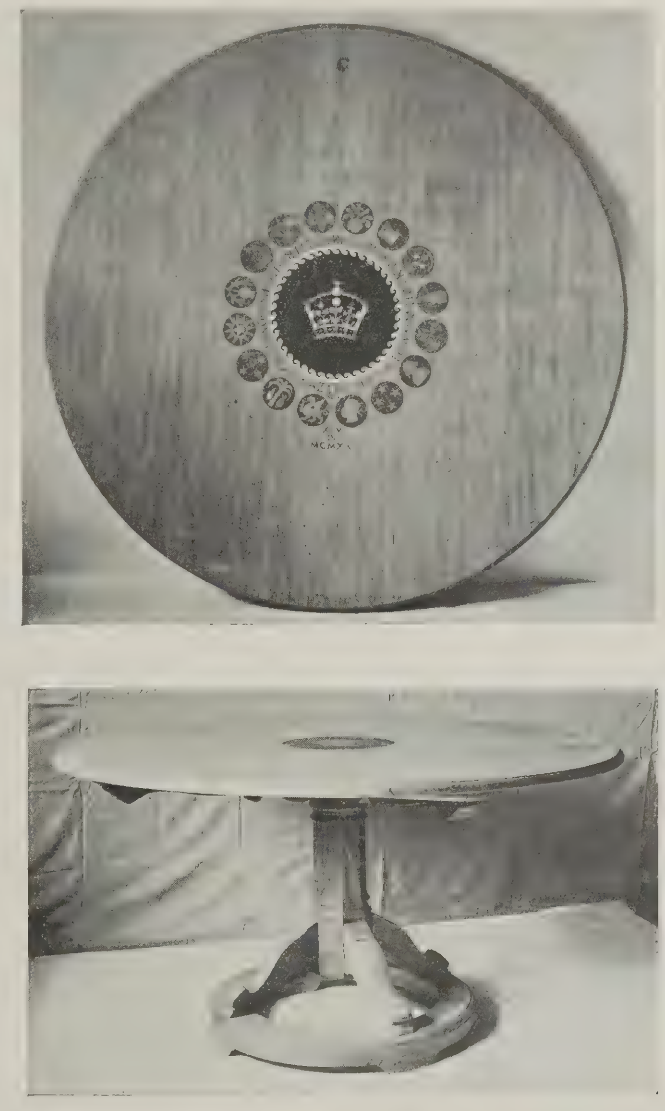
# Modern Craftsmanship. 2.–Furniture

### By JOSEPH ARMITAGE

An eminent but adventurous architect told me many years ago that modern furniture was not suitable for the Gentleman's House. Being young and full of that strange mass of virtues we loosely called "Arts and Crafts," I did not take the remark seriously. Obviously the fault lay with the gentleman's house. There was, however, a good deal of sound criticism in the remark. Taken in conjunction with the charges of vulgarity and crudeness so often made against modern furniture, it is some explanation of its comparative failure to find a market.

By modern furniture I suppose we mean furniture designed by the men of to-day to serve the needs of to-day. The reproduction of an antique model is not modern furniture, however closely its uses may approximate to our necessities; but the introduction of forms, moulds, or decorations used in previous periods does not necessarily prevent the furniture being modern—it all depends on the accent. Some of us love to use quotations and, though few of us need quote like parrots, fewer still can claim to be really original; most of us have a very reasonable fear of such a calamity. The important thing is that the furniture should be and appear to be fit for its purpose, furniture for present-day use.

There is a very close parallel between furniture and clothes, both have approximately the same qualities if good, their design and production are governed by approximately the same conditions. Development is slow and in detail only; the well-dressed man differs very little from the average. It is all in the cut; given certain common essentials, everything depends on fitness and proportion. We must "live with" our clothes and our furniture, and they represent the two arts in which most people resent the unusual and the unexpected—a very proper attitude which limits the demand for modern furniture in any degree experimental.


AN ENGLISH OAK PRESENTATION TABLE.
BY HERBERT BAKER, A.R.A., F.R.I.B.A.

The present generation of advanced thinkers furnish with antiques or reproductions of antiques in the main, with an odd piece of modern furniture here and there, chosen rather as an indication of devilry "with difficulty kept under," than for its beauty. That I think explains much of the wildness of certain modern furniture. No one would dream of furnishing a house throughout with it, and no one is expected to do so.

With regard to the crudeness of modern furniture, imagine the result if some revolutionary designed his clothes on strictly "constructional" and utilitarian lines, refusing all superfluous buttons and the numerous survivals from previous periods still embodied in the modern clothes, with nothing added and very little conceded to grace. That, in terms of furniture and speaking broadly, describes much of the early arts and crafts furniture. Obviously it was not suitable for the "Gentleman's House." It was inclined to be stark and uncouth, but it was a very definite and sincere attempt to tackle a difficult problem by getting it down to its essentials—a refusal to accept as necessary the customary ornaments and accretions—a refusal to accept as gospel all the parrot said. When the crowd of imitators started work they copied the obvious, giving us a type of furniture infinitely worse in taste than the Victorian furniture. Fortunately it looks cheap and isn't.

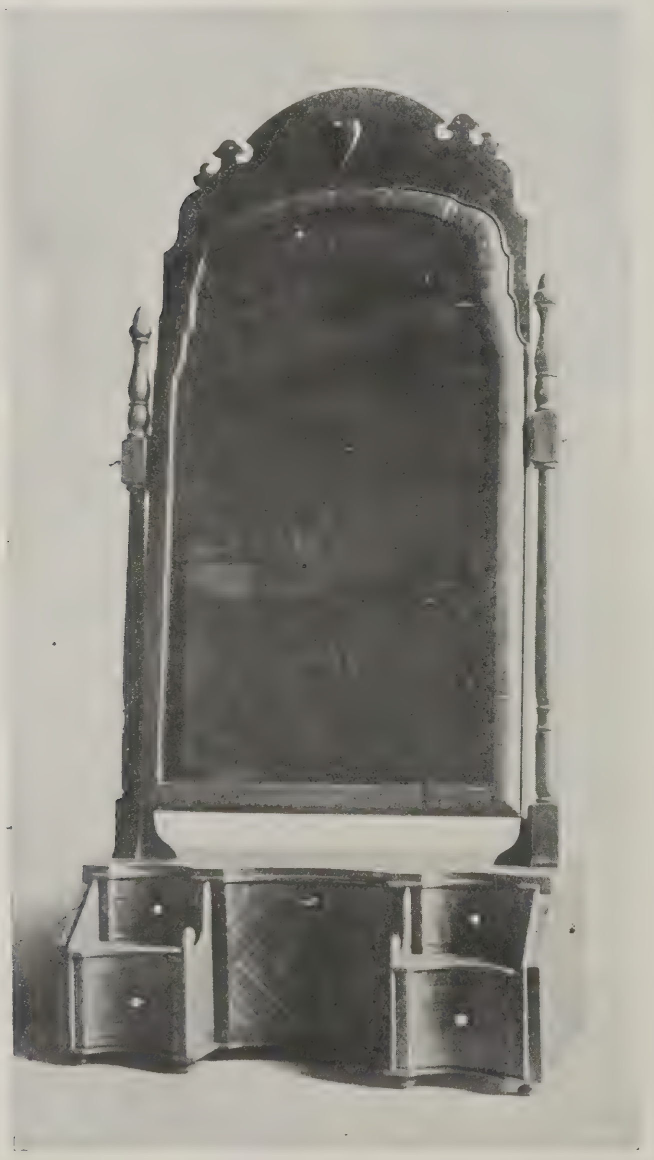
There is some justification for the attacks so often made on the attempts to design and make furniture which shall be modern in inspiration and designed to serve present-day needs and conditions, but when one takes into account the terribly low level which furniture production and design had reached, and the horrible stuff still being put on the market, the attempt to improve it would have been worth while had we only failures to show. During the past twenty years modern furniture has been made in England which will compare favourably with any furniture yet produced so far as workmanship is concerned, at times a little self-conscious in design perhaps—that is inevitable until a sound tradition has had time to develop—but a gentleman can furnish his house with it and not lose caste. Our best modern English furniture is equal to any that the world has produced for the past hundred years, and is an attempt to fit the clothes to the man, which is surely better than leaving him to do the best he can with his great-grandfather's breeches.

The comparatively small amount of good modern furniture is accounted for by the limited demand due to the conservatism of the public complicated by the salesman's estimate of the fashionable, and by the limitations imposed on supply by modern methods of production.

The salesman is mainly responsible for what the average person buys. In furniture and some other things people buy what they are expected to buy. Tell them often enough and definitely enough what is the correct thing and they will buy it. The correct thing from the salesman's point of view is not necessarily the best thing. Selling is a fine art to-day, and we have produced men who would sell you a mangle if you went into the shop to buy a baby's rattle.

Modern methods of production affect the supply of modern furniture, because the great bulk of the furniture sold to-day is made under conditions which tend towards a standardization of parts. Made in factories or small East End workshops, the work amounts to little more than the assembly of standardized parts. The design is bad in the main, but tends towards a closer and more intelligent copy of antique models varied by sporadic outbursts of some phase of garden city culture. The result is cheap furniture in every sense of the word, perhaps cheaper in actual exchange value than at any previous period of production.

The smaller, more experimental, and adventurous designer and maker cannot possibly approach the price, his charges appear ridiculous by comparison. Only those who have tried to do sound work in a small workshop can estimate the difference of cost entailed as against factory production for sale to a public with no technical knowledge. Most of the men have to be watched very carefully for habits and customs of the trade which cheapen production at too great a cost in durability and soundness of construction. To many of them the average sound job of, say, a hundred years ago, when much furniture was made to use as well as to sell, is sheer lunacy in the light of their experience. They often think it is their duty to protect the "Guv'nor" against his will.



A DRESSING GLASS.

BY SIR ROBERT LORIMER, A.R.A., R.S.A., F.R.I.B.A.

AN OAK SIDE-TABLE.

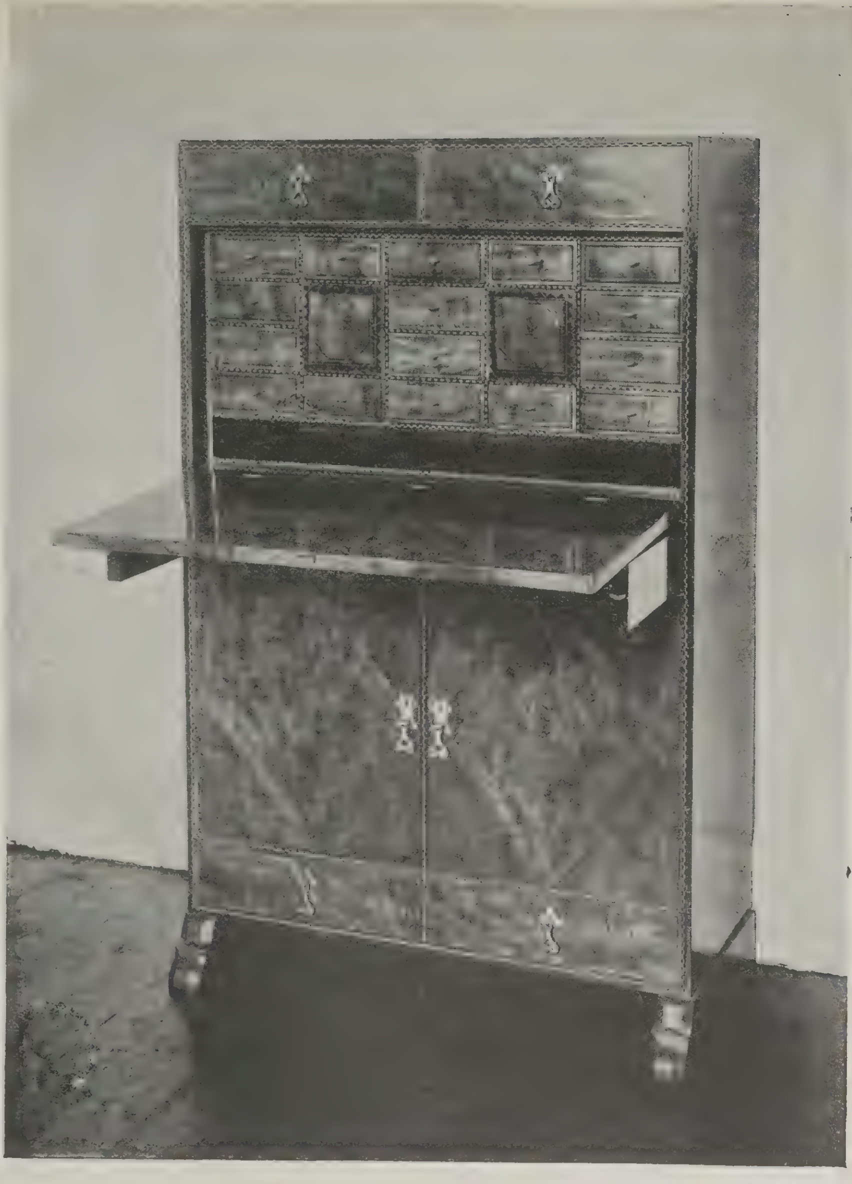
BY SIR EDWIN LUTYENS, R.A., F.R.I.B.A.

The problem of the production and sale of good modern furniture has been attacked from most sides by able men, but, so far as I know, not one of them has received an adequate return for his labour and the capital expended. The more or less successful men have had independent means or some other source of profit to enable them to carry on until the expensive business of launching it on the market has made some return. Many firms are producing most excellent reproductions of antique, and most people of culture either buy antiques or reproductions of them. Furniture modern in design and honestly made, which the average person can afford to buy, or is willing to buy, scarcely exists in the shops, although many men have attempted to supply it.

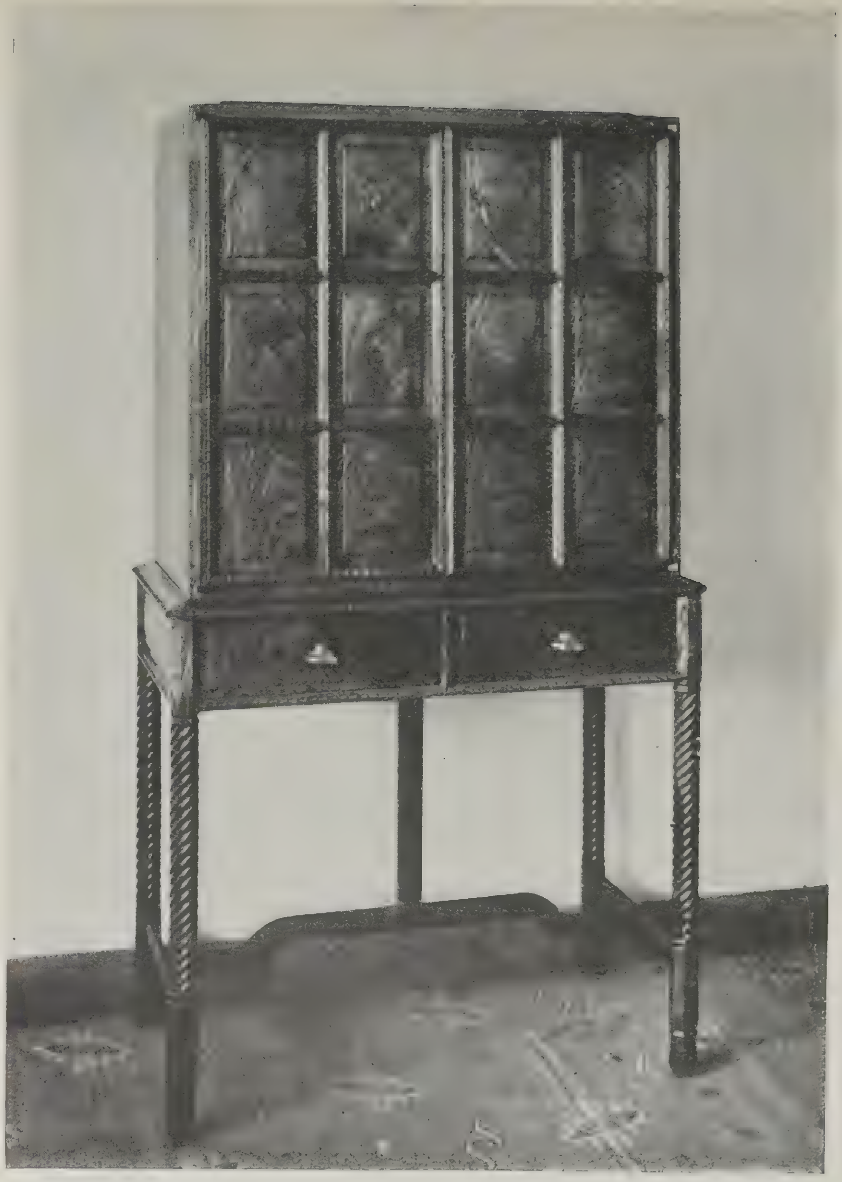
To pursue the analogy with clothes still further, furniture making, like tailoring, seems to be one of the trades which depend for their health on comparatively small workshops, or workshops where small things are of importance. It is significant that we date furniture not so much by kings or shapes as by makers during the eighteenth century—and if we had sufficiently detailed history before then it would, I think, be found that particular types were named after the workshops or individuals producing them, certainly they are named by localities.

The tradition of fine cabinet-making was, perhaps, one of the last to die. Cabinet-makers of great skill and fineness of perception who had direct descent from the workshops of the seventeenth or eighteenth century could be found in small workshops up and down the country a generation or so ago. They made their neighbours' furniture soundly and well—like the rest of the craftsmen their designs had suffered as a result of the conflicting demands of their customers' tastes—still they had a lingering conviction of what was good design; they had certainly fought every attempt to change the customary way of doing things, for they were the grandfathers and fathers of the workmen all architects know. Mass production under the control of expert salesmen put them out of business, but we have been fortunate in retaining much of their traditional skill. We need small workshops now. The work of building a tradition of sound design and workmanship in cabinet-making must necessarily be experimental, and there must be failures. The accepted practice is so far removed from right lines that no formula can be given to correct the errors, and machine production can only exist on formulæ.

Perhaps the first serious attempt to supply sound modern furniture was that made by Kenton & Co. The company included Prof. Lethaby, the late Ernest Gimson, Sidney and Ernest Barnsley, Sir Reginald Blomfield, Gerald Horsley, and, I think, one or two others, all then young architects. Although the venture was not a success commercially, and was short lived, it is to the first three of these men and their

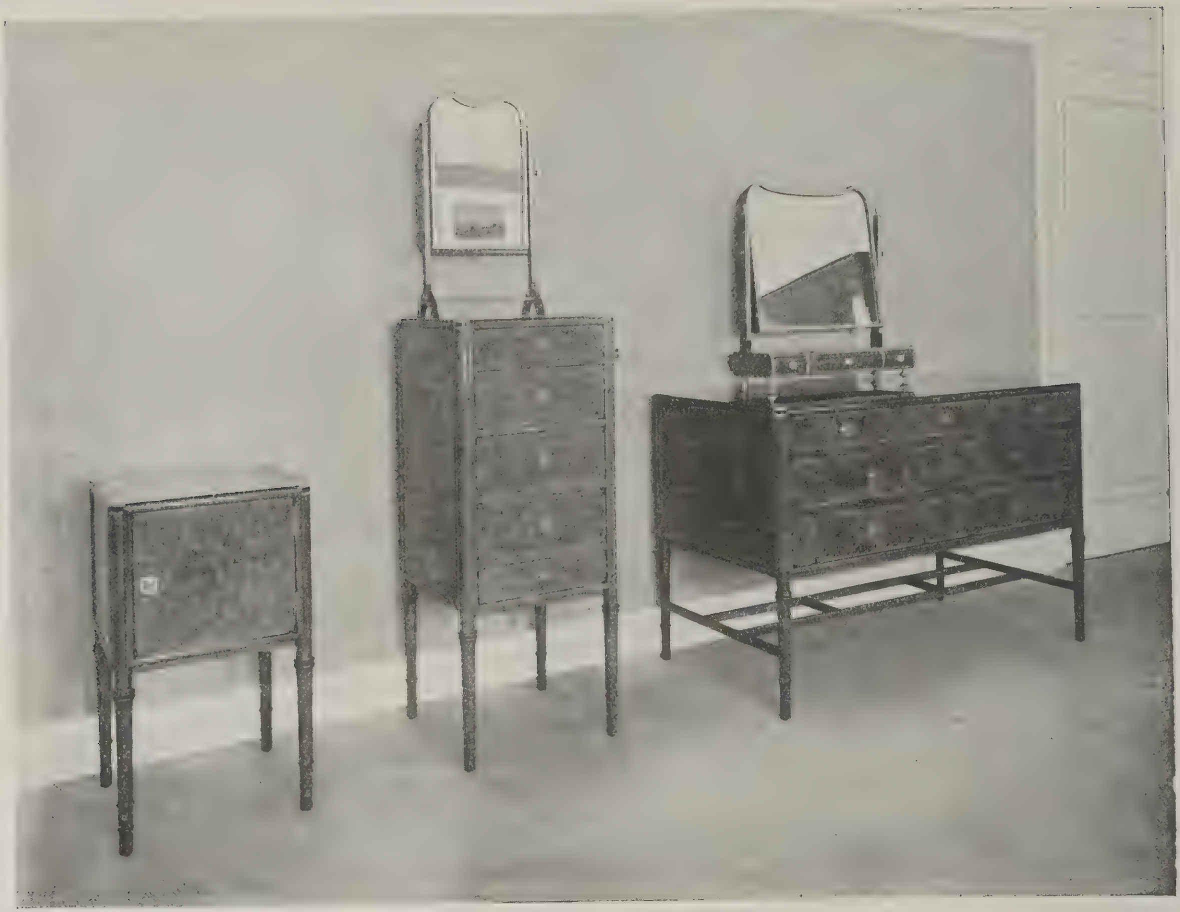


WRITING DESK OF CUBA MAHOGANY VENEER, WITH EBONY AND HOLLY INLAID LINES.

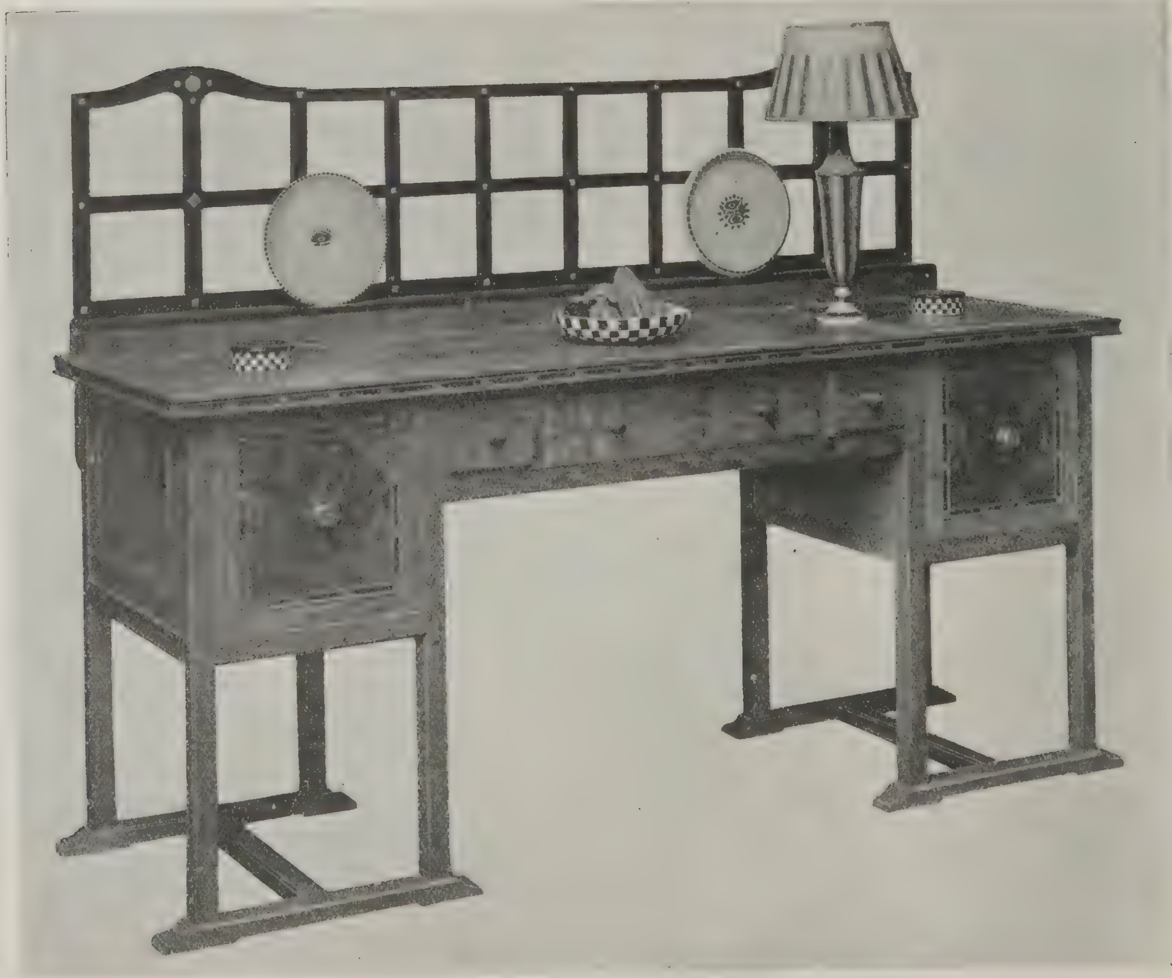


A CABINET OF ENGLISH WALNUT.

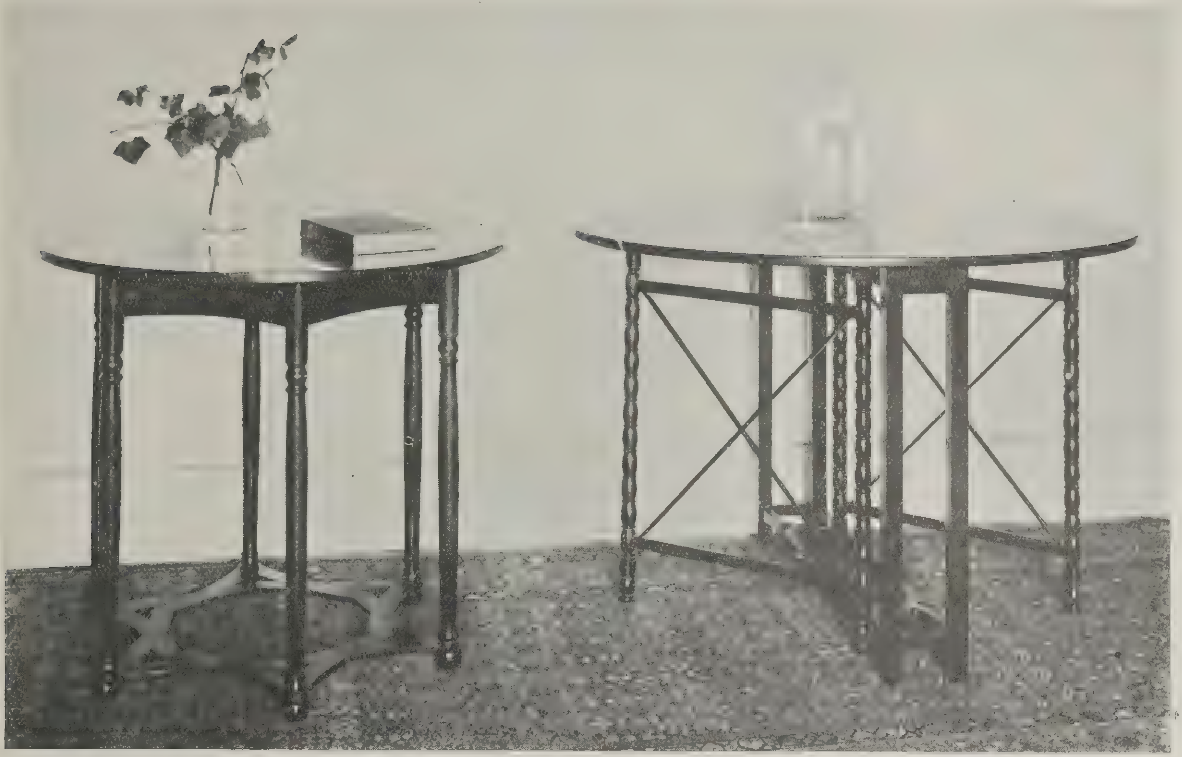
TWO PIECES OF FURNITURE BY ERNEST GIMSON



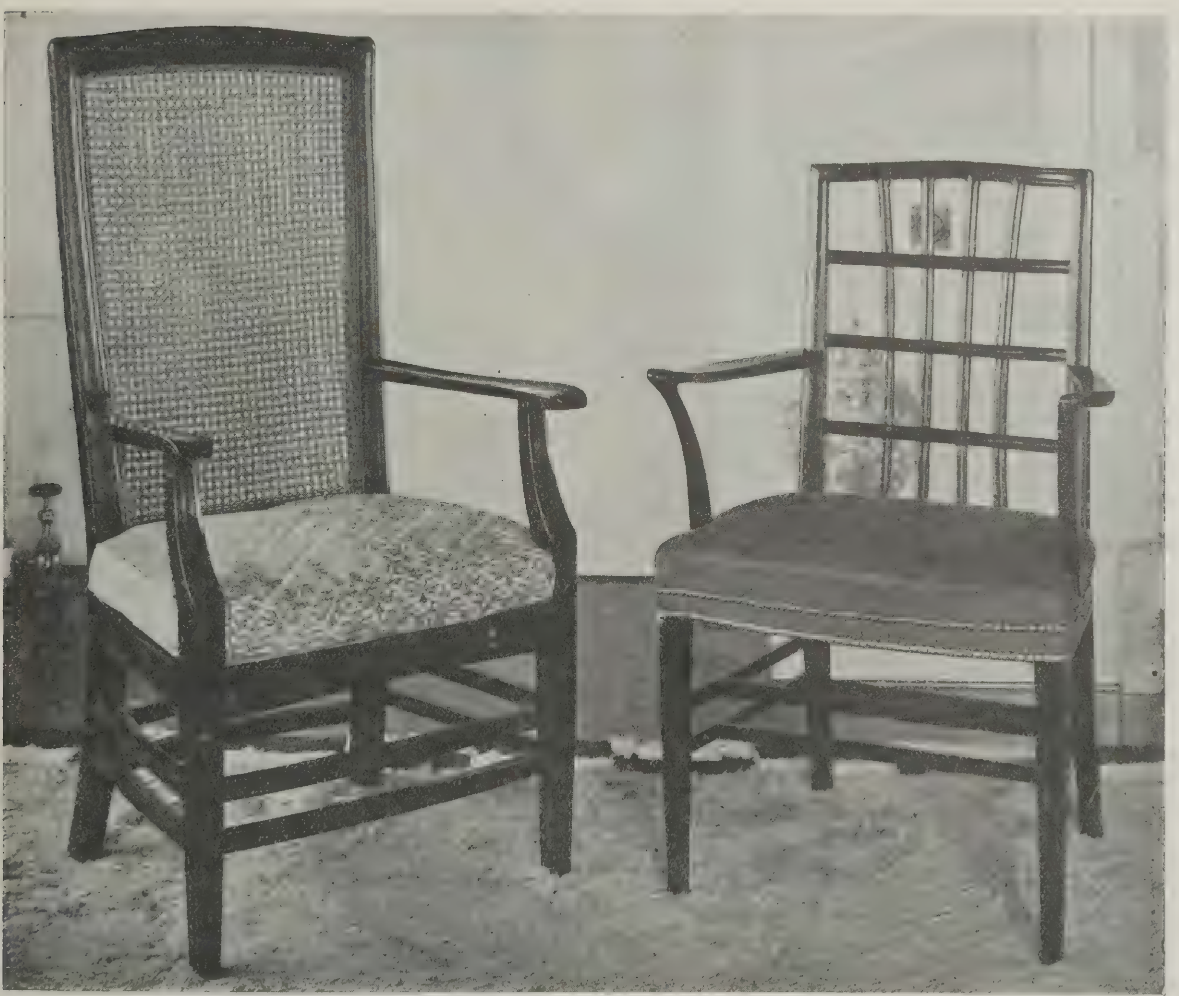
VENEERED BEDROOM FURNITURE. BY J. HENRY SELLERS.



A WALNUT SIDEBOARD INLAID WITH EBONY AND MOTHER OF PEARL. BY AMBROSE HEAL.



MAHOGANY TABLES. BY CHARLES SPOONER, F.R.I.B.A., AND A. J. PENTY.

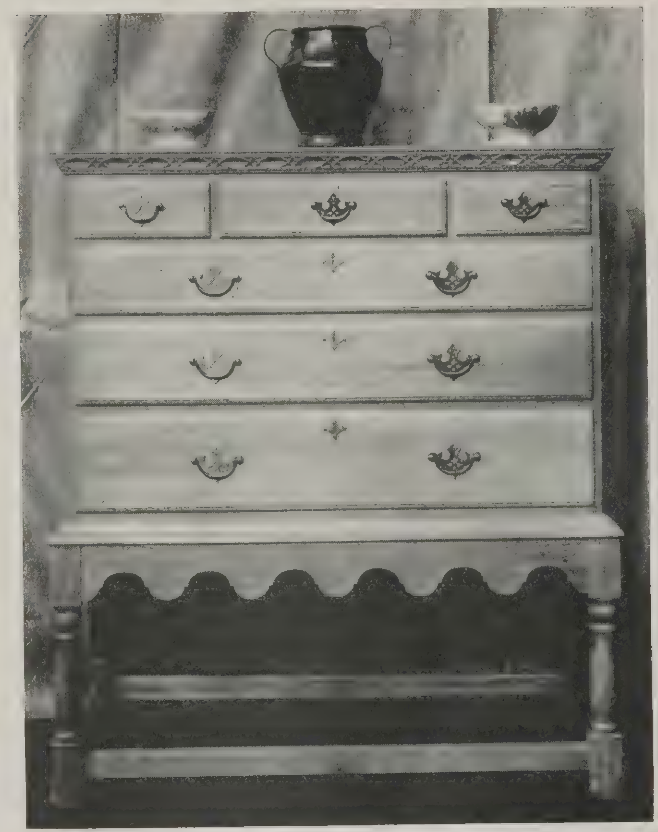


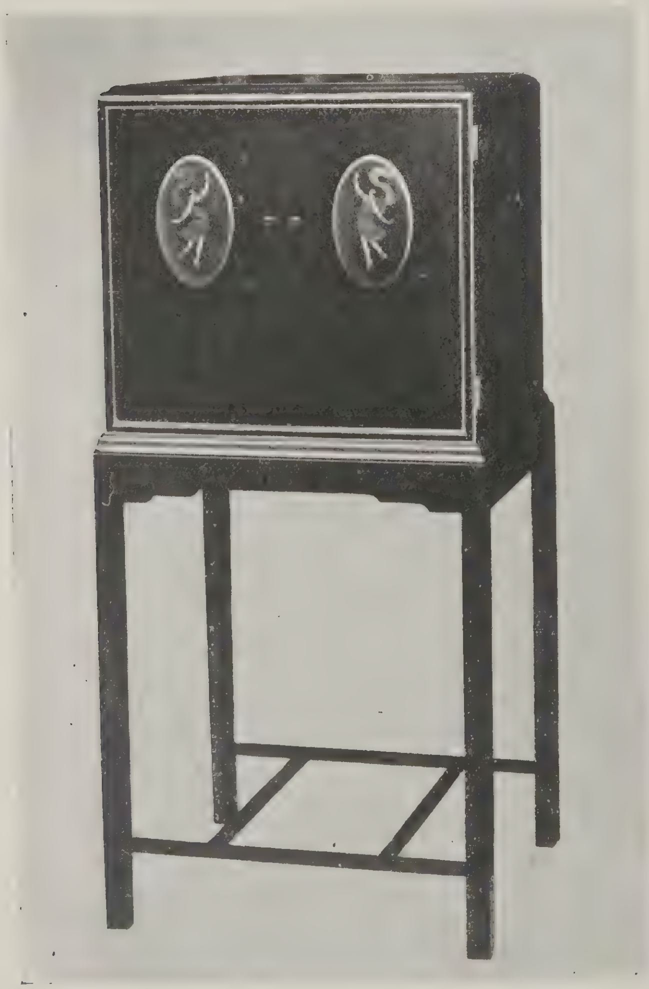
TWO CHAIRS. BY CHARLES SPOONER, F.R.I.B.A.

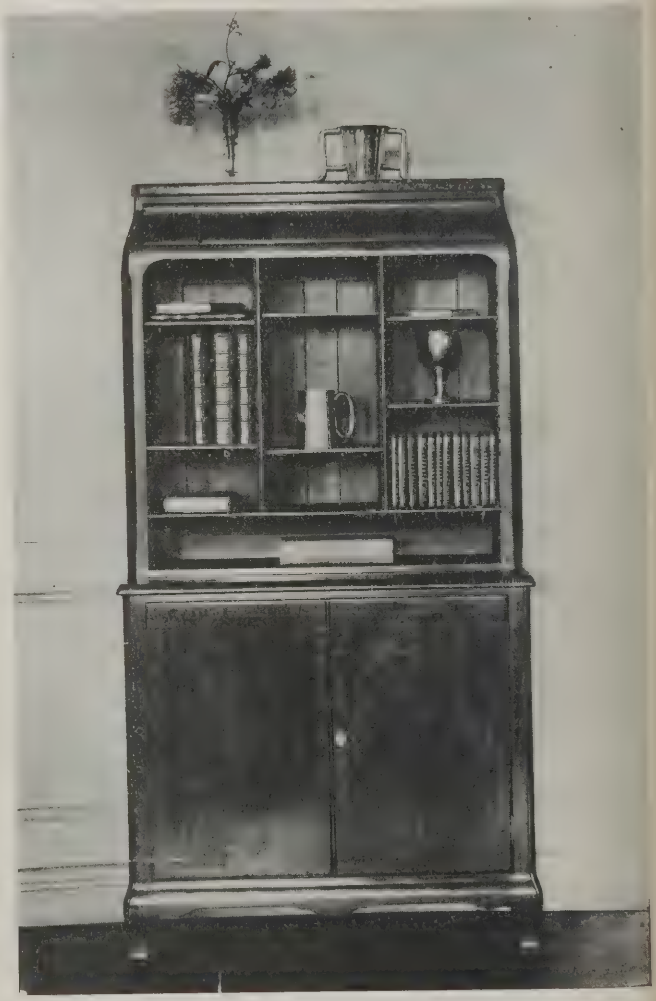
disciples that we owe most of our best furniture. The influence of Prof. Lethaby cannot be estimated. The late Ernest Gimson and Messrs. Sidney and Ernest Barnsley settled in Gloucestershire, and Gimson eventually established the workshop at Daneway House, where most of the furniture he designed was made under ideal conditions. He produced a lot of work, and a monograph on it is now being written and fully illustrated by photographs. Until that appears it is difficult to convey any idea of the strength, delicacy, and charm of the work he produced to those who have only seen it in single pieces. He and Mr. Sidney Barnsley have certainly produced a higher quality of furniture, both in design and workmanship, than has been produced in either Europe or America during the past 100 years, and it is modern in every real sense of the word. English furniture owes a great deal to them, perhaps most of all for their sound and sufficient workmanship, for "workmanship" can be redundant, or be applied to wrong purposes.

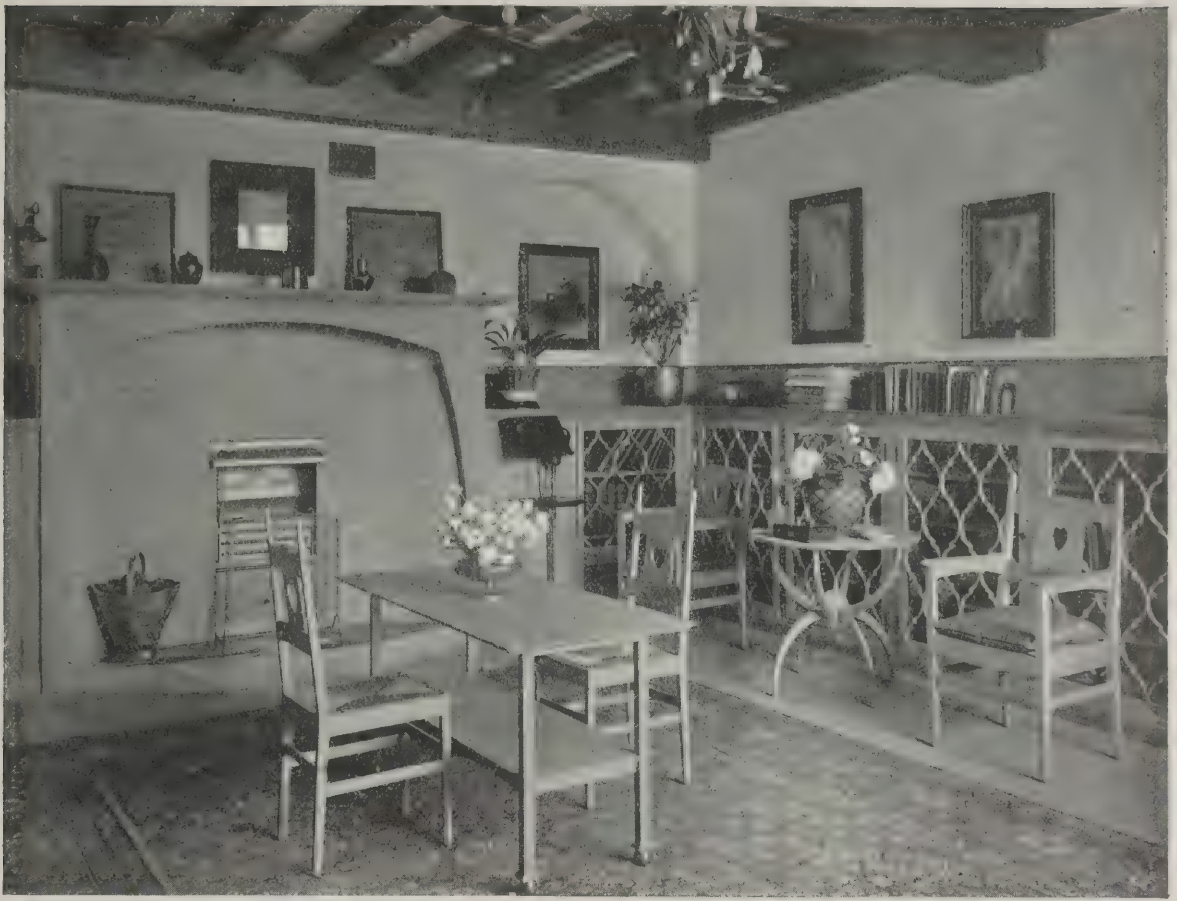
Both have worked chiefly in English woods, of which there is a remarkable range not easily obtainable as timber. As in the case of many other building materials, conditions of transport and sale make it easier to supply imported materials — and the native material is starved out.

These workers and others have shown us how to use the wood and treat the surface so that the full beauty of the grain is brought out. Much good wood has been spoilt and bad wood camouflaged by stain and polish. Mr. Sidney Barnsley works alone as a practical cabinet-maker, and is making the best furniture of our time, but he takes no photographs. These two are, perhaps, sufficient to represent the attack on the problem from one side. On the other side are Mr. Ambrose Heal and others. Mr. Heal learnt the trade of cabinet-making, and on taking charge of his firm experimented with modern furniture commercially

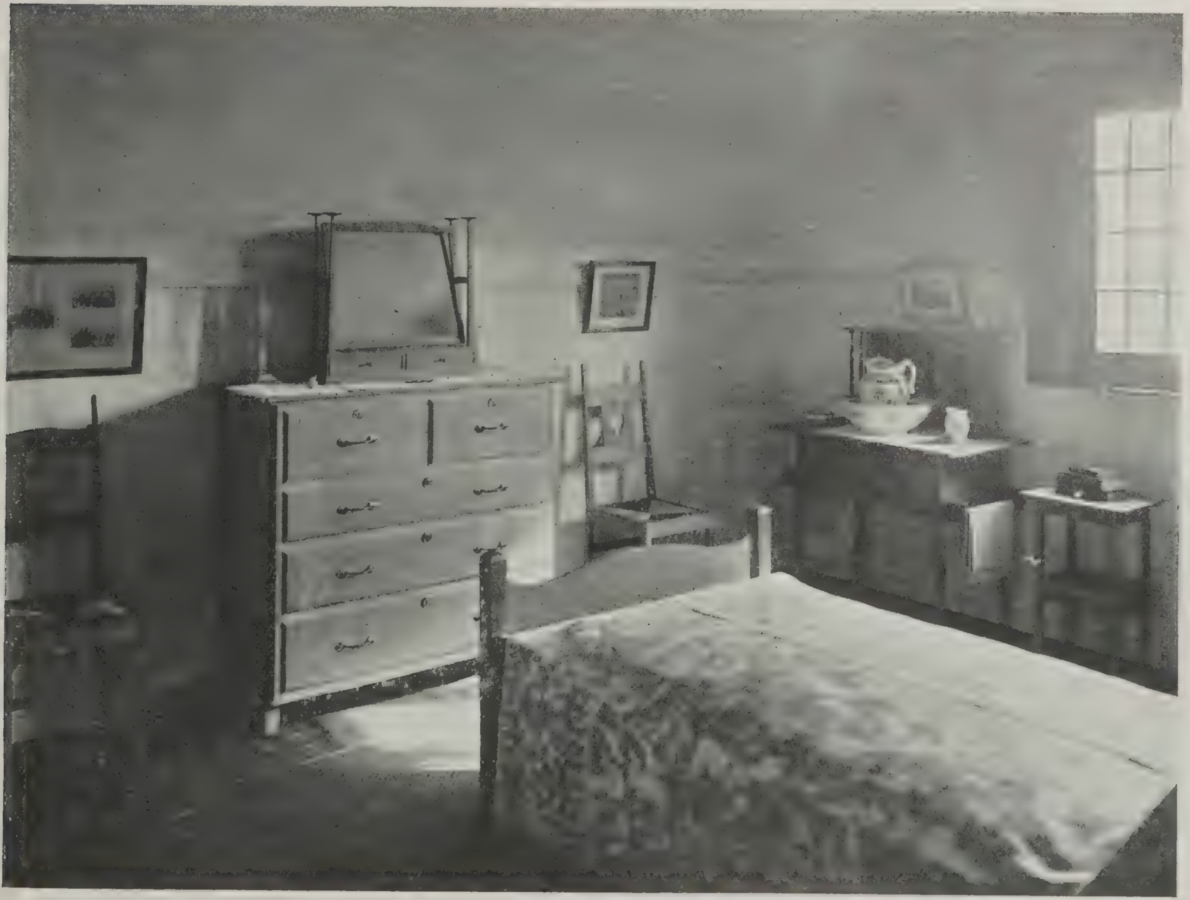

A CHEST OF DRAWERS.
BY CHARLES SPOONER AND A. J. PENTY.


AN ÆOLIAN VOCALION CABINET.
BY W. J. PALMER-JONES.


A CABINET IN KINGSWOOD.
BY SIR ROBERT LORIMER, A.R.A., R.S.A., F.R.I.B.A.



A GARDEN CORNER LIBRARY.



A BEDROOM SUITE.

SOME FURNITURE BY C. F. A. VOYSEY.

possible, and the result has been a lot of very interesting furniture: in particular he has experimented successfully with painted furniture.

I suppose architects have always been interested in the designing of furniture—certainly many modern architects have designed excellent work. Coming from men working in such different keys as say, Sir Edwin Lutyens, Sir Robert Lorimer, Messrs. Baker, Voysey, Spooner, Sellars, Penty, and Palmer-Jones, to name a few only, it has been especially valuable at this stage when furniture, like architecture, is seeking its formula. Agreement on the rational use of material appears to be almost within sight, but beyond that "design" seems to be rather a matter of fashion than conviction.

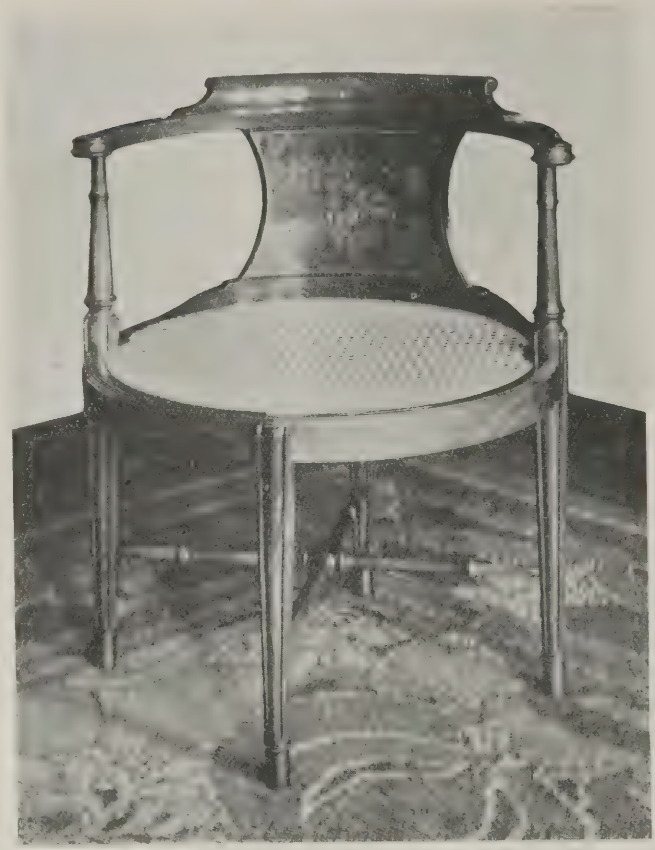
Mr. Spooner at the Central School of Arts and Crafts, and Mr. Percy Wells at the Shoreditch Technical Institute, have done a lot of valuable work in teaching rational furniture design, and Mr. Wells's experiments toward presentable factory production are especially valuable and commendable.

After all, the machine and the factory (perhaps under another name) must be regarded as permanent for all practical purposes. In more enlightened hands many of their evils would die, meantime they (and their evils) are in being, they produce most of the things we use and a few of the things we need. There is a very definite quality which belongs to all properly produced machine work which is, perhaps, best described as "direct"—a quality which is becoming a distinctly modern characteristic. On the whole I think I would admit machinery to Utopia, but I would put the best and most enlightened men that could be found in charge of it. Its proper control and use would be one of the most important jobs in the State.

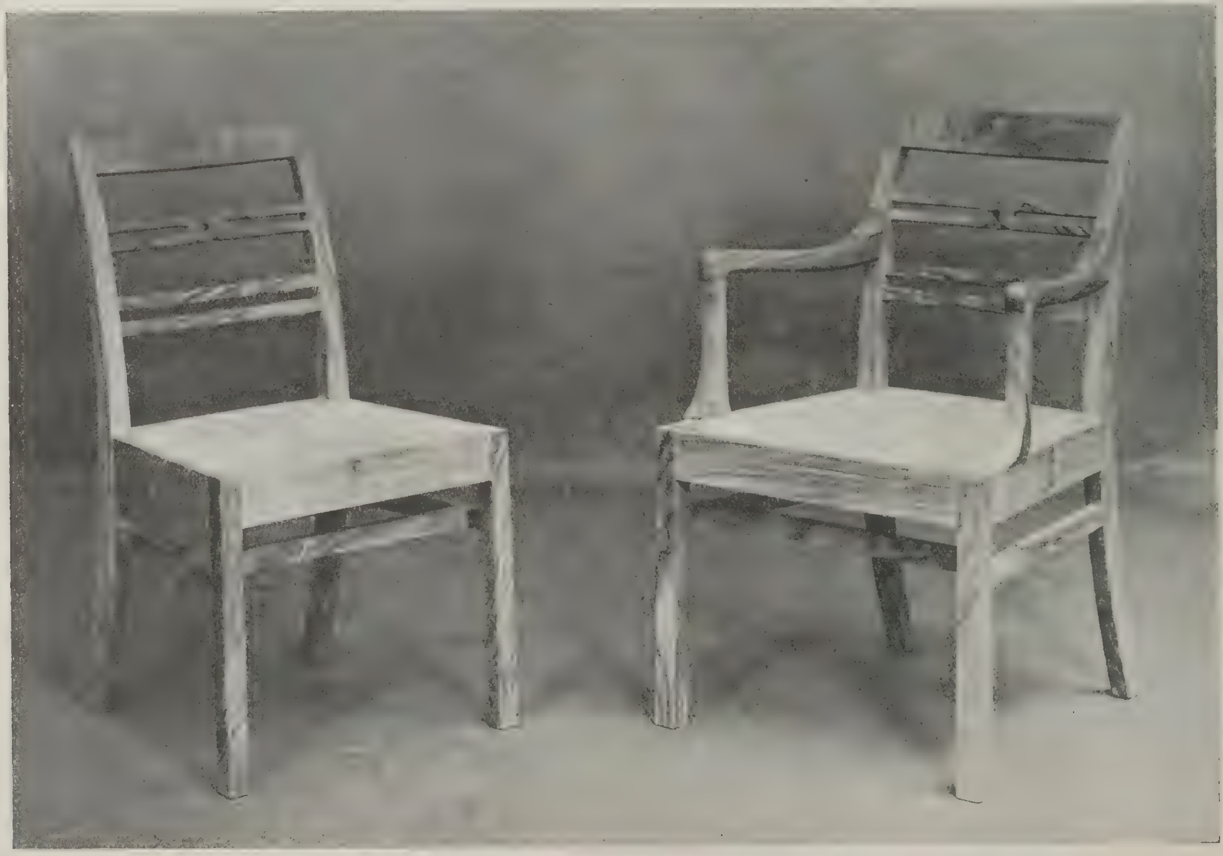
I have been struck recently by the distinctly rectangular character of most of the modern furniture being produced. In form and construction it seems to suggest that the designers are obsessed by the idea that wood comes from thin boards and "Three by Twos." I suppose it is due in part to designing for easy production by machinery, a faulty conception of what the machine can do, but chiefly perhaps to the ease with which the rectangular can be full-sized.

Much of the best old furniture would never have been produced if a careful and accurate full-size detail had been a necessary part of its conception. So many of the lines in old furniture are too good for conception on paper—they could only "grow" under the hands of a skilful workman, as most of the best details of craftsmanship have done at one time or another.

The first article of this series appeared in our issue of January 10th.



A CHAIR. BY J. HENRY SELLERS.



TWO ENGLISH WALNUT DINING-ROOM CHAIRS BY CHARLES HOLDEN, F.R.I.B.A.

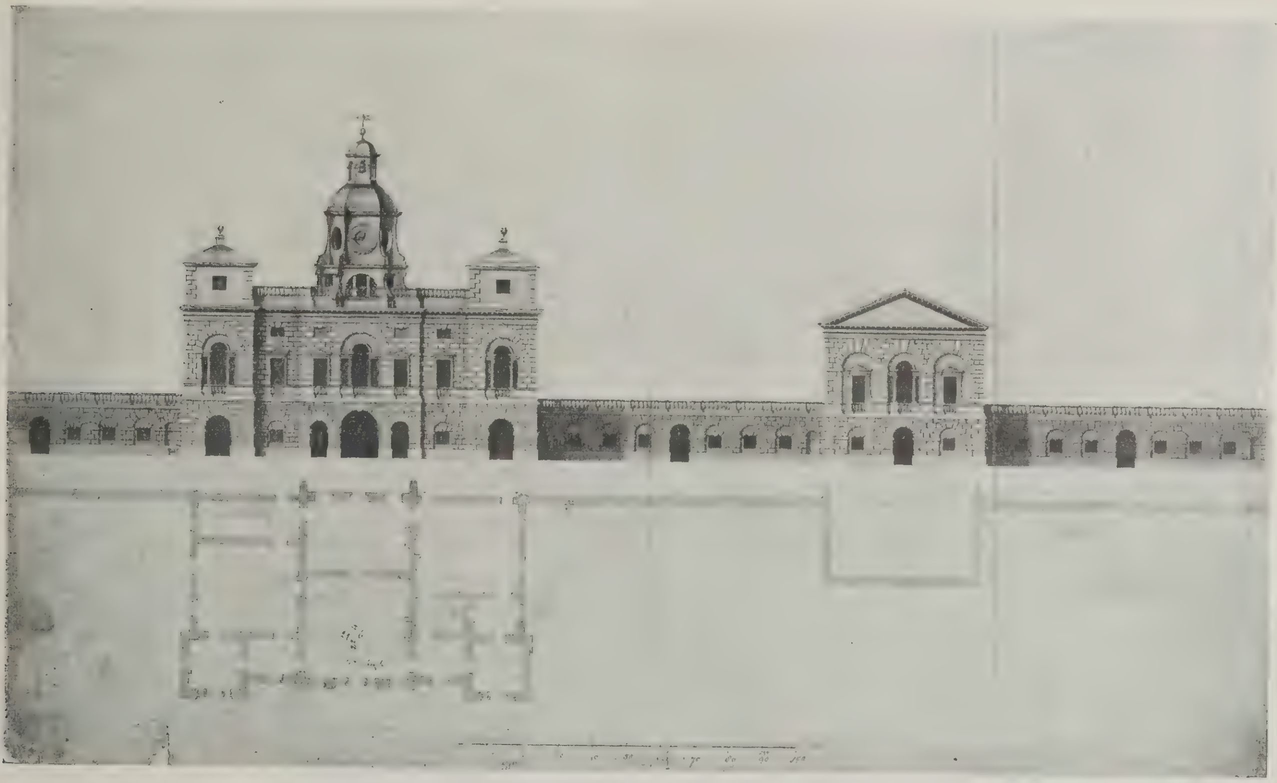
# An Exhibition of Old Drawings at the Architectural Association

WREN'S final monument will be, not St. Paul's, but the drawings of it. As it began, so will it end. Among the exhibition of old drawings at the Architectural Association are one or two plans—not on particularly stout paper—that have outlived the buildings themselves. Were it not for one's memory, and the histories, no other record of them would remain.

Among the names attached to some of the original drawings on show are William Kent, Sir Charles Barry, Robert Smirke, Greek Thomson, Chambers, and Cockerell. One is shocked to find that such treasures are not kept under a glass case instead of being exposed on a wall. But perhaps our museums are already too full.

And the present age has been rather more insistent than most that drawings are only a means to an end. But here are the drawings of the two most important buildings of the nineteenth century—a bird's-eye view of the Law Courts, and an elevation of the Houses of Parliament. And there are a preliminary sketch elevation of the Horse Guards, and one or two drawings of Somerset House. Well, however dead one's soul may be, here is at least a thrill. You cannot stare at these yellowed sheets bearing faded lines of Indian ink, even though the drawings were prepared only in the great men's outer office, without feeling in touch with the dim beginnings of buildings that were household words in your youth. And these drawings were very important once — very important. Imagine the rage and muddle into which some of these great men would have been cast had they been torn up or stolen fifty or a hundred years ago. You might have altered the skyline of the Strand or Whitehall! And now (almost) you could tear them all up without occasioning more than a mild "I say!" from the gentleman who has lent the drawings—Mr. V. O. Rees.

The large aerial view of the Law Courts was obviously prepared to put before some committee. The buildings actually erected reveal that many amendments were made. And so this, no doubt, was the actual drawing put forward for approval by George Street. One can imagine the controversy that raged in some committee room over it—the expressings of opinion by gentlemen who knew nothing at all about it, and the despair at heart of the poor architect. Somewhere, perhaps, there are diaries which would throw a flood of light upon all these things: "Saw Mr. G. to-day. He told me that the building in its present form could not go on. Received instructions later as to the amending of all my plans." "Mr. W. called. Told me that money was wanting, and that in all likelihood the building would have to be abandoned. My staff and I have expended fifteen months of constant thought and work upon it, and for which no adequate reward, save that of seeing the building actually completed, can be made."—Yes; somewhere, perhaps, there are diaries . . . or the hair of the architect turned a little whiter and he took all these troubles down to the grave.



THE HORSE GUARDS, WHITEHALL.
From an original drawing by William Kent.
(*The A.A. Exhibition of Old Drawings.*)

We reproduce Kent's elevation for the Horse Guards. It will be seen that one or two amendments have been made. The right-hand portion was never carried out, and an upper story was added to the portion between the two pavilions.

It is curious how old-fashioned old drawings can make a building look. Buildings which are passed by without remark day after day here look as ancient as mutton-chop whiskers and wide trousers. But there was a wonderful quality of draughtsmanship in those days. H. JOHNSON.

# The Rebuilding of Buckfast Abbey

## FREDERICK A. WALTERS, F.S.A., Architect

IN 1882 a community of Benedictine monks acquired the site and what little remained of the once rich and powerful Abbey of Buckfast, situated on the border of Dartmoor. Founded in remote Saxon times as a Benedictine House, it passed into the hands of the Cistercians, and was rebuilt by them in the twelfth century, and appears to have been, as usual, added to and altered from time to time up to the early part of the sixteenth century. The abbey was surrendered to the Royal Commissioner in 1539, and although inhabited for some time after it was eventually left to ruin and decay, and like so many others became a stone quarry for the countryside.

In 1806 a Mr. Berry levelled what remained standing of the church and most of the other buildings, out of the materials of which he built a modern house. As at this time he carefully covered all the foundations of the old walls, with the sole exception of certain fifteenth-century additions to the original buildings, the disposition of the latter had become quite unknown.

In 1883 it was determined to discover, if possible, the old foundations, and with completely successful results—the whole plan being laid bare with the exception of the position on which the modern house stands. The buildings forming the south side of the quadrangle were at once re-erected, and since then the western side has been completed, as well as the east and north cloisters.

At the end of 1906 it was determined to commence the rebuilding of the abbey church, and the work was begun with as little delay as possible, the whole work being carried out by the monks themselves under the direction of Mr. Frederick A. Walters, F.S.A., architect, and in the earlier stages by a clerk of works.

The total length of the church (according to the twelfth-century foundations) is 240 ft., but there had evidently been an extension of the choir eastwards at a later date. As far as can be ascertained the plan and character of the twelfth-century church has been followed with the exception of the probably low Cistercian tower, which by special desire has been replaced by one more in accordance with Benedictine traditions.

The plan of the church is cruciform, the eastern arm being short (as was the usual early Cistercian arrangement), with a range of six chapels at the end. The transepts only project one bay, and have each a chapel on the east side.

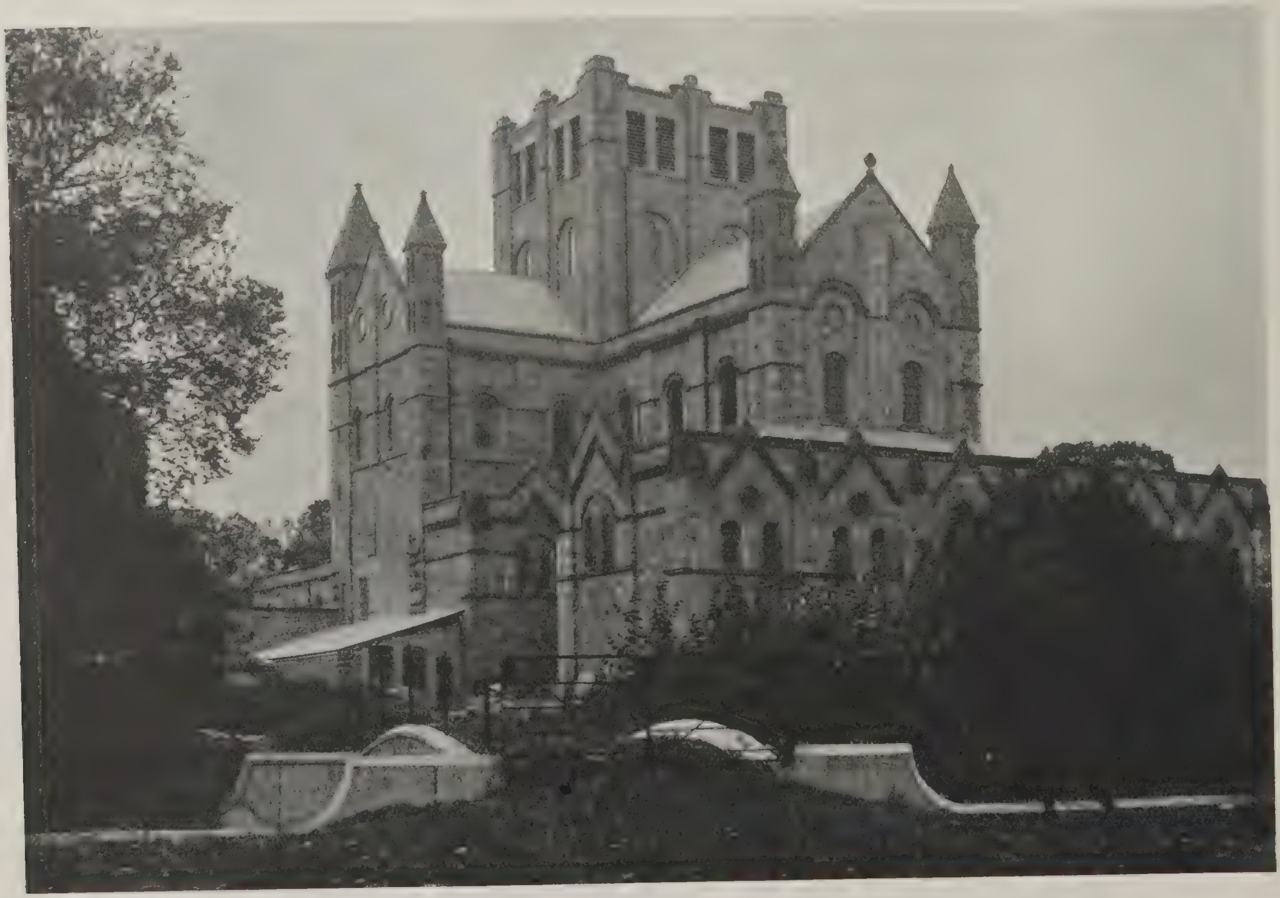
The eastern arm comprises all the presbytery, or sanctuary, of three bays, westward of which is the crossing, 25 ft. wide, westward of which again is the structural nave of nine bays, three of which form the monks' choir and will be furnished with two rows of stalls and separated from the actual nave by a rood screen.

The north and south aisles are carried round the presbytery forming an ambulatory behind the high altar, and beyond this are six eastern chapels forming a species of eastern transept as at Fountains Abbey and Durham Cathedral where, however, the number of chapels is nine. These chapels are dedicated respectively to the Blessed Sacrament, St. Benedict, St. Joseph, St. Michael, the Holy Souls, and the Guardian Angels.

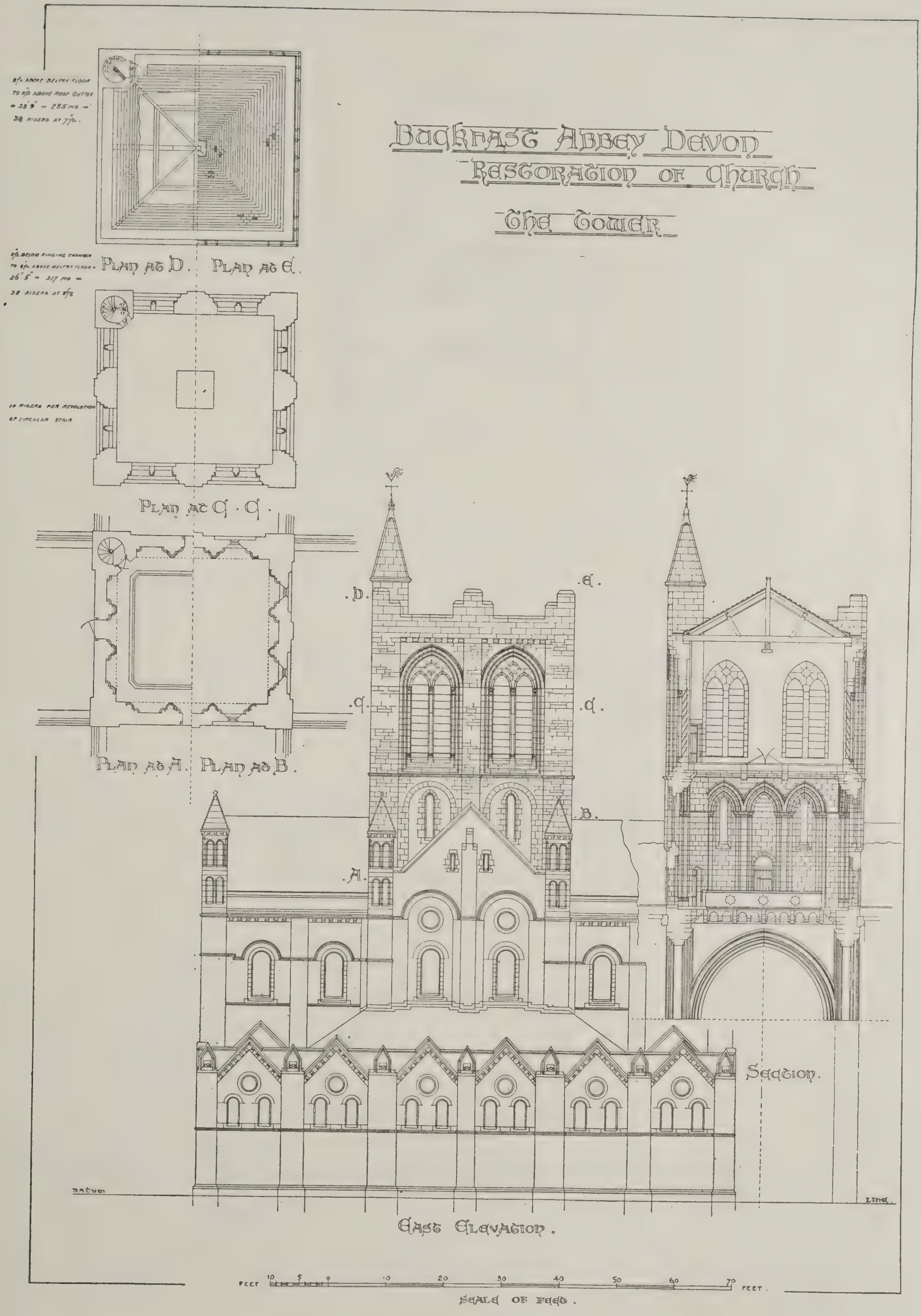
There are two more chapels opening from the north and south transepts respectively, that on the north side dedicated to Our Lady, and containing the restored statue of Our Lady of Buckfast; and that on the south dedicated to the Holy Cross.

It is intended also to have small altars facing eastward

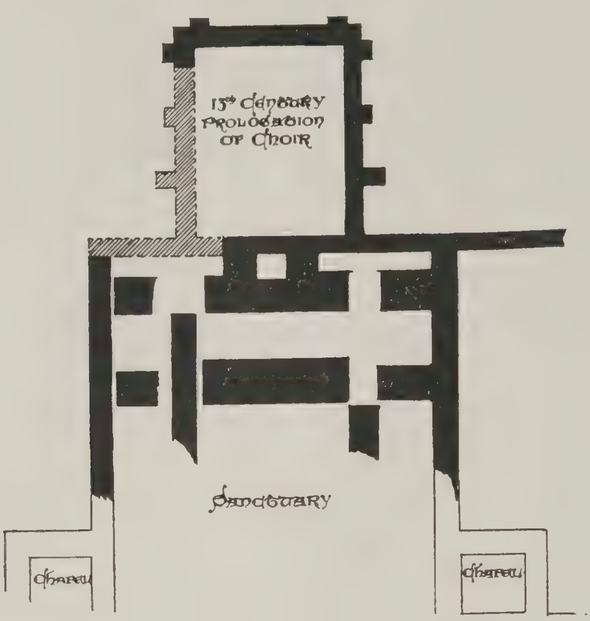
(*Continued on page* 267.)



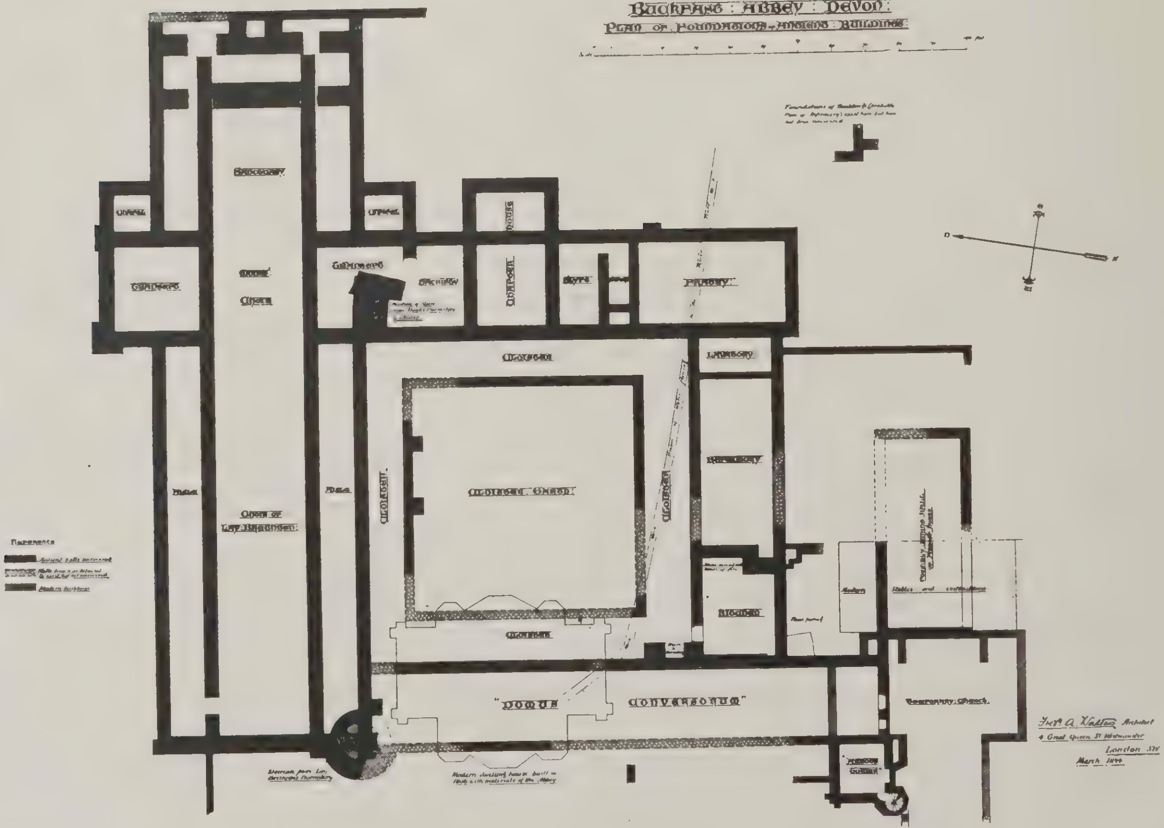
A VIEW FROM THE SOUTH-EAST.


Buckfast Abbey Devon
Restoration of Church
The Tower
8½ ABOVE BELFRY FLOOR TO 8½ ABOVE ROOF GUTTER = 23' 9" = 285 INS. = 38 RISERS AT 7½.
8½ BELOW RINGING CHAMBER TO 8½ ABOVE BELFRY FLOOR = 26' 5" = 317 INS = 38 RISERS AT 8⅓
16 RISERS PER REVOLUTION OF CIRCULAR STAIR
Plan at D.
Plan at E.
Plan at C · C.
Plan at A.
Plan at B.
.D.
.E.
.C.
.C.
.B.
.A.
Section.
DATUM
LINE.
East Elevation.
FEET 10 5 0 10 20 30 40 50 60 70 FEET.
SCALE OF FEET.

BUCKFAST ABBEY, DEVON: PLANS, ELEVATION, AND SECTION OF THE TOWER.
FREDERICK A. WALTERS, F.S.A., ARCHITECT.

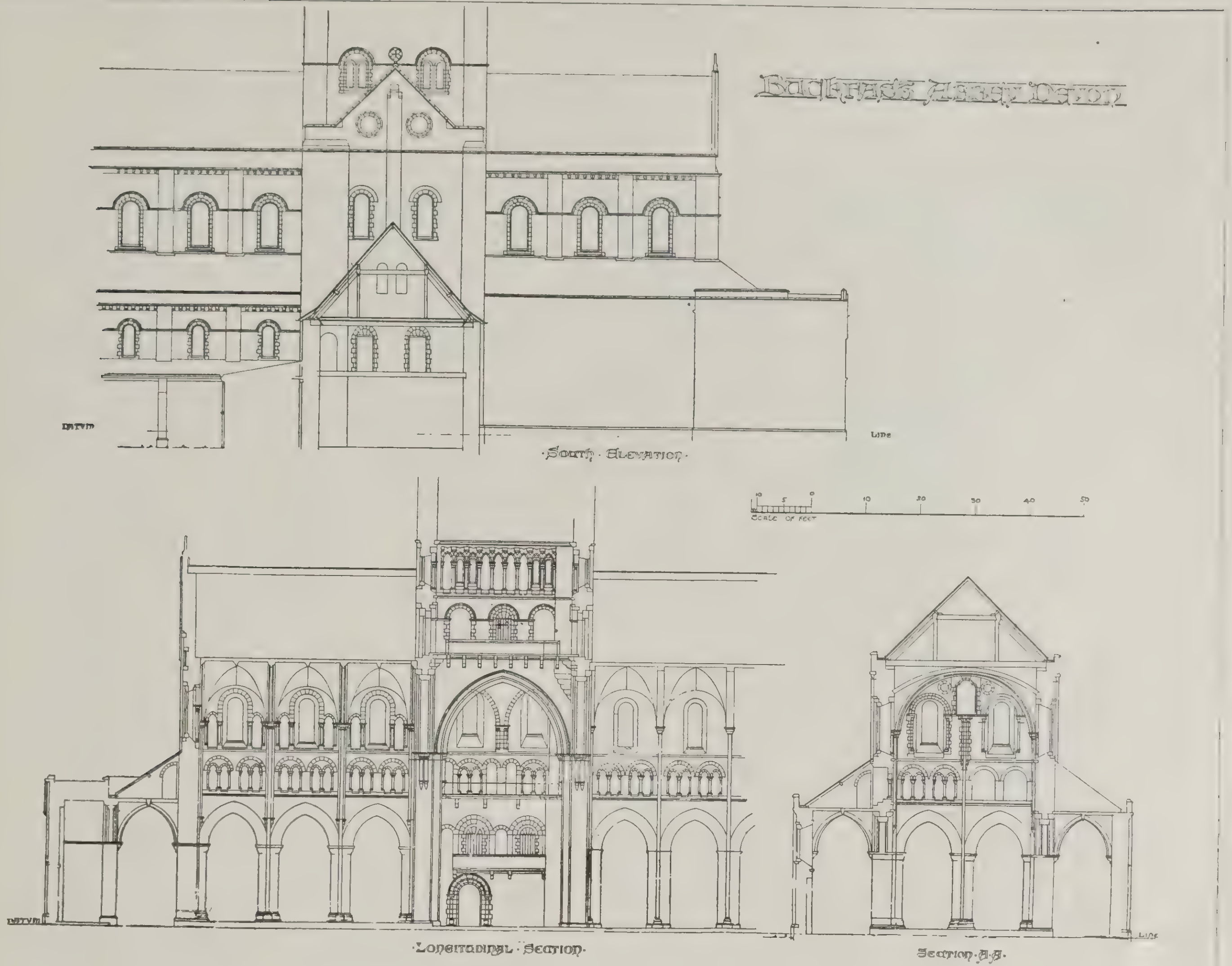


PART PLAN OF THE ORIGINAL FOUNDATIONS.

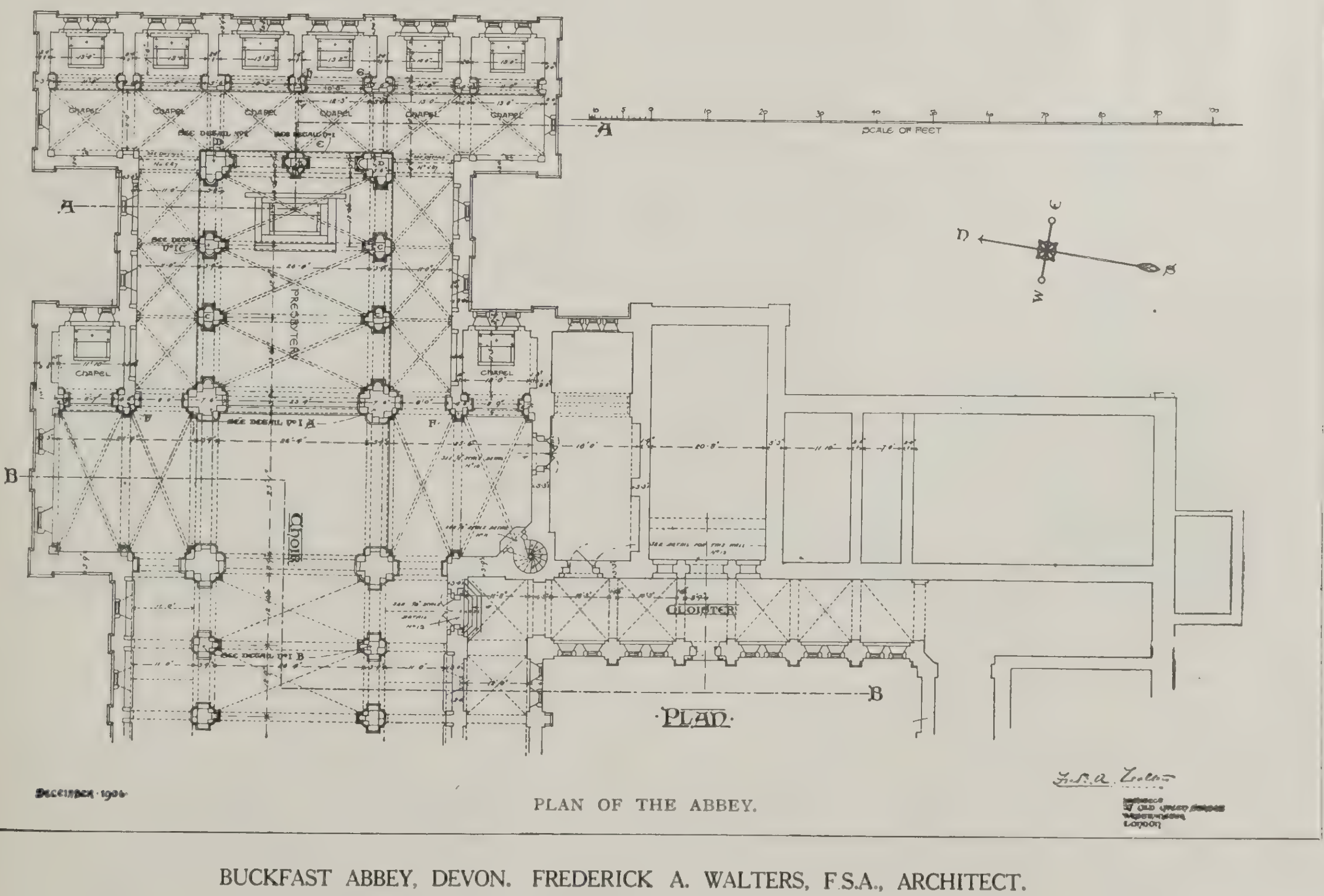


THE FOUNDATIONS OF THE ANCIENT BUILDINGS.

BUCKFAST ABBEY, DEVON. FREDERICK A. WALTERS, F.S.A., ARCHITECT.

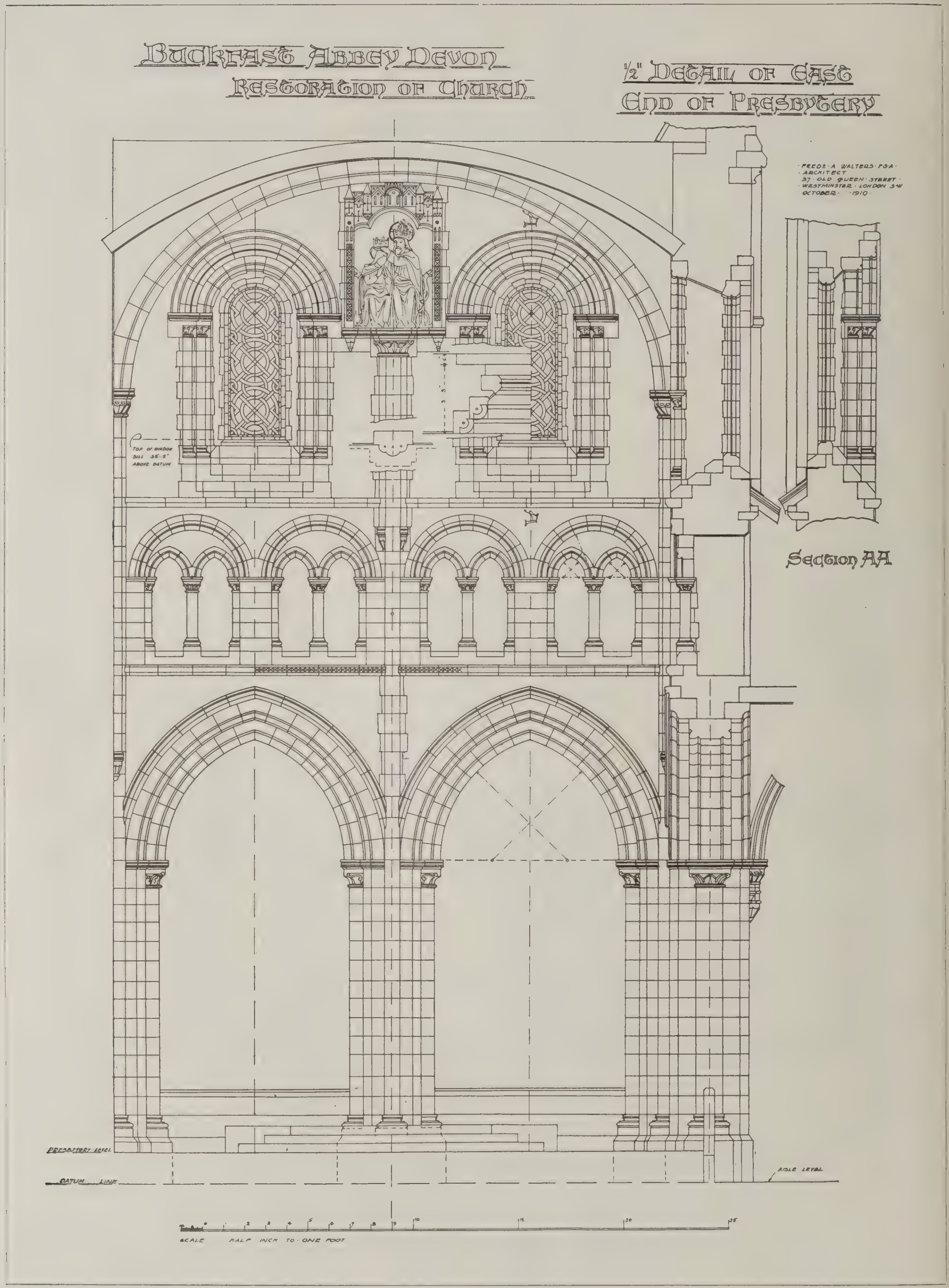


ELEVATION AND SECTIONS.

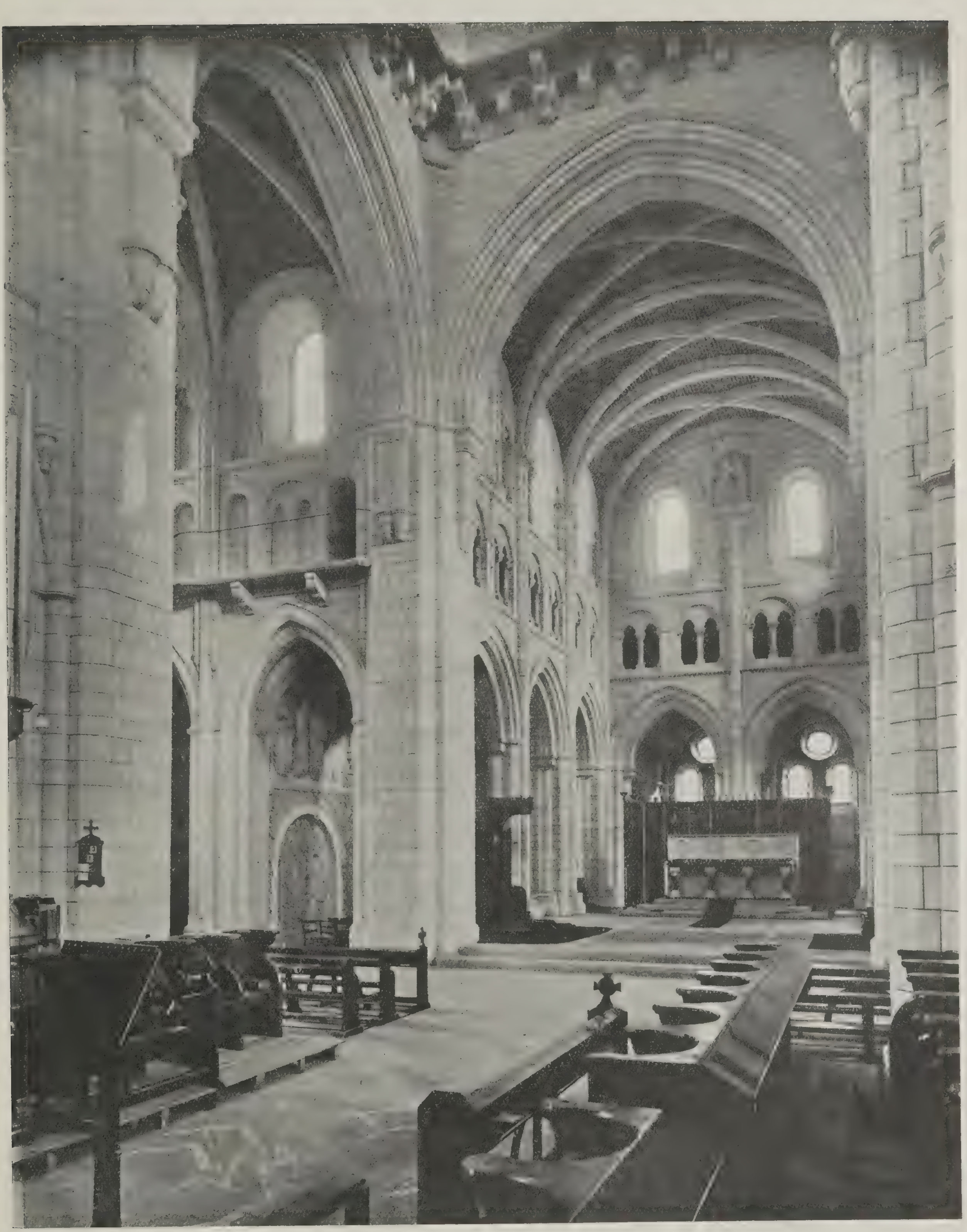


PLAN OF THE ABBEY.

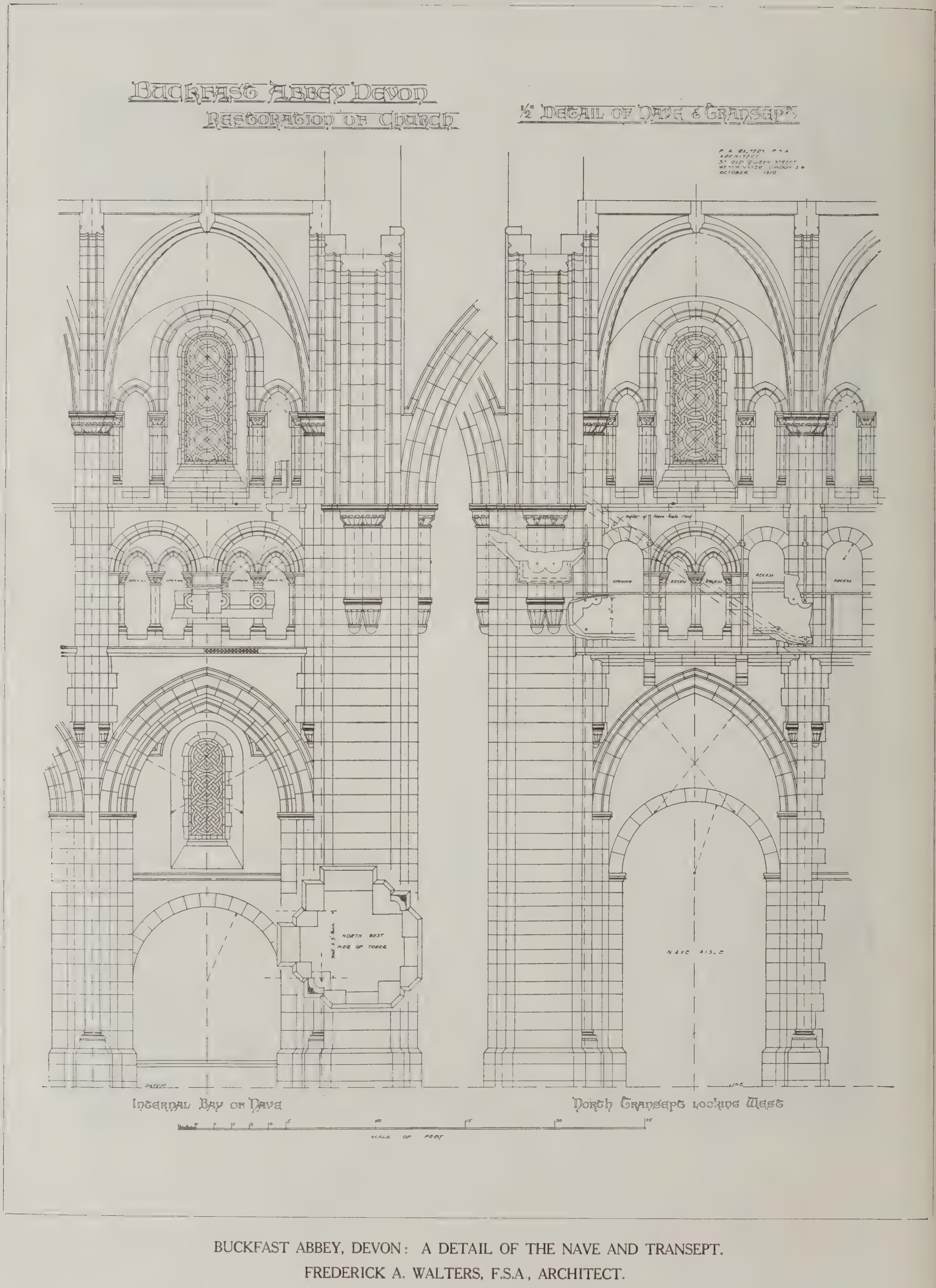
BUCKFAST ABBEY, DEVON. FREDERICK A. WALTERS, F.S.A., ARCHITECT.



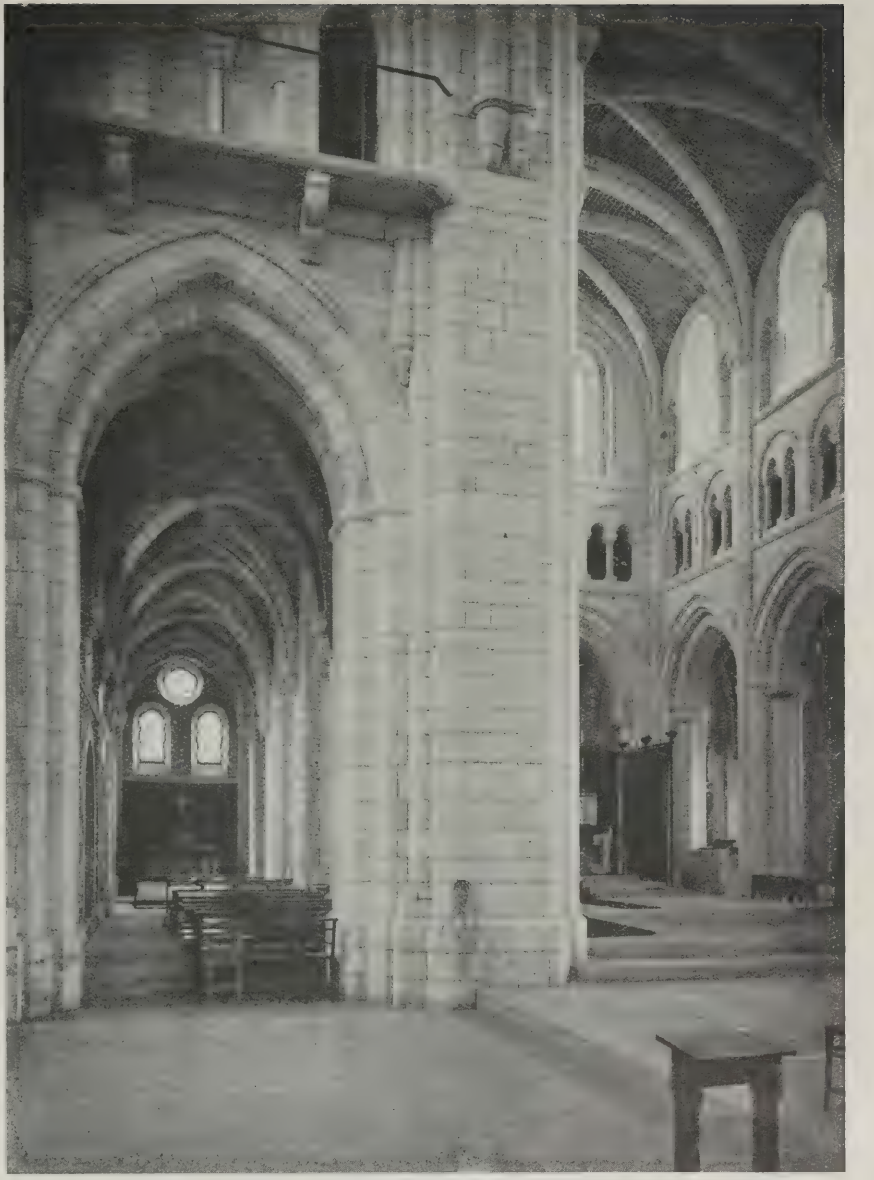
BUCKFAST ABBEY, DEVON; A DETAIL OF THE PRESBYTERY.
FREDERICK A. WALTERS, F.S.A., ARCHITECT



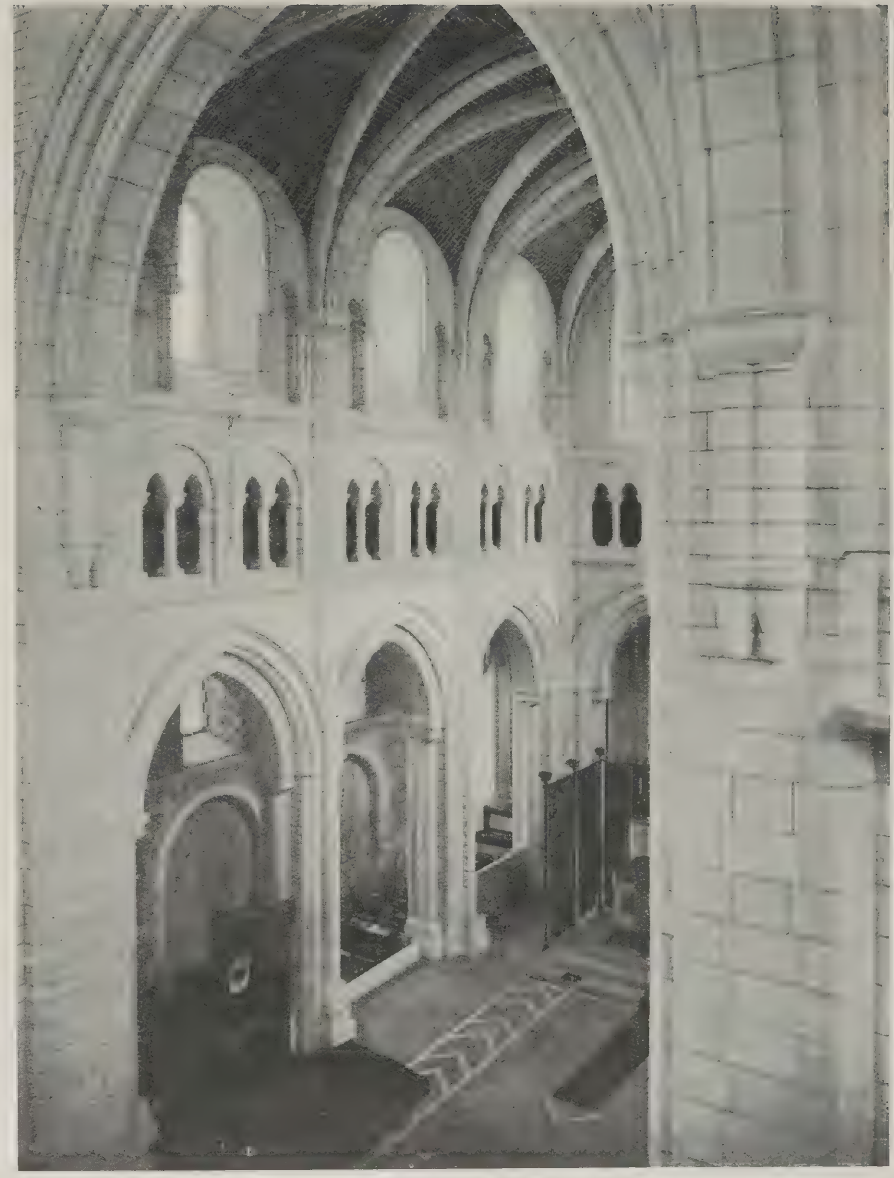
BUCKFAST ABBEY, DEVON: THE PRESBYTERY.
FREDERICK A. WALTERS, F.S.A., ARCHITECT



BUCKFAST ABBEY, DEVON: A DETAIL OF THE NAVE AND TRANSEPT.
FREDERICK A. WALTERS, F.S.A., ARCHITECT.

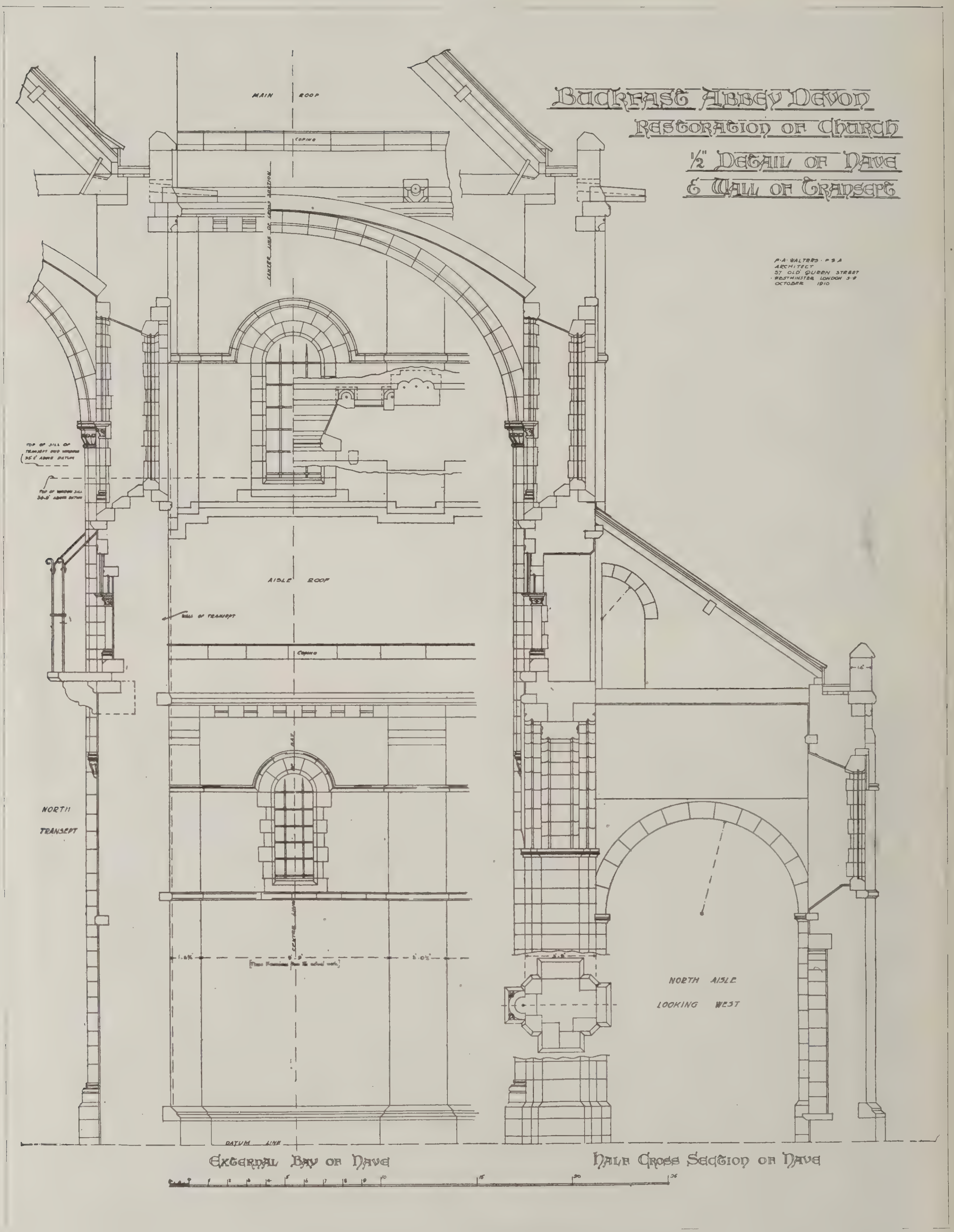


A SIDE CHAPEL.



THE PRESBYTERY.

BUCKFAST ABBEY, DEVON FREDERICK A. WALTERS, F.S.A., ARCHITECT.



BUCKFAST ABBEY, DEVON: A DETAIL OF THE NAVE.

FREDERICK A. WALTERS, F.S.A., ARCHITECT.

against each of the nave piers, as was formerly the case at St. Alban's Abbey and elsewhere; one of these, dedicated to St. Edith, is already given and is in position.

The high altar stands in the eastern bay of the presbytery, and is raised three steps above the floor. It consists of a marble slab 11 ft. long by 3 ft. wide, and is 6 in. thick. In front it is supported on four marble columns with carved capitals, and attached at the back to a stone wall supporting the retable with panels carved with the Instruments of the Passion. It is surrounded by six columns which will support golden angels, and the ornamental ironwork connected with the columns will support rich silk hangings at the back and sides.

The abbot's throne in the N.W. bay of the presbytery is constructed from late-fifteenth-century carved oak work which came from a manor house not far distant, which belonged to the abbey in former days, and which was built by one of the later abbots before the dissolution.

The windows are glazed with lead glazing of early design, and the lady chapel has already its three windows filled with stained glass; the two eastern lights have the subject of the Annunciation, and on the north side, the Assumption.

At the crossing of the presbytery, nave, and transepts there is a lofty lantern and gallery round, 51 ft. from the floor, and above rises the central tower, incomplete at present, but carried sufficiently high to accommodate a peal of fourteen bells, which are hung from the gallery round the lantern.

The height from the floor to the crown of the vaulting is 49 ft., and to the ridge of the roof 64 ft.

Internally the church is entirely constructed of Bath stone, the filling in of the vaulting between the ribs being of red sandstone from the locality.

Externally, the walls, including quoins, are of random-coursed dark-grey local limestone, Ham Hill stone being used for the windows and other freestone work.

Mr. Walters has designed and superintended the work from the commencement in 1883, including the tracing and uncovering of the foundations of the whole of the original buildings. Three more bays, together with the west front, remain to be built.

At first the actual building was done by a single monk-mason with one assistant. At no time have there been more than six monks at work, and so the building has been carried on as money came.

The whole building, when complete, will consist of nave of nine bays with aisles, transepts with eastern chapels, and choir with an eastern square-ended projection or transept of six chapels, the whole surmounted by a square central tower and spire. Its internal dimensions will be: length, 240 ft.; width, 62 ft.; length of transept, 85 ft.; height, 49 ft. The whole of the eastern portion, the transepts and crossing, and two bays of the nave are completed, and four more bays of the nave are finished to the clerestory.

A fourteenth-century statue of Our Lady, recovered (in fragments) from the ruins, has been restored and placed in the north transept chapel.

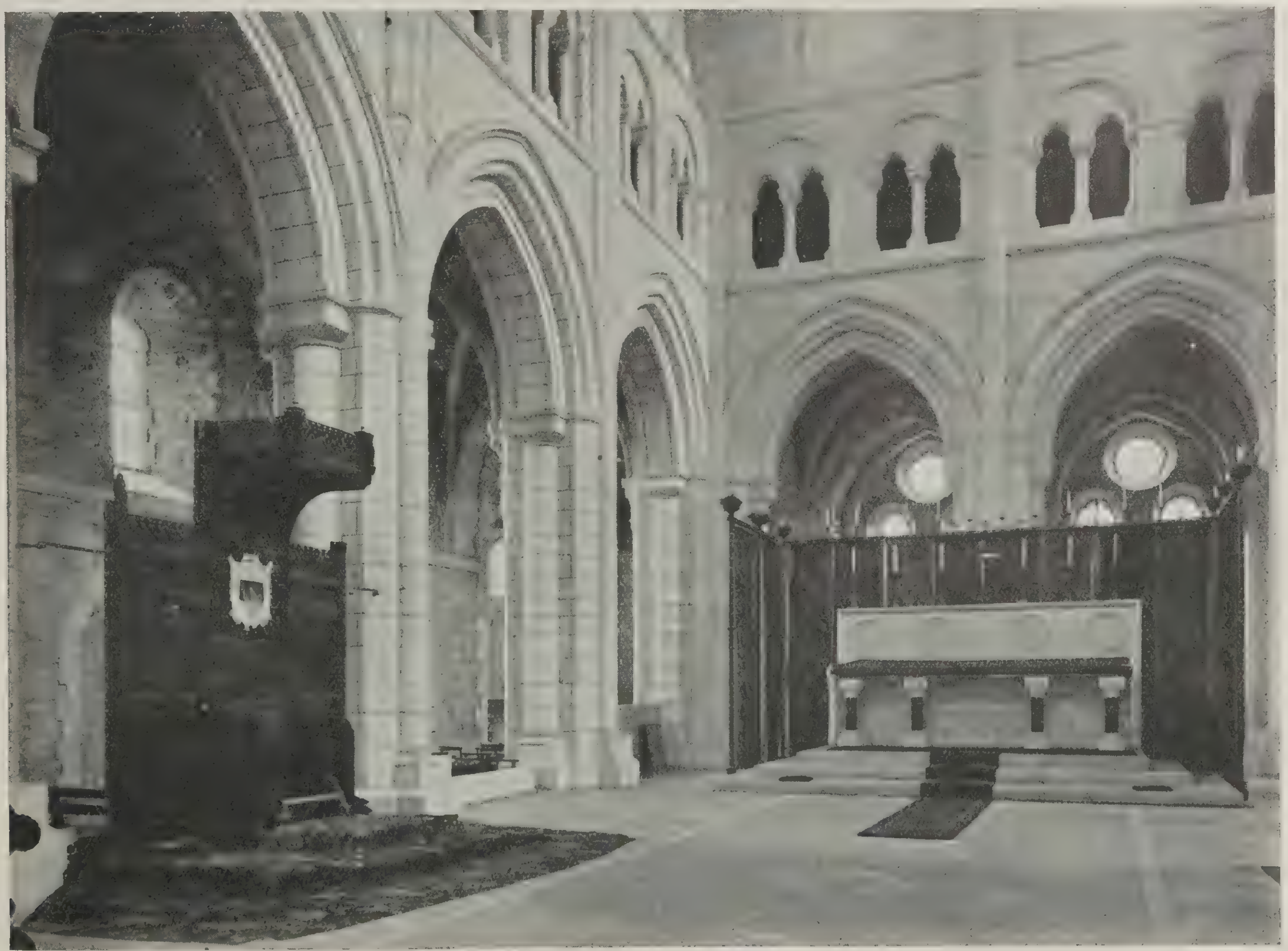
The building occupies an exquisitely beautiful situation in the valley of the Dart, near to Herrick's Dean Prior, and to Dartington, where Froude spent his childhood.

The site forms the foreground of one of Turner's wonderful drawings of the great gorge of the Dart, and, as seen from the elevated churchyard of Buckfastleigh, forms as choice a setting as that of any abbey in England.

The church which has now risen is unique as the only rebuilding of any ancient English abbey, and it forms one of the most important ecclesiastical buildings of modern times.

No existing church in the Home Counties outside London, except the cathedrals, is so large, and it may be regarded as approximately of the original dimensions of the great church at New Shoreham.

Mr. Walters has also designed the Church of Our Lady of Ransom at Eastbourne (notable for the extreme beauty of the colouring of the stonework) and the Franciscan Friary at Chilworth, in Surrey.



A DETAIL IN THE PRESBYTERY.

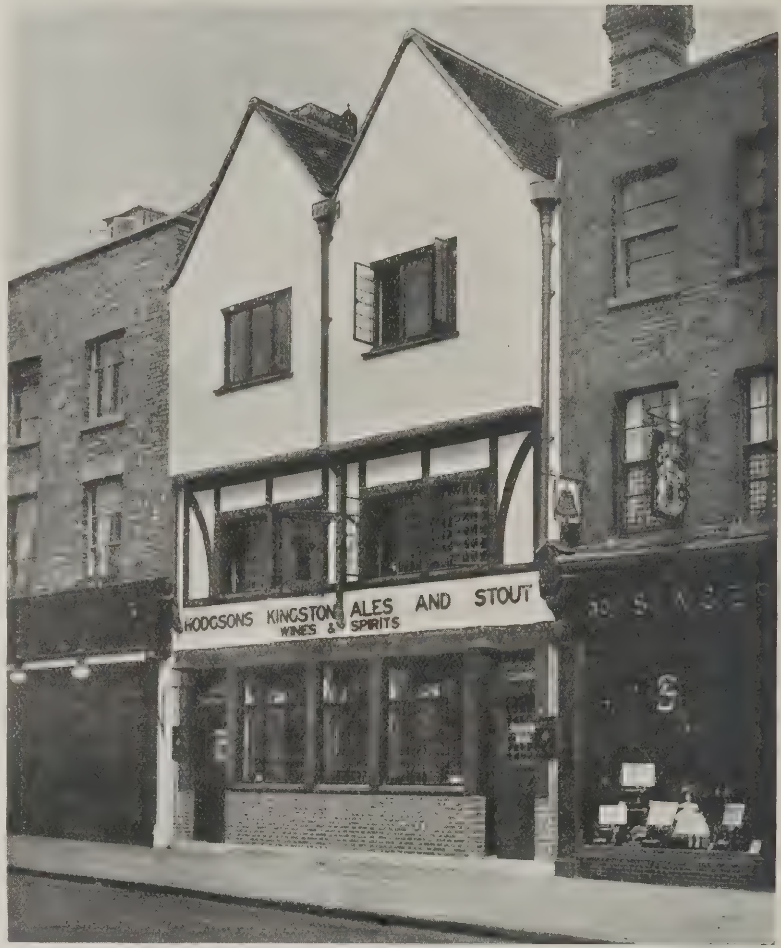
# A Mediæval Tavern Rebuilt

## JOSEPH HILL, F.R.I.B.A., Architect

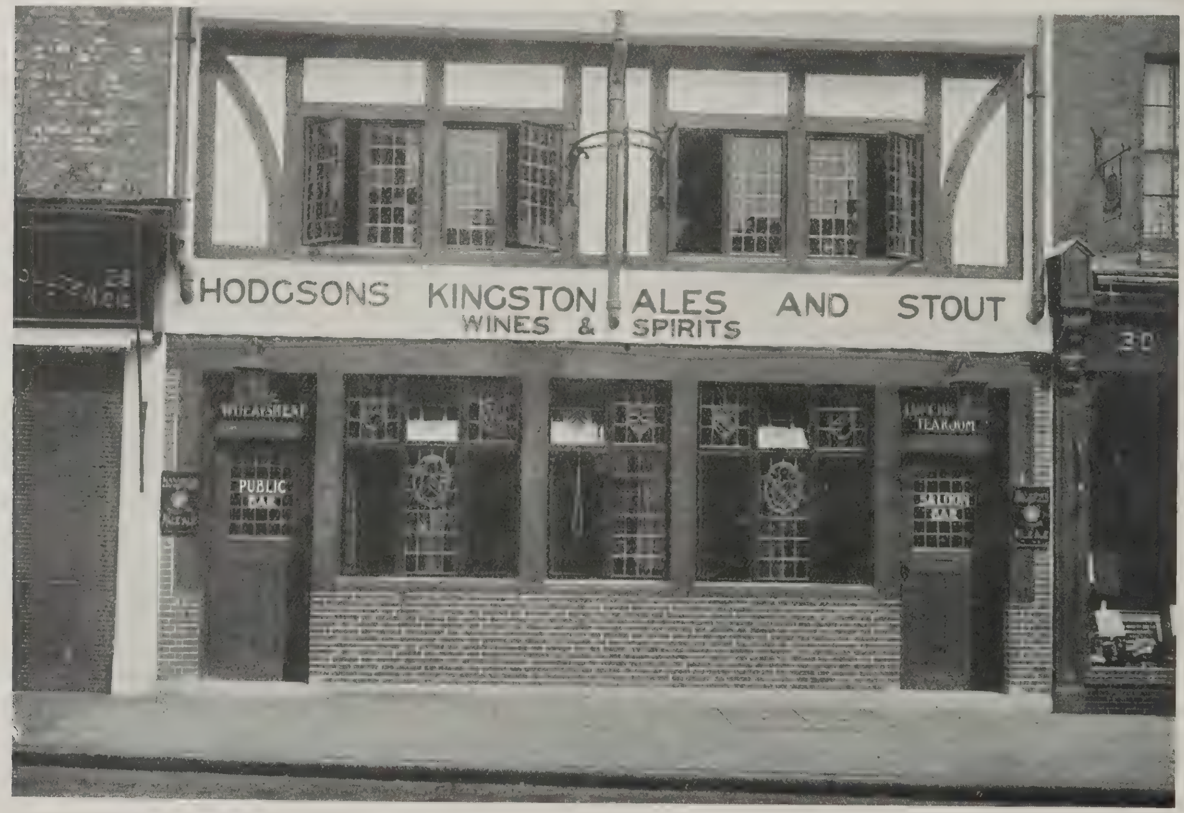
"THE WHEATSHEAF INN," which occupies a prominent position in the picturesque Market Place of Kingston, has been rebuilt from the designs of Mr. Joseph Hill, F.R.I.B.A. It is designed in the style of architecture which originally surrounded the Market Place, and of which some charming examples still exist. The old inn was of great age, the timber framing and "daub and wattle" infilling spoke of the early seventeenth and probably late sixteenth centuries, but the original front had been replaced by a late Georgian or early Victorian cement face of but small artistic merit and poor construction.

The ravages of time and the demands of local authorities made it clear that it was essential that an entirely new building be provided. A restoration was impossible, as the height and arrangement of rooms were unsuited to the requirements of the licensing justices, and the entire structure had in fact become insanitary. Messrs. Hodgsons' Kingston Brewery Co., Ltd., the owners, had plans prepared by Mr. Hill, of the firm of Messrs. Yetts, Sturdy, and Usher, architects. The plans were approved by the licensing bench and the borough surveyor, and the work has been carried out under Mr. Hill's supervision.

Whilst in planning and construction the building is thoroughly up-to-date, the uses to which the old material could be put were given careful thought. The old oak beams and posts from the early building have been carefully treated and re-used in the old manner, whilst all the brickwork and the plasterwork speak of careful and traditional craftsmanship.

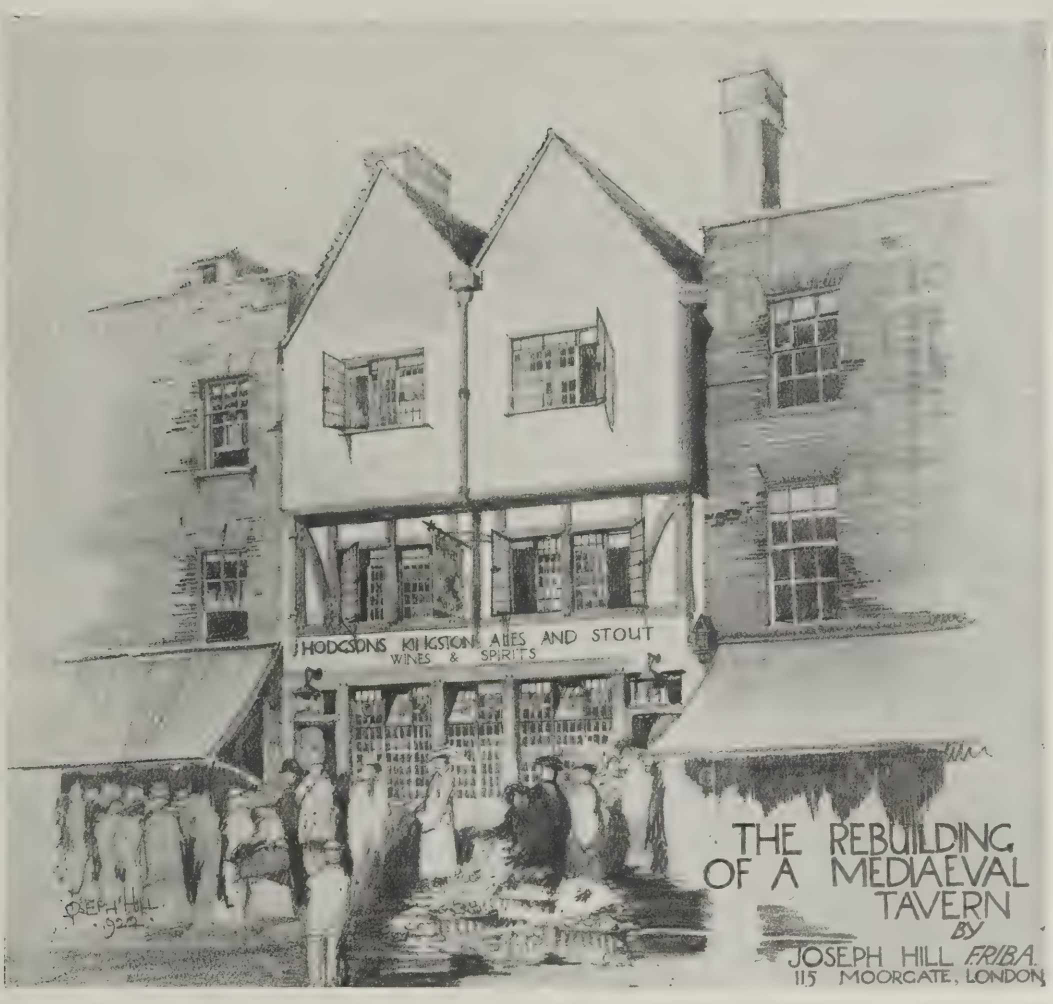


A VIEW FROM THE MARKET PLACE.

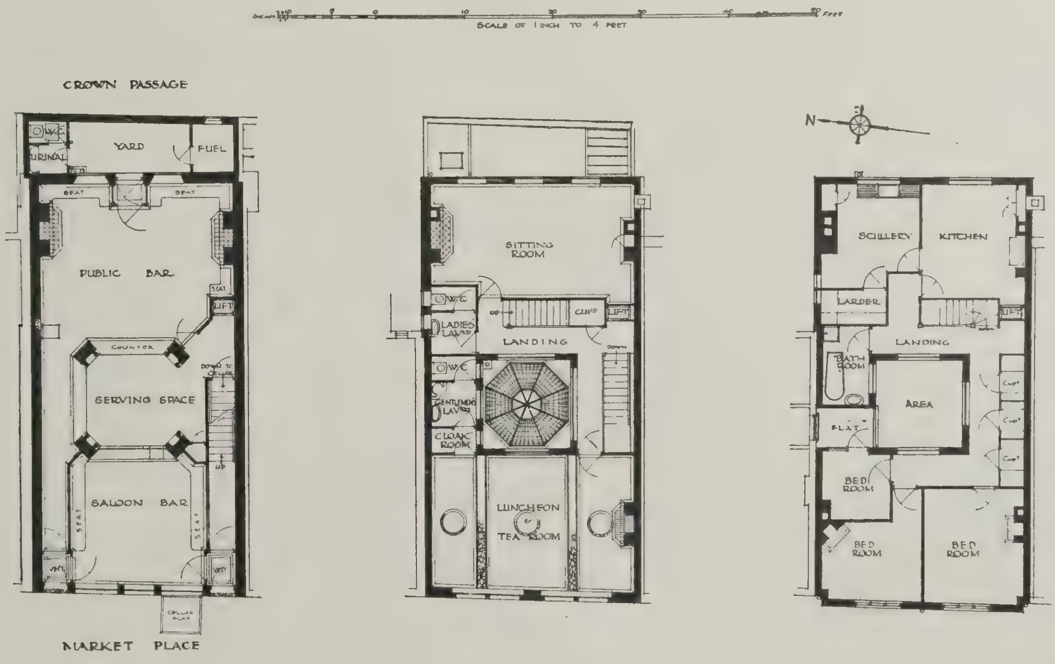


DETAIL OF FRONT.

"THE WHEATSHEAF INN," KINGSTON-ON-THAMES



A PERSPECTIVE DRAWING.



GROUND FLOOR PLAN.

FIRST FLOOR PLAN.

SECOND FLOOR PLAN.

"THE WHEATSHEAF INN," KINGSTON-ON-THAMES.
JOSEPH HILL, F.R.I.B.A., ARCHITECT.

In designing the Market Place front, the architect was guided by the outline of the original building. This bore a charming relationship to the busy thoroughfare which, on market days, is such a blaze of colour and hive of commerce.

The site is a long and narrow one, and the difficulty of obtaining light has been overcome by the formation of a well in the centre of the building. This terminates in a glazed dome over the serving space, which forms the central feature between the public and saloon bars on the ground floor. A spacious and attractive tea and luncheon room is provided on the first floor, with direct access from the Market Place. The kitchen service is on the second floor, and is connected with the bars and public rooms by a lift. In planning the bars careful attention has been given to the modern requirements of the licensing authorities, and the result is open, well-lighted, and efficiently supervised public rooms.

The general contractors were Messrs. W. H. Gaze and Son, Ltd., of Conduit Street, W.1, and Kingston-on-Thames; the sub-contractors being as follows: The Aston Construction Co. (steelwork); the Crittall Manufacturing Co. (metal casements and dome); Kelley & Co. (lead glazing); O'Brien Thomas & Co. (sanitary fittings); the Kleine Flooring Syndicate (Kleine flooring); the British Premier Flooring Co. (asbestic jointless composition flooring); Leo Sunderland & Co. (electric lighting); the Well Fire and Foundry Co., Ltd. (firegrates, backs, etc.); Messrs. John Daymond and Son (enriched plasterwork); Messrs. Gaskell and Chambers (bar counter, fittings, and pewtering); Samuel Haskins Bros. (lift—hand-power service); Thomas Elsley (rain-water heads); Yannedis & Co. (ironmongery).

# Houses—But No Homes

## By CROSSLEY DAVIES

NOW that the speculative builder is at work again houses are to be had, though the demand is much greater than the supply. But those who have a small capital can at least buy a roof to shelter them. The prospect is no longer so hopeless as once it was. Thanks to private enterprise, at last able to enter the field, estates are springing up on the outskirts of London which promise to meet an urgent need.

That the speculator has been obliged to go out into the country where the air is fresh and the prospect pleasing is matter for congratulation. The movement of the townspeople outwards makes for health. For this contribution to the problem of London's congestion we must all be grateful. But while the enterprise of the speculative builder has its good points there are unfortunately also reasons for grave disquiet. He is certainly giving us houses, but we are not getting homes. The houses that nobody wants are the only houses that anybody can get.

Let the builder fondly imagine that he is supplying the ideal homes of which we have heard so much and seen so little. Let him proclaim that the man with the trowel is walking in ahead of the millennium. Yet the fact remains that what he is giving us is very far from what we have a right to expect, even though that expectation is modestly based on the possibilities of to-day.

Since the ideal home became fashionable the speculative builder has rushed in with many assorted samples. Now it is possible to get a house on easy terms, like a piano or a motor car, a house, we are told, that is modern, labour-saving, artistic, spacious, and cheap. No lower standard will satisfy the altruistic builder of to-day. It is wonderful to find that the gentlemen who before the war were accused of giving us so many shoddy substitutes for the substantial homes of our forefathers, in the name of progress, have so signally seen the error of their ways.

While we gladly agree that the speculative builder has rendered valuable service in the provision of homes at an economic rent, and still plays an important part in repairing the omissions of the war, we feel that his claims in the matter of the ideal home need close examination. All the more so because he remains his own architect, a fact that an inspection of the plans of his new "villa residences" proves at once.

Alluring brochures describe the beauties and conveniences of many new estates around London, with the *rus in urbe* appeal so dear to the heart of the modern suburban couple. But a tour of some of the new estates suggests that care must be taken that we do not get all the old faults of the pre-war middle-class house repeated.

The householder too often finds that the new house is little better, if at all, than the home that before the war he could buy for half the price. Perhaps the gravest defect is the failure of the builder to employ an architect. We went into a typical new "villa" the other day. The rooms were small. The largest was not more than 12 ft. by 10 ft. The hall was described as a "lounge hall," but it opened right on to the porch. The kitchen was not big enough for a good-sized table, and there was no scullery. Nor was there a copper. Assuming that the owners would have a servant, which is almost certain, the absence of a scullery is a grave defect. The kitchen is the maid's living-room, and should be designed with that fact in view. She does not want to live with the work always on top of her. The scullery gives her a workroom outside her living-room. A copper, or a washing machine, should be in every home. Few people of the class who occupy houses of the type under discussion can afford to put all their washing out to a laundry, and they need facilities to do some of it at home.

Passing from the ground floor to the first we found the stairs deep and winding, perilous for children and tiring for adults. The main criticism of the bedroom floor is that the bathroom was ridiculously small. In one case the door could not be opened to the full extent because the lavatory basin stopped it. Electric light was laid on, but there were no power plugs.

This is a fair sample of the sort of "villa" which is to-day being built for a little over a thousand pounds, or on easy terms, with interest, about twelve hundred and fifty.

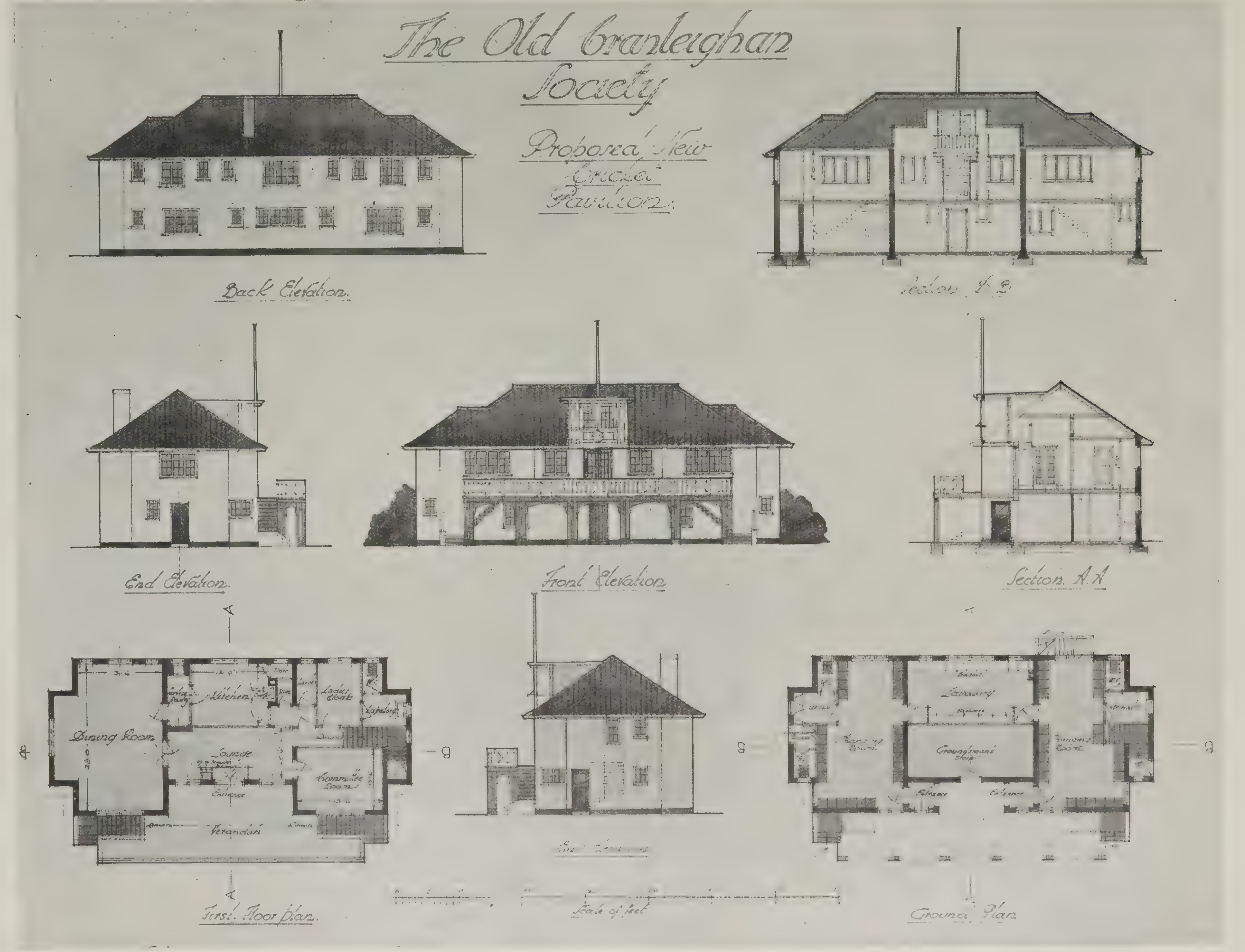
No house was equipped for central heating. None had adequate cupboard accommodation. None had enough fittings. They certainly had dressers with glass doors, but nowhere did we find a kitchen cabinet such as the housewife gets in America. In no case were there any basins with hot and cold water fitted in the bedrooms. Beyond the mantelpieces there were no permanent fitments in the two main rooms downstairs, and no built-in wardrobe in the hall, which in most cases was a waste of valuable space for the sake of vanity.

This sort of thing will not do. It is clear that the builder has not sought the advice of the women who will have to live in the "residences" he designs. Nor has he asked an architect to plan it for him.

The builder has, unhappily, a good excuse for small rooms and low ceilings. The Ministry of Health, whose officials should have known better, set him the example. They were the first to cut down the size and height of rooms, in some cases below the standards of the local by-laws. It was a retrograde move for which we may have to pay heavily before this generation has run its course. But there is hope that by some scheme of co-operation between the architectural bodies and the speculative builders we may at last have what we have never known before, small middle-class houses built to architect's plans. It may be that this has not been possible before because the architect's fees, based on the cost of the building, may have proved too heavy for the builder. Or at least that the builder cut his prices in keen competition so much that he was obliged to dispense with the architect. In any case, whatever the cause, it is surely not beyond the powers of human ingenuity to devise some way of overcoming the difficulty. It has been done in America, and it can be done here. There are obvious advantages in having an architect to plan a house. And those advantages would be heightened if the architect could be aided by the guidance of some body of women who could best get from the housewife a list of her requirements. Perhaps it is an ideal solution of the problem of getting houses worthy of the age and the people, but the collaboration of architect, builder, and housewife should not be impossible. It would certainly end in a far finer style of home than we are getting now. It might even lead us to the ideal home which to-day is, alas, but an idle dream for at least 90 per cent. of the community, who have not the means to translate into brick or stone the vision they hold of the sort of house the twentieth century should give them.

# The Old Cranleighan Society's Cricket Pavilion Competition: First Premiated Design

W. E. Masters and F. T. Dear, AA.R.I.B.A., Architects



The winners of this competition have planned an economical and symmetrical building on two floors. The disposition of the principal rooms on the upper floor and the changing rooms below, with the projecting verandah and the scoring box as a central feature, give a simple and well-proportioned effect to the design.

# Architecture in the Lay Press

## County Hall Acoustics

At the meeting of the London County Council last week a further attempt was made to find a partial remedy for the defective acoustics of the new chamber by providing the Press with an electrical apparatus to aid the reporters in their task. The experiment, it must be admitted, was not wholly satisfactory. A good telephone voice has not yet been judged a necessary qualification for a councillor, and even good voices require a good chamber. Some of the speeches, as they were received, confused the ears by their exaggerated cadences and others were blurred and dimmed. All speakers, it is true, cannot be followed with equal ease even in a satisfactory chamber, and doubtless the instruments will be improved. Clearly something must be done, if only to prevent or to postpone drastic alterations in the building. When the Council held their first sitting last year the chamber pleased the eye by its fine proportions, marble pillars, and carved galleries, but it baffled the ear by its confusing resonances. In a correspondence which followed in our columns some distinguished men of science directed attention to American researches on architectural acoustics; others urged the need of fundamental investigations in which physicists should assist the constructor. Architects were disposed to absolve Mr. Ralph Knott, the designer of the County Hall, on the alternative grounds that he had followed the known principles of acoustics and that a science of architectural acoustics did not exist. But there was general agreement as to the certain cost and uncertain result of alterations intended to fit the chamber to its primary function as a place of public debate. We see no reason to alter the opinion stated in our original comments. If there be a science of architectural acoustics, its principles have not been applied so as to lead to any but capricious results, and we doubt if any architect would pledge his reputation to acoustical success when he is explaining his plans. We believe that the Royal Institute of British Architects would do well forthwith to consult with experts in physical science, collate existing knowledge, and devise and conduct experiments which would carry architectural acoustics beyond the experimental stage.—"The Times."

## Chesterfield's Pride

The crooked spire of the Chesterfield Parish Church has not many claims on the indulgence of iconoclasts. Those who believe that a church spire should be straight and nothing but straight would have small hesitation in sweeping away this outrage of all architectural convention; this contortionist which succeeds in bending three ways at once. But though its claims are not many, there are two which are strong. In the first place, it is unique. There are not many buildings that succeed in continuing through centuries a defiance of all the laws that should govern their existence. The leaning tower of Pisa is the only one that comes readily to mind; and that achieves nothing more than a straightforward cant; the Chesterfield spire has nearly succeeded in imitating a Jacobean table-leg.

In the second place, the Chesterfield spire is the only known rebel against the poetic tradition that a spire points uncompromisingly and austerely to heaven. There is something to be said for a spire which spends its time in proclaiming the more comfortable doctrine that there is something to be said for making the best of both worlds. When this kink of compromise first made itself manifest in the spire no one can say. In its infancy and youth, presumably, it led an upright existence; but at last the stuff that was put into it began to tell and to pull it off the straight. That stuff was oak, and as the spire was put up in the fourteenth century it was probably English oak. It is not likely that timber would be imported in those days. A lot of things have been said and sung about "English oak," but those who concern themselves with old buildings will tell you that, unless it is used under water, for such purposes as sluice gates, no iron bands can hold in its tremendous power to warp and twist.—"The Manchester Guardian."

## Garden Cities and Their Pioneers

It is not easy to associate the plain, dour North-country habits of Mr. Frederick Litchfield with his pioneer work for the ideal garden suburb or garden city. But the two were in fact intimately associated with a passionate zeal that leaves the critic of either or both suspended, as it were, in mid-air. Perhaps some profound student of human personality can solve for us the riddle of a man whose soul survives the dinginess of routine work in a railway office at Derby and lives to create the Letchworths, the Hampstead Garden Suburbs, and the rest of the idealist housing schemes of which Mr. Litchfield was a pioneer. Some of us, in our cynical moments, like to amuse ourselves with stale jibes at the too self-conscious citizenship of these places; at their primness, their architectural freakishness, their long-haired men, their bobbed-haired women—in short, we suppose, their cranky houses and their even more cranky people. Well, it is still the business of a crank, we suspect, to revolt against dull convention, and if we care to look for him in the garden cities scattered up and down England, we shall certainly find him. But we shall find there, too, in the vast majority just such people as we would wish to find in any intelligent community. The garden suburb is no longer an abnormality. It is fast becoming the normal expression of man's revolt against the complete detachment of household shelter from the good brown earth. An imperfect expression it may be, subject, we should hope, to such amendment as will enable it in the next generation, if not in this, to become a self-contained community and not a mere modern dormitory. Meanwhile it spares us some of the more obvious evils of the herd instinct, which battened on the industrial revolution.—"The Westminster Gazette."

## Our Ordnance Maps

Whatever else may escape privation during an "economy stunt," a public undertaking which is only indispensable and inexpensive and does not excite any large crowd, tickle any sensational journalist, or give any politician the makings of an attractive agitation, is pretty sure to come off badly. So the Ordnance Survey, the source of nearly all our British maps, is quietly starving, as Colonel Crook reminded us in his excellent address at the Map Exhibition in the Whitworth Hall. The whole history of the Ordnance Survey's map-making forms a rather pathetic tale. At one time or another it has produced fragments of extraordinarily good work—maps so exact that even on the one-inch scale they once showed you almost vividly the whole design of a village, and so beautiful in their engraving that some of us still prefer to walk the hills round Edale with the old hill-shaded map on which there was as yet no railway to be shown. And yet the Survey has never quite given us a full and uniform set of large-scale maps of England thoroughly good all through. You could never be utterly sure that any sheet which you did not already know could be trusted as well as the best of those that you did.

If there were any hope of its success we should try to raise an agitation against the further starving of the Ordnance Survey. Whatever its past faults it has lately done much good work, and the making and using of maps of the various theatres of war in 1914-18 gave a strong new impulse to official cartography. But we fear there are not enough people, all told, who care sufficient about maps of their country's soil to mind whether these are good or bad.—"The Manchester Guardian."

## Colour in Church Buildings

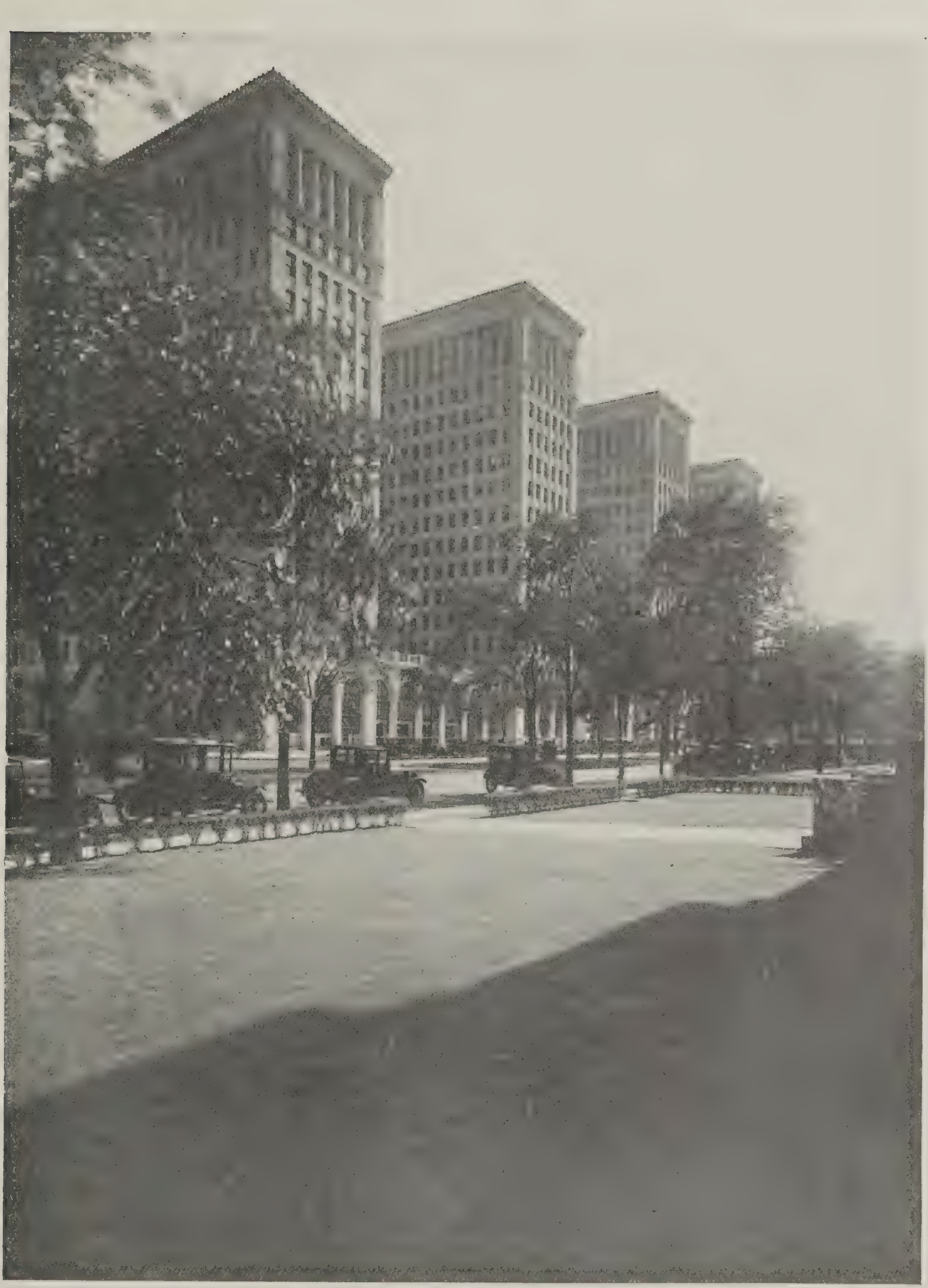
SIR,—Your reference to Mr. Grattan Doyle's plea for warmer tones in urban buildings inspires me to ask whether ecclesiastical architects cannot evolve some brighter designs in the external decoration of church buildings. That the interior of our places of worship should be suitably and artistically adorned is not disputed. But might not the association of beauty and colour with religion be carried further by the use of terra-cotta and vitreous brick and tiles in the outside walls of our churches in the great centres of population where grimy stone and dingy brick impose upon the inhabitants a dreary and depressing environment? Modern processes in the production of ceramics offer to the builder a variety of hues—greens and blues and yellows as well as buff and red; a church on whose walls these colours were æsthetically blended would be a refreshing oasis in a wilderness of bricks and mortar.

Yours, etc.,

ROBERT P. JOHNSON in "The Tablet."

# Modern American Architecture. 39.—Office Building for the General Motors Company, Detroit

Albert Kahn, Architect



The four great bays of this building are typical of the tremendous scale on which the Americans work. There is scarcely a roadway in London which would be wide enough to take such a huge block. The arcading, which is a feature of the lower floors, gives the connecting link between the bays that the eye desires. Our illustration is reproduced by the courtesy of "Kahncrete."

# The Registration Bill

As briefly announced in our last issue the Registration Bill received its first check at a special general meeting of the R.I.B.A. on Monday, January 29.

The importance of the meeting was indicated by the packed audience, about 300 being present. Mr. A. W. S. Cross (Vice-President) was in the chair.

A letter from Mr. Paul Waterhouse (President) was read, regretting his absence and giving an account of an interview he had had with Lord Crawford. Lord Crawford had, he said, expressed the opinion that it would be unwise to introduce any Registration Bill into Parliament unless it had the fairly unanimous support of all sections of the architectural profession. For his own part, he (the President) hoped that the fullest precautions would be taken to avoid any possibility of failure.

Letters from Mr. Gotch, pleading for unification as a preliminary to Registration, and from Mr. Flockton and Professor Reilly, were also read.

Mr. Cross said that all matters relative to procedure during the debate would be carried by the usual majority. For the Bill itself and all deliberations with regard to its various clauses, a two-thirds majority would be required. Mr. Perks would propose the adoption of the Bill, which would, if passed, become an Institute measure.

Mr. Sidney Perks then moved the adoption of the Bill generally, subject to its consideration clause by clause later on. The proposals of those who desired unification before Registration had been rejected at the last Council election, and the present Bill had been to some extent modelled on that of the dentists'. It aimed at giving as little offence to anybody as possible, and contained no provision for any member on the Register becoming a member of the Institute. In setting up an independent register they were following the precedent established by the legal, medical, and dental professions.

They had not heard from the Society of Architects, who had been invited to express their views on the subject, but he hoped that they would be able to come to an agreement.

It was absurd to say that the Bill, if opposed, could not go through Parliament. There had been intense opposition to other Bills, but they had all got through ultimately.

Suggestions from the allied societies had been received, and he thought these had all been embodied in the Bill. The allied societies wanted the old unification scheme, because they wanted to get into the Institute without examination. They were mainly non-members of the Institute, their total membership being 1,944, of whom only 716 belonged to the R.I.B.A.

Opposition to the Bill was only to be expected, but they wanted to find out where it was coming from and how to meet it. It might be from the general public, on the grounds that Registration for architects was simply a trade union. The promotion of a Bill was the only way to find out the true position. It had taken the veterinary surgeons twenty-one years to get their Bill through, but they had done it in the end, and he thought they ought to test the thing and go ahead.

Mr. Charles Heathcote seconded the motion.

Mr. G. A. Middleton said he considered himself nearly the father of the Registration movement. He had been working for it for forty years and would be willing to wait yet another year for the sake of getting a good Bill. It should, he thought, go back for further detailed consideration. In this Bill a board and tribunal had been set up in addition to the Institute. The tribunal was only a committee of the board, and he thought only one of them was necessary. The existence of two bodies would merely multiply labour. The board itself, to consist of forty-seven members, was, in his opinion, over-large for the administration of an Act of Parliament. It was, besides, over-dominated by the Institute, twenty-five of its members being nominated by that body.

They could be turned out at the will of the Council, and he thought this was a mistake. A five years' term of office would be none too long. The board should be a paid one, as most of the work came of practising architects.

In the proposed Act only the words "architect," "architecture," "architectural" were registered, and it would be quite easy to get round that. The same mistake had been made by the dentists and had had to be rectified.

The Bill would kill the Society of Architects—another point in its disfavour. He moved the following amendment :—"That the draft Registration Bill be referred back to the Council for both general and detailed reconsideration before being again submitted to a general meeting."

Mr. Bernard Dicksee seconded the amendment, and said that under the Bill no single member of the Institute was absolutely entitled to Registration. He himself was a district surveyor and not an architect in practice, and would therefore be ruled out.

Professor Beresford Pite supported the amendment, and said the Bill must secure the support of the allied and other architectural societies before it went forward. It did not register satisfactorily, or define the qualifications necessary for registration.

Mr. Gilbee Scott said the principal objection expressed had been with regard to the Board and tribunal. It was to disarm Government and public hostility that nominees of the Privy Council, Board of Trade and Board of Education had been included. They wanted the Institute to predominate, since it represented the majority of architects.

Mr. Herbert Welch inquired whether or no the Council had received the views of the Parliamentary Agents on the Bill.

Mr. Perks replied that the agents had drawn up the Bill.

Professor Beresford Pite wanted to know the views of the Parliamentary Agents on the prospects of the Bill.

Major H. C. Corlette said he did not think the Bill should be referred back to the Council. It was a question whether the Council had any power to bring the Bill before the meeting. They were acting contrary to the charter in reversing a resolution of the Institute—that of 1920.

Mr. Percy Thomas pressed the question as to the chances of the Bill becoming law.

Mr. Scott-Moncrieff thought that if the amendment was passed, there would be a danger of the question of unification before registration being revived.

Mr. Middleton's amendment was then put to the vote, and lost.

Mr. Guy Dawber, saying that he wished to deal with broad principles only, moved that—"This Bill be not considered until the other professional societies and interests affected have been consulted and a general consensus of professional opinion obtained in favour of the Bill."

No attempt, he said, had been made to consult the other allied societies, and no attempt had been made to unify. Why waste time and money when they were so far from agreement? The Society of Architects and the A. and S.A.P.U. were unable to support the Bill, and it was opposed by many of the allied societies. He would like to know whether the Surveyors' Institute and the Civil Engineers had been consulted. He would like to have Messrs. Sherwood's opinion as to the possibility of a Bill going through Parliament. Until they had unity in the ranks, discussion was a mere waste of time.

Mr. Josiah Gunton seconded Mr. Dawber's amendment, and said registration was useless without unification.

Mr. Buckland, speaking as Chairman of the Conference of Allied Societies' Presidents, said that they had made very strong recommendations that unification should precede any attempt to promote a Bill in Parliament. He urged the necessity of obtaining general support for the measure before putting it forward.

Mr Francis Jones and Mr. Edward Warren also spoke.

Major Harry Barnes said that a clear issue was before the meeting. They were not asked to decide between registration and unification, but as to whether they were going to make a further attempt to get a general consensus of opinion in favour of the Bill before they went on with it.

He had been much impressed by the dashing speech of Mr. Perks in introducing the Bill. Mr. Perks was prepared to go on twenty-one years to get it through; but he would like to shorten that period. Could not the profession be united on the Bill? If nothing could be said or done, they were justified in going on, but was that the case? The chances of a Bill would not be improved by differences of opinion between large bodies in the profession. The nurses and dentists had only got their Bills through after substantial unity had been established. How could they meet opposition from the public if the profession itself was divided? Opposition in the House would be engineered in formidable quarters and supporters of the Bill would be torn to rags.

Mr. Dawber's amendment was wise, temperate and judicious. Let them make one more effort to try and obtain unanimity in their own profession.

Sir Aston Webb supported Mr. Dawber's amendment, and suggested that friendly meetings for the discussion of the Bill might be arranged at the Institute.

Mr. Delissa Joseph, Mr. Alan E. Munby (President, York and East Yorks Society of Architects), and Mr. Woodward, spoke in support of the Bill.

Mr. Perks dubbed the unification scheme a " funk-hole," and said he hoped the Council would be allowed to proceed with the Bill.

A vote was then taken on Mr. Dawber's amendment, with the results announced last week.

The Chairman said that the Council would consider the position created by the vote.

On the advice of the parliamentary agents the preamble which appeared in the first draft of the Bill has been omitted, and a memorandum giving the public case for the Bill has been prepared by the Registration Committee with a view to its being printed on the face of the Bill.

The memorandum is as follows :—

It is expedient in the public interest that persons requiring professional aid in architecture should be enabled to distinguish qualified from unqualified practitioners, and that consequently the use of the title "architect" should be confined to persons enrolled under the provisions of this Bill.

The practice of architecture in modern times demands of architects many and varied gifts and attainments, and the spending, in the aggregate, of vast sums of money. Artistic sense, scientific knowledge, practical skill and business ability are some of the essential qualifications for the proper performance of the duties of an architect which involve many questions affecting the life, health, convenience and financial interests of a very large section of the public. It is, therefore, in the public interest to prevent untrained and incompetent persons, styling themselves architects, from imposing upon the community to its material loss and detriment.

The statutory registration of architects involves no new principle. It has already been adopted in British Columbia, Alberta, Quebec, the Transvaal, New South Wales, Western Australia, New Zealand, in several European countries, and in many of the United States of America.

The Bill is promoted by the Royal Institute of British Architects, which acts under the Royal Charter or letters patent of his late Majesty King William the Fourth, and of her late Majesty Queen Victoria, by which the Institute was incorporated, and the supplemental Charter of his late Majesty King Edward the Seventh of 1909. The Institute contains, with its allied societies, the greater part of the architects practising in the British Empire, and is, by its numbers and high standing, eminently fitted to be the controlling body in the examination and registration of architects.

The object of the Bill is to provide for the compulsory registration within three years of the passing of the Act of all persons who are now bona-fide following the profession of architecture, and afterwards of those persons who pass a statutory qualifying examination. The vested interests of engineers, surveyors, builders, or any other persons engaged in constructional building works, or in the preparation of plans, or in the supervision of such works, are not interfered with.

The Bill creates for the purposes of this Act a Board and Tribunal of a thoroughly representative character consisting of representatives of the Privy Council, the Board of Trade, the Board of Education, the Council of the Institute of the Society of Architects, the allied societies, the Incorporation of the Architects of Scotland, the Royal Academy, and all the universities who possess a recognized school of architecture. The Board will determine the standard of examinations, and the Tribunal will determine who, subject to the provisions of the Bill, are proper persons to be enrolled in the register.

# Correspondence

## The Best Building of the Year

*To the Editors of* THE ARCHITECTS' JOURNAL.

SIRS,—It is to be hoped that the R.I.B.A. will adopt the suggestion in your last issue to decorate "the best building of the year" with a plaque setting forth the reasons for the award. I agree that the plaque is the most important part of the scheme.

Unfortunately, many people imagine that because a building is a new one it is good architecturally. Quite recently, on a visit to a provincial town, a native pointed with pride to the latest monstrosity—a new cinema—and coolly informed me that an eighteenth-century building (the best example of architecture in the district, the work of a famous architect) should be pulled down as it was out of date! This is, I am sure, the general notion of a very large section of the public.

It is not enough to state that a building is good. The public should be told "*why.*"

R. HUTCHINGS.

## Whitgift Hospital

*To the Editors of* THE ARCHITECTS' JOURNAL.

SIRS,—As a resident of Croydon I should like to thank you for the stand you are taking in the matter of Whitgift Hospital. It is a disgrace to this town that a majority of its inhabitants should have so little regard for the historic past that they enthusiastically approve the deliberate destruction of a building of such rare distinction as the Whitgift Hospital, and to what end ? A moderate improvement of traffic facilities !—an improvement that Mr. Milnes Emerson has clearly shown in your columns can be secured without disturbing a single brick of the building.

One would think that every conceivable alternative would be considered before the destruction of so venerable a relic were even thought of. Yet Croydonians quite cheerfully say : "It stands in the way of our trams. Pull it down." Really, one begins to despair of the public. After all the educational efforts of Press and platform we still find the same old indifference—nay, antagonism—towards the things that really matter. May Parliament protect us!

" DISGUSTED."

## Records of London's Buildings

*To the Editors of* THE ARCHITECTS' JOURNAL.

SIRS,—A very noticeable feature in our streets to-day is the large number of historical buildings and monuments now undergoing repair, for which work the necessary scaffolding is often of an elaborate character consisting of several stages.

The stone lantern surmounting the dome of St. Paul's Cathedral, the crowning turrets of the Victoria Tower, Kent's cupola at the Horse Guards, Henry VII's Chapel, and Decimus Burton's famous arch at Constitution Hill are conspicuous examples of the praiseworthy efforts now being made by the authorities to carry out these long overdue renovations.

In view of the circumstances to which I venture to call attention, it appears to me that this scaffolding presents exceptional opportunities to architectural students for making careful measured drawings of the buildings in question. I would even suggest that the Art Standing Committee of the Royal Institute of British Architects might well make it its business to acquaint itself with these activities, and advise students through the professional journals—as the occasion arises—that facilities of this kind are available for studying and recording a particular work of architecture.

It might even be possible, and in the interests of architectural study most desirable, for some such committee to request public authorities to inform them beforehand of the intention to undertake repairing work of this description, so that the resulting records might gradually include most of the masterpieces for which London is so justly famed.

FREDERICK CHATTERTON, F.R.I.B.A.

## The R.A. Exhibition

*To the Editors of* THE ARCHITECTS' JOURNAL.

SIRS,—Please grant me space to point out one of the slips in the second part of my critique on the R.A. Exhibition. I refer to that paragraph in which I say that certain craftsmen "against every possible *disability* . . ." etc. The word I intended was *disadvantage*. I wish to point out this mistake in particular because the word "disability" implies a meaning derogatory to the men whose works are so much to be admired.

W. W. SCOTT-MONCRIEFF.

# Mr. Clausen on Decorative Painting

THE lecture room at the Royal Academy was again packed to the doors when Mr. George Clausen, R.A., recently delivered the second of the public lectures being given in connection with the Exhibition of Decorative Art.

Mr. Charles Sims, R.A., who was in the chair, introduced Mr. Clausen, who gave a most interesting account, illustrated by lantern slides, of decorative painting in all times. The term "decorative painting," he said, was commonly understood as referring to paintings on walls or ceilings executed as the permanent decoration of a building. That was the sense in which it had been used by Sir Reginald Blomfield the previous week, and he proposed to go more or less over the same ground, but from the painters' and not the architects' point of view.

He did not altogether agree with this limited point of view, as he thought all painting should be decorative, even that kind which was often referred to rather contemptuously as the easel picture. He did not think that that distinction existed in old times, when work was done because it was required, and painters were prepared to execute large or small works. At present the only living for the painter was from the small picture.

The only difference between the easel picture, a portable thing, and the decorative painting as commonly understood was that the latter had to be designed both in regard to its form and colour in relation to its architectural setting, while the easel picture had no relation to anything outside the boundaries of its frame. But within that the same qualities were necessary as in the large fixed panel—balance, harmony, expression, good colour and composition. It should not be forgotten that those who had given us large monumental work of the utmost grandeur and beauty were also painters of little pictures, and one had only to go to the National Gallery to see that the finest qualities of painting were shown in small works equally with those of large size.

Practically all our painters were painters of easel pictures. It was not that they had not the ability to paint large decorative works, but they had not, and had not had for generations, the opportunity of doing so. A great deal would therefore have to be learnt and we must look to our younger artists to rise to the opportunities which it was to be hoped would be afforded them. There was a growing feeling in favour of their work, for it was widely felt that painting should have its use and purpose as in old times, that there should be a need for it. At present it was only needed for poster advertisements, some of which were indeed of great beauty.

Decorative painting was worth a permanent place, and there was among younger artists a strong desire to employ their talents in that way, a desire which had been greatly encouraged by the establishment of the British School at Rome. South Kensington had had a school of decorative painting for over twenty years, and a serious beginning in that direction had been made in the R.A. schools.

It was to be hoped that the exhibition would awaken and stimulate the interest of our public bodies in this branch of art, for the necessary encouragement must come from them. With few exceptions, our public buildings were dreary and needed adorning, and the talent was available.

The object of decorating a building should be not merely to adorn it, but to express something of its use, of its associations, or of the history of the people concerned with it. In this sense our cathedrals were made living buildings, expressing not only the sacred story, but all sorts of amusing contemporary things. The old artists wanted to say something, to communicate, and in the older painters' work this communication was made in the plainest terms. It was little more than an outline touched here and there with colour—in fact, a description.

All early art was primarily descriptive, like the drawings of children, and as artists gradually learnt to represent things and painting developed it passed, in Europe, from its early descriptive stages through various degrees of realism up to the point where it was almost possible to give the complete illusion of reality.

There were the two opposing tendencies in art, both aiming at representation; the earlier giving, by recording facts, what was practically a description, the other, by recording appearances, aiming at illusion. Somewhere between these extremes was the ideal, and, perhaps, the central position which Raphael and Michelangelo held rested to some extent on the balance and restraint shown in their realism, expression not being sacrificed to it.

The early artist, if he had to represent a man in a passion, would notice the lines of the face, the movement of the body, and this would be the main thing for him to render—he would give the expression. He would not notice whether the man was standing half in light and half in shadow, or how he was relieved against the background; it would be a lesser interest, and would not occur to him. But in later times the study of appearances, such as this, overshadowed the study of expression, to the loss of the qualities which were so valuable in decorative art—simplicity and clearness of statement. Before the pre-Raphaelite movement the primitives had hardly been seriously studied, it was assumed that the later developments of painting sufficed and summed up all perfections. But since then greater attention had been given to primitive art and its basis more closely examined. The beauty of the art of primitive races, of Byzantine and Oriental work, particularly the Chinese, had been recognized, and its relation to early European work studied, and the conviction had grown that the progress of painting towards illusion had not been altogether a gain, that painting, in its search after truth to appearances, had lost something of the force of its early appeal, of its simplicity, expressiveness, and decorative value. Chinese art, in which expression had always been the aim, developed into an art of the greatest possible beauty without the slightest leaning towards illusion.

There was, however, little doubt that the aim of painting in all countries had been to give the effect of reality, but the Eastern mind's conception of this was not the same as the Western. In Europe the early frescoes were pictures frankly painted on the wall. But later came the effort to make the picture part of the room in which it was placed, enlarging the room and bringing the spectator, as it were, into the company of the persons represented, the actual architecture of the room was skilfully continued into the painting.

Such admirable work had been done and in so many different methods that it was impossible to dogmatize and say that one style of painting was decorative and another was not. It all depended on the conditions, the style of the building, and the position and lighting of the work. The full range of colour should not be attempted in this country, there was not light enough. A simple treatment of flattish, well-adjusted tones was preferable in a light and shade modified to suit the building. The situation of a work should determine the weight of its colour, but the artist should aim at enlarging rather than at contracting the boundaries of his room. A decoration that was to harmonize with architecture should have certain qualities that we associated with architecture, a formality in the planning of its groups, and a sense of stability in the figures, with an ease and clearness of design, so that the figures should seem to be naturally employed and their actions understood. The treatment of light and shadow should be simple, and as to colour, it should be clear and harmonious and related to the building. The work of Puvis de Chavannes stood at the head of modern decorative art. His pictures rested happily on the wall and were part of it. In his Pantheon decorations there was no colour darker than the natural shadow of the cornice above them, which apeared to be taken as the key for his work—the dark end of the scale of colours he employed.

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# Public Lectures on Architecture

The public lectures on architecture given at the R.I.B.A. last year met with such great success that the Royal Institute have arranged for a further series during February and March. The lectures will be given in the large gallery in the afternoons on the following dates :—

February 22.—Sir Ryland Adkins (subject to be announced later).

March 1.—Mr. J. A. Gotch. "A Note on the Life of Sir Christopher Wren."

March 8.—Mr. Walter Bayes, A.R.W.S. "Architecture and Painting."

March 15.—Mr. H. S. Goodhart-Rendel. "Architecture—a Necessity or a Luxury?"

March 21.—Lord Sumner. "Architecture and the Public."

It is important that the public should know more of architecture, and public lectures should be arranged by all those societies who have not already done so.

# Reinforced Concrete Calculations for Beginners. VII

By Professor HENRY ADAMS, M.Inst.C.E.

*(Continued from January 17, page 163.)*

WE said in the opening remarks that reinforced concrete building consists essentially of slabs, beams, and pillars. For instance, in a building 76 ft. by 130 ft. the main beams were 12 in. by 26 in. and 25 ft. span, the secondary beams 6 in. by 14 in. at 6 ft. 3 in. centre to centre, and 16 ft. span, the bays being 25 ft. by 16 ft.; the floor slabs 4 in. thick finished with 1 in. granolithic on top, which counts for weight only in the calculations. A small piece of the plan is shown in Fig. 17, the reinforcement was not known, but we can try what would be suitable. In calculating the floor slab the span will be from centre to centre of the secondary beams, 6 ft. 3 in., the effective depth will be 4 in., less, say, ½ in. for cover on the underside. If the load to be carried is 2½ cwt. = 280 lb. per ft. sup., and the slab weighs 5 × 12 = 60 lb. ft. sup., the total load on a width of 12 in. and span of 6 ft. 3 in. will be 6¼(280+60) = 2,125 lb., and the maximum bending moment taking the L.C.C. rule of

$$\frac{WL}{10} = \frac{2125 \times 75}{10} = 15{,}937{\cdot}5 \text{ lb. in.}$$

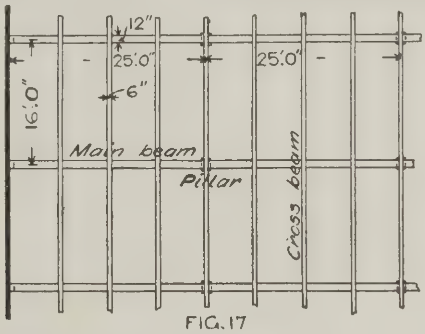

FIG. 17

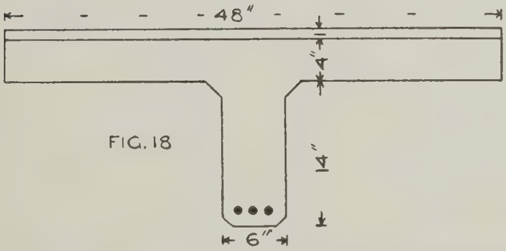

FIG. 18

Assume that the reinforcement consists of ⅜ in. rods at 4 in. centres.

$$p = \frac{\cdot 1104 \times 3}{12 \times 3{\cdot}5} = \cdot 0079,$$

$$m = 15,$$

$$\begin{aligned} k &= \sqrt{(p^2m^2 + 2.p.m)} - p.m. \\ &= \sqrt{(\cdot 0079^2 \times 15^2 + 2 \times \cdot 0079 \times 15)} - \cdot 0079 \times 15 \\ &= \sqrt{(\cdot 00006241 \times 225 + \cdot 237)} - \cdot 1185 \\ &= \sqrt{\cdot 251} - \cdot 1185 = \cdot 3825, \end{aligned}$$

$$\begin{aligned} t &= \frac{B}{p.b.d^2\,(1 - \frac{1}{3}k)} \\ &= \frac{15{,}937{\cdot}5}{\cdot 0079 \times 12 \times 3{\cdot}5^2\,(1 - \frac{1}{3} \times \cdot 3825)} \\ &= \frac{15{,}937{\cdot}5}{1{\cdot}1613 \times \cdot 8725} = 15{,}726 \text{ lb. sq. in.}, \end{aligned}$$

$$\begin{aligned} c &= \frac{2.B}{k.b.d^2\,(1 - \frac{1}{3}k)} \\ &= \frac{2 \times 15{,}937{\cdot}5}{\cdot 3825 \times 12 \times 12{\cdot}25\,(\cdot 8725)} \\ &= \frac{31{,}875}{56{\cdot}23 \times \cdot 8725} = 649 \text{ lb. sq. in.} \end{aligned}$$

An approximate rule for slabs is: effective thickness in inches = ½ span in ft.

The secondary beams, or cross beams as they are sometimes called, would be calculated next. They would, however, not be taken as ordinary beams, but as tee beams, having a section as shown in Fig. 18. The width of flange of the tee beam should be whichever is least of:

(*a*) One-fourth the effective span of the beam.

(*b*) The distance between the centres of the beams.

(*c*) Twelve times the thickness of slab.

Now, $(a) = \frac{16 \times 12}{4} = 48$ in., $(b) = 6\frac{1}{4}$ ft. = 75 in., $(c) = 12 \cdot 4 = 48$ in., the width to be taken will, therefore, be 48 in. The load on this beam will be 4 × 16 (280 + 60) = 21,760 lb. for the flange portion of slab and superimposed load, and 6 × 14 × 16 = 1,344 lb. for the secondary beam; and 21,760 + 1,344 = 23,104 lb. total load. Maximum bending moment,

$$\frac{WL}{10} = \frac{23{,}104 \times 16 \times 12}{10} = 443{,}597 \text{ lb. in.}$$

It will be useful now to give the notation for tee beams:

$m$ = modular ratio = 15,

$d$ = effective depth of tee beam,

$d_s$ = total depth of floor slab,

$p$ = ratio $\frac{A_s}{A_c}$,

$k$ = fraction of depth given by neutral axis from compressed edge

$$= \sqrt{(p^2m^2 + 2.p.m)} - p.m.,$$

$n$ = distance from compressed edge to neutral axis = $d.k.$,

$z$ = when neutral axis falls within slab

$$= \frac{n}{3},$$

$z$ = when neutral axis falls below slab

$$= \frac{d_s}{3} \times \frac{3n - 2d_s}{2n - d_s},$$

$$t = \frac{B}{A_s\,(d - z)},$$

$$c = \frac{2.B.n}{b.d_s\,(2n - d_s)\,(d - z)}.$$

Reinforcement, say, three ⅞ in. rods, 3 × ·6013 = 1·804.

Then $d$ = (say) 16·5, $d_s$ = 4,

$$p = \frac{1{\cdot}804}{48 \times 4 + 12{\cdot}5 \times 6} = \cdot 00675,$$

$$\begin{aligned} k &= \sqrt{\cdot 00675^2 \times 15^2 + 2 \times \cdot 00675 \times 15} - \cdot 00675 \times 15 \\ &= \sqrt{\cdot 0102516 + \cdot 2025} - \cdot 10125 \\ &= \sqrt{\cdot 2127516} - \cdot 10125 = \cdot 36, \end{aligned}$$

$$n = dk = 16{\cdot}5 \times \cdot 36 = 5{\cdot}94.$$

Then as $n$ falls below the slab

$$\begin{aligned} z &= \frac{4}{3} \times \frac{3 \times 5{\cdot}94 - 2 \times 4}{2 \times 5{\cdot}94 - 4} = \frac{4}{3} \times \frac{17{\cdot}82 - 8}{11{\cdot}88 - 4} \\ &= \frac{4 \times 9{\cdot}82}{3 \times 7{\cdot}88} = \frac{39{\cdot}28}{23{\cdot}64} = 1{\cdot}66, \end{aligned}$$

$$t = \frac{443597}{1{\cdot}804\,(16{\cdot}5 - 1{\cdot}66)} = \frac{443597}{26{\cdot}77} = 16548 \text{ lb. sq. in.},$$

$$c = \frac{2 \times 443597 \times 5{\cdot}94}{48 \times 4\,(2 \times 5{\cdot}94 - 4)\,(16{\cdot}5 - 1{\cdot}66)} = \frac{5269932}{22452} = 234 \text{ lb. sq. in.},$$

so that the steel shows a little above, and the concrete much below the regular stresses. To equalize this better we can increase the reinforcement a trifle and reduce the depth of concrete, making the reinforcement, say, three 1 in. rods, and reducing the depth of beam by 3 in.

$d = 13{\cdot}5$, $d_s = 4$.

$A_s = \cdot 7854 \times 3 = 2{\cdot}356$,

$A_c = 48 \times 4 + 9{\cdot}5 \times 6 = 249$,

$$p = \frac{2{\cdot}356}{249} = \cdot 00946$$

$$\begin{aligned} k &= \sqrt{(\cdot 00946^2 \times 15^2 + 2 \times \cdot 00946 \times 15)} - \cdot 00946 \times 15 \\ &= \sqrt{\cdot 30393561} - \cdot 1419 = \cdot 4094, \end{aligned}$$

$$n = 13{\cdot}5 \times \cdot 4094 = 5{\cdot}5269,$$

$$z = \frac{4}{3} \times \frac{3 \times 5{\cdot}527 - 2 \times 4}{2 \times 5{\cdot}527 - 4} = 1{\cdot}622.$$

Owing to the reduction of depth and, therefore, weight, the bending moment will now be 428,851 lb. in.

$$t = \frac{428851}{2{\cdot}356\,(13{\cdot}5 - 1{\cdot}622)} = 15{,}321 \text{ lb. sq. in.},$$

$$c = \frac{2 \times 428851 \times 5{\cdot}527}{48 \times 4\,(2 \times 5{\cdot}527 - 4)\,(13{\cdot}5 - 1{\cdot}622)} = 294{\cdot}6 \text{ lb. sq. in.}$$

This gives a reasonable stress on the steel, but still very low on the concrete, which is usually the case in tee beams, and we may leave it at that.

If the whole rectangle of a tee beam be taken, the suitable bending moment is approximately given by B = 40 $bd^2$, and the reinforcement ·33 per cent. For example, in the present case B = 443,597, the width of tee beam = 48 in., then approximate depth =

$$\sqrt{\frac{443597}{40 \times 48}} = \sqrt{231} = 15{\cdot}2.$$

The slab is 4 in., therefore, projection of rib = 15·2 − 4 = 11·2, and we have taken 11 in. The sectional area of 48 × 11 = 528 sq. in., and ·33 per cent. of this is $528 \times \frac{\cdot 33}{100} = 1{\cdot}74$ sq. in., for which we have taken three ⅞ in. rods = 1·8 sq. in.

*(To be continued.)*

# The Week's News

*A London Hospital to be Rebuilt.*

It is proposed to rebuild the Eye Hospital, Marylebone Road, N.W., at a cost of £30,000.

*The Late Sir Ernest George's Estate.*

Sir Ernest George, R.A., left £32,019. The executors may select drawings not exceeding thirty and give them to his friends.

*Ideal Home Exhibition.*

The next Ideal Home Exhibition—the seventh of the series—is to be held at Olympia, London, from March 1 to 24.

*Whitby War Memorial Hospital.*

£10,804 has been subscribed towards the proposed hospital at Whitby. A site has been secured of over 3,000 acres, at a cost of £3,000.

*Blyth Welfare Scheme.*

Blyth miners are going in for a big welfare scheme to cost over £12,000. It is proposed to build a large hall to seat 500 people, a library, and reading, billiard, and ball rooms.

*The International Air Congress.*

The president of the R.I.B.A. has nominated Major Harry Barnes, F.R.I.B.A., to represent the Royal Institute on the General Council of Honour in connection with the International Air Congress, 1923.

*The National Gallery.*

The fire proofing of the roofs of rooms IX and X of the National Gallery has now been completed, and the rooms have been re-opened. The whole of the galleries at Trafalgar Square are thus made available for the first time since the war.

*Proposed Tunnel at Amsterdam.*

It is reported that the Advisory Committee for Public Works of the Corporation of Amsterdam has decided to advise the municipality to lay a tunnel for traffic under the Y, the river communicating with the North Sea canal from Amsterdam to Ymuiden.

*Public Contracts.*

Sir Eric Geddes, President of the Federation of British Industries, has addressed a letter to the Prime Minister, urging upon the Government the importance of placing public contracts, both national and municipal, in the United Kingdom.

*The R.I.B.A. and the Wren Bicentenary.*

The Council of the R.I.B.A. have decided that the annual dinner for 1923 shall take the form of a banquet in connection with the bicentenary celebration of Sir Christopher Wren. The dinner will be held on February 26 at the Hotel Victoria, Northumberland Avenue, London. In place of the usual after-dinner speeches addresses will be delivered by the president, Sir Reginald Blomfield, R.A., and Mr. Mervyn Macartney, F.S.A., dealing with the various aspects of Wren's life and achievements.

*The Tombs of the Kings at Luxor.*

Professor Percy E. Newberry will deliver a lecture on "The Tombs of the Kings at Luxor" in the Lecture Theatre of the Victoria and Albert Museum, on February 9 at 4 o'clock. The number of applications for tickets for the lecture is considerably in excess of the number of tickets available. In consequence, no further applications for tickets can be entertained.

*House Builders' Demand.*

A national housing programme is outlined in a manifesto which has been issued by the National Federation of House Builders. The federation declares that the first step towards a resumption of building is the removal of "the exacting restrictions now imposed by the Rents Restriction Act," which, it is claimed, has intensified the housing shortage.

As some assistance is necessary at present to build houses for the working classes, the Federation advises a cash subsidy to the owner of any new house of an approved type, or, alternatively, an exemption from local rates for a period of years.

*Patents in 1922.*

Messrs. Rayner & Co., of Chancery Lane, London, patent agents, inform us that during 1922 there was an increase of more than 300 patent applications over the previous year. The figures were about 35,500, the second highest on record. For "Wireless Telegraphy" there was a considerable increase in the number of inventions, as there was for reinforced concrete building construction. Numerous patents were taken for labour-saving devices for the household. Aviation patents have gone entirely out of favour and show a considerable decrease. Recent months show a distinct inclination to increasing business in H.M. Patent Office, which should be an indication of better industrial times, as inventions nearly always precede improvements in commerce.

*Mr. W. Haywood on Guide Books.*

"The greatest mistake of our guide books is that they do not stress the things in which we excel or are unique." This statement was made by Mr. William Haywood, F.R.I.B.A., in a lecture at Birmingham. He said that the pre-Raphaelite work in the Art Gallery, the Burne-Jones glass in the Cathedral, the work of the Birmingham School in painting, book illustration, and jewellery; the Shakespeare library, the Watts' collection; illustrations of some examples from each of these, and a simple but scholarly description of the whole, would strike a really distinguished note. These were the treasures peculiar to Birmingham, and they had not made enough of them. They might add to this list—among other things—those portions of arterial and ring roads now completed. These were good evidence of a progressive spirit and of a greater Birmingham. The work of the Repertory Theatre was the work of Birmingham men, and work to be proud of. Let the stranger be told and shown these things attractively, for without them he could not properly grasp what Birmingham meant.

*The British Empire Exhibition.*

Passengers through Wembley by the Metropolitan, Great Central, and London and North Western railways, although they miss the old Watkin Tower, so conspicuous though never finished, have a new landmark in the Empire Stadium. This great steel and concrete structure stands on the crest of the hill in the parklands once owned by the monks of Kilburn Priory. It is built, in fact, on the very site of the old Watkin Tower. But it is not the Stadium alone that informs railway travellers of the site of the exhibition. Great hoardings now proclaim the fact at every one of the four local stations—one at Wembley Park on the Metropolitan line, two of 40 ft. by 15 ft. at the Wembley-Sudbury Station (L. & N.W.R.), two others of the same size on the same company's North Wembley Station (Euston to Watford), and the largest of all, 80 ft. by 12 ft., on the Great Central Coy.'s Wembley Hill Station. At the fifth local station notice boards will not be necessary; it will be actually within the exhibition grounds. An illustrated article by Mr. Percy Marks, Licentiate R.I.B.A., dealing with the progress of the exhibition was published in a recent issue.

## The Chevalier's House, Exeter

On page 246 we illustrate the Chevalier's House, which is to be sold under an order of the Chancery Division, by Messrs. Debenham, Tewson, and Chinnocks (Cheapside). James Crocker, the architect, regarded the house as "by far the best example of seventeenth-century work in Fore Street, Exeter. The architectural features are as faithfully preserved as when first fixed in place." The oak panelling has been painted, but that could be easily remedied, if desired. The original winding oak staircase leads to what must have been the "withdrawing room." The timbers of the ancient window frame, in the first floor, have the marks of the adze with which the carpenter worked. The plaster ceiling is one of the earliest of the more elaborate style, and it is not the only specimen of early ornamental plastering in Exeter. There is an old secret recess, concealed by panels.

## Clay as a Building Material

Mr. H. J. C. Johnston, president of the Institute of Clayworkers, in a lecture at the London Polytechnic on "The Story of Clay," illustrated his remarks by cinematograph films of various brick and terra-cotta works. The "Brighter London" movement, he said, had created renewed interest in ceramic constructional materials for city buildings, as terra-cotta and glazed bricks were the only materials of a permanent character by means of which colour in architecture could be introduced. Mr. Halsey Ricardo and others had shown how the quiet shades of ceramic material, used with stronger colours in special features, could produce highly artistic results.

Although glazed bricks had been very effectively used for the elevation of a number of London buildings, the principal part they had to play in brightening life was to aid sanitation and general welfare by their use in factories, areas and wells of office blocks, hospitals, schools, swimming baths, railway stations, etc. The English manufacturers of glazed bricks had reached a standard unequalled by those of any other country, and their products had been used extensively in all parts of the world. Mr. Johnston gave interesting data on the comparative durability of clay and other constructional materials, and pointed out that the materials the use of which he was advocating were absolutely fireproof.

## Mr. Albert Rutherston at the A.A.

"The Artist Craftsman in the Theatre of To-day" was the subject of discussion at last week's meeting at the Architectural Association. Apparently the subject is a painful one; speaker after speaker dwelt on the gloomy nature of the present outlook.

We really had no theatre in this country to design for, said Mr. Rutherston. Until we had something stable—a theatre independent of accident, or passion, or chance, or stockbrokers, and supported by the country, as the police, Navy, and Army, were supported—we should not reach a higher standard either in acting or design. There were very talented actors and actresses, and also designers; but those who stood for finer things in art had to compromise. If we had in this country a permanent national theatre in which people interested in stage-designing could work and experiment, they might be able to do great things; but, as matters stood, it scarcely seemed worth while, and he saw no career before the architectural student who thought of taking up designing for the theatre.

Mr. C. W. Ellis thought the suggestion that we might take a few risks with the Army and Navy in order to get a better theatre was worth consideration. The way to get a finer theatre was to work together to make the mere commercial productions a failure, and in order to do that it was necessary to catch the critics, who had considerable influence, but who, unfortunately, were for the most part unfit for their job.

Mr. Geoffrey Whitworth said it was almost tragic that the modern theatre was unable to make use of the undoubted talent which existed in many quarters, and which could raise it from the rather disreputable place it occupied to something delightful. There were productions like the "Beggar's Opera" and "Polly" which owed a great deal to the pioneer work of the band of artists who, before the war, under Mr. Granville Barker, were showing English people what could be done in the theatre; but, in general, theatrical production had not improved from the purely æsthetic point of view. He suggested that architects should take the matter in hand and build a national theatre in London, in which they could incorporate all their highest ideals.

Mr. W. J. Turner thought that Mr. Rutherston erred on the side of idealism. Ninety-nine per cent. of the potential architects present would be bad architects. (Laughter.) This was regrettable, but true. Let them leave out the question of inspiration, but help with organization; each individual must decline to support a bad theatre or a bad play.

Mr. C. W. Ellis asked how architects were to get employment in the theatre.

Mr. G. Norman thought that architects should design theatres, but that the decoration should be left to craftsmen like Mr. Rutherston.

## Town Planning

The Minister of Health thinks it desirable, in connection with the administration of the Town-Planning (General Interim Development) Order, 1922, to issue some further guidance to local authorities. If there is not an approved town-planning scheme in force local authorities have now power to prevent development which complies with the by-laws or other statutory provisions in force. The Minister considers that the presumption should always be in favour of the person who wishes to undertake development. Town planning is new, and it would not be right to attempt so close a control at the early stages as may later be warranted. It is highly desirable that cases should be settled locally.

## R.I.B.A. Council Meeting

Following are notes from the minutes of the last meeting of the Council of the R.I.B.A.:—

Unification and Registration.—The Council received a deputation representing the members of the former Unification and Registration Committee and consisting of Mr. H. T. Buckland (F.), chairman of the Conference of presidents of the Allied Societies; Mr. E. J. Sadgrove (F.), former vice-president of the Unification and Registration Committee; and Major H. C. Corlette (F.), representative of the architects in Australia on the committee. The deputation urged the Council to permit the committee to complete its work and present a report. The Council decided not to accede to this request.

British Non-Ferrous Metals Research Association.—The Council made the usual annual grant of £10 in aid of this research.

Tenders without Quantities.—The Council, on the advice of the Practice Standing Committee, decided to make a protest to the Margate Corporation against its action in inviting tenders for a building costing £20,000 without supplying quantities.

The Rent Restriction Act.—It was decided to make representations to the Rent Restriction Act Committee with regard to the hindrance to large building operations which is caused in some cases by the working of the present Act.

Brechin War Memorial Competition.—Members and Licentiates of the Royal Institute of British Architects must not take part in this competition, as the conditions are not in accordance with the published regulations of the Royal Institute for architectural competitions.

R.I.B.A. Prizes and Studentships.—The report of the Board of Architectural Education on the award of the R.I.B.A. prizes and studentships was approved.

# London Building Work

*Following is a list of the building work which has been, or is about to be, started upon, in the Commercial Road East area of London:—*

| JOB. | ARCHITECT. | BUILDERS. | WORK. |
|---|---|---|---|
| Messrs. Charrington, Ltd., Anchor Brewery, Mile End Road. | Messrs. Bradford and Sons, 12 Regent Street, W. | Messrs. F. and H. F. Higgs, Ltd., Station Works, Hinton Road, S.E.24. | Extensive additions and alterations, vat house and plant. |
| 97 Mile End Road. | Mr. F. S. Coles, 40 Craven Street, W.C.2. | Messrs. Franks and Simons, 354 Mile End Road. | New building, restaurant and flats. |
| Messrs. Wickham, Ltd., 65 &c., Mile End Road. | Messrs. Jay Evans and Son, 34 High Holborn, W.C.1. | Messrs. Parker and Sons, Ltd., 124 Sumner Road, S.E.15. | Extensive additions and alterations to drapery establishment. |
| Messrs. Mann, Crossman, and Paulin, Ltd., Brewery, Raven Row. | Mr. William Stewart, 4 Aldgate, E.C. | Messrs. Holland and Hannen, Belvedere Road, S.E.1. | New steel-framed building, bottling stores. |
| Ford Motor Co., Ltd., 39 Commercial Road. | Mr. E. H. Abbott, 6 Warwick Court, W.C.1. | Messrs. Fram, Ltd., 135 Grosvenor Road, S.W.1. | New reinforced concrete building, garage, etc. |
| Jewish Hospital, Stepney Green. | Messrs. Joseph and Sons, 2 St. Paul's Bakehouse Court, E.C.4. | Messrs. Gaze and Sons, Ltd., 23 High Street, Kingston-on-Thames. | Additions—laboratories. |
| Seamen's Hostel, Commercial Road. | Messrs. Daniel and Parnacott, 36 Victoria Street, S.W. | Messrs. G. E. Wallis and Sons, Broadmead House, Panton Street, S.W. | New steel-framed building. |
| Messrs. Hubbucks, Ltd., Broad Street. | Mr. E. J. Gosling, 1 Verulam Buildings, Gray's Inn. | Messrs. Curtis and Sons, 24 White Horse Street, E.1. | New reinforced concrete building, chemical manufacture. |
| Electric Power Station, Harrow Street. | Stepney Borough Council, Mr. Bernard J. Belsher (engineer). | Messrs. J. Jarvis and Sons, 8 Wormwood Street, E.C.2. | Additions and suction plant. |
| Messrs. Lendrums, Keepier's Wharf, Harrow Street. | Mr. Victor Jackson, 4 Finsbury Square, E.C. | Messrs. Walter Jones and Sons, 64 Victoria Street, S.W. | New reinforced concrete building, paper warehouse. |
| 86A White Horse Street. | Mr. J. C. Codrington, 191 Bishopsgate, E.C. | Messrs. Shurmur and Sons, Ltd., Riverside Works, Upper Clapton, N.E. | New building, club. |
| 438 &c., Mile End Road. | Mr. C. A. Aish, 22 Bedford Street, W.C. | Messrs. Cohen Bros., 103 Mile End Road, E. | New building, shops and flats. |

## London County Westminster and Parr's Bank

The annual ordinary general meeting of the shareholders of the above bank was held at the head office, 41 Lothbury, E.C., on Thursday of last week. Mr. Walter Leaf (the chairman) presided.

The chairman said it was with somewhat mixed feelings that they must all look back upon the year through which they had just passed. The year had been for this country one of stabilization. Fiscally we had been engaged in stabilizing the £. This had been effected by just balancing the Budget and leaving nothing over for the payment of debt. We had thus avoided adding to the suffering involved in deflation, and had escaped the far greater evils which accompanied inflation, ills of which Germany was at present giving us a terrible example. The result of this policy was that prices during 1922 had been remarkably steady, and the purchasing power of the £ had been stabilized. Having detailed factors which went to show that we were on the way to recover through reduced prices the position we held in international trade before the war, the chairman went on to speak of the dark cloud of unemployment, which he showed was essentially a world phenomenon.

Of course, we felt the burden of taxation which honesty involved, and so far as the urgent cry for relief took the form of an insistence on reduced expenditure—the one means by which taxation could be legitimately reduced—it must have all our sympathy. But when one saw suggestions that we should not attempt to pay our way, that we should accept a deficit in the Budget and borrow the money in order to relieve the burden of the moment by throwing it vaguely somewhere on the future, then it was time to raise the voice of protest.

The immediate problem of unemployment depended on the prospect of such an early improvement in trade and industry as would afford the natural, and therefore most efficient, remedy for the present troubles. The Continental outlook at least was not encouraging. Having commented on the position farther East—in Russia, China, and India—the chairman went on to say that, in spite of the adverse conditions, there were definite signs of a strong trade revival which was already doing something to diminish unemployment here, and seemed likely before long to do a great deal more.

Finally, the chairman referred to the internal affairs of the bank, and dealing with the bank's balance sheet, he said, like all other institutions, they showed a diminution in the amount lodged with them. This he did not regard as evidence of continuing deflation, though it was the result of deflation in the past. The fact that prices had remained steady, with a slight tendency to rise, was, in itself, a proof that there had been no deflation during the past year. Their total profits showed a shrinkage, but this again was an experience the bank shared with its competitors; but on the whole the shareholders would, he hoped, feel that the results were not unsatisfactory. The year had, for pure banking profits, been rather a lean one, but, on the other hand, the appreciation in the value of investments had made up behind the scenes for a good deal that they had missed in other ways.

The report was unanimously adopted, and other formal business transacted.

At a special meeting, which followed, an extraordinary resolution was submitted to change the name of the bank to "Westminster Bank Limited." The chairman said that there was no part of their name to which a certain amount of goodwill did not attach, and there was not a word in their long name which they could surrender without a certain amount of regret. It was only because they strongly felt that the advantage of shortness outweighed the value of any part which they gave up that they put the resolution before the shareholders. The resolution embodying acceptance of the change of name to "Westminster Bank Limited" was agreed to.

A cordial vote of thanks to the chairman closed the proceedings.

## Coming Events

*Wednesday, February 7.*

Northern A.A.—Visit of the R.I.B.A. president, Mr. Paul Waterhouse, Annual Dinner, County Hall, Newcastle.

Royal Academy.—"The Influence of the Arts and Crafts Movement on Architecture." By A. R. Powys.

Institution of Structural Engineers.—Annual Dinner.

*Thursday, February 8.*

R.I.B.A. Chadwick Lecture.—"London's Unhealthy Areas: the Possibility of their Elimination." By G. Topham Forrest.

Institute of Mechanical Engineers, Midland Branch. — "Escalators." By Cyril Poole.

Birmingham Town-Planning Lecture. —"The Importance of Environment." By John Robertson, C.B.E., M.D., B.Sc.

University of London Public Lecture on "The Acoustics of the Auditorium." By G. A. Sutherland, M.A. 5.30 p.m.

*Friday, February 9.*

Royal Technical College Architectural Craftsmen's Society.—Open night.

Town-Planning Institute.—"Relation between Health and Site and Use of Site." By Professor F. E. Wynne, M.B., D.P.H.

*Saturday, February 10.*

A.A. Visit to Westminster Hall Roof.

*Tuesday, February 13.*

Art Workers' Guild.—Annual Shrovetide Revels.

### *The Institution of Structural Engineers' Annual Dinner.*

The annual dinner of the Institution of Structural Engineers is to be held at the Savoy Hotel to-day. Speakers will include Lord Riddell, Mr. Justice Darling, Major-General Sir Sefton Brancker, K.C.B. (Director of Civil Aviation), Sir Charles Ruthen (Director-General of Housing), and the Rev. F. H. Gillingham (the Essex cricketer). As on former occasions, the seating accommodation (250) has already been over-subscribed for by the members, and in future years it is hoped to find some banqueting hall to seat 500.

## List of Competitions Open

| Date of Delivery. | COMPETITION. |
|---|---|
| Feb. 28 | Scheme for the distribution of drinking water for the town of Mantes-sur-Seine. Apply Mairie, Mantes, or at the offices of La Renaissance des Cités, 23 Rue Louis le Grand (11c). Premiums: 4,000, 3,000, and 2,000 francs. |
| March 31 | War Memorial for Port Said, Egypt, to the memory of the soldiers of the Australian and New Zealand Forces who fell in Egypt, Palestine, and Syria during 1916, 1917, and 1918. Premiums: 250 guineas, 100 guineas, and 50 guineas. Apply High Commissioner for Australia, Australia House, Strand, W.C. |
| March 31 | War Memorial in Crow Nest Park, Dewsbury. Assessor, Professor C. H. Reilly, O.B.E., M.A., F.R.I.B.A. A copy of the conditions together with plans of the site may be obtained on application to Mr. H. Dearden, A.R.I.B.A., Borough Surveyor, Town Hall, Dewsbury. on payment of one shilling. |
| June 30 | Bridge over Nygaardsstrommen in Bergen. Apply Department of Overseas Trade (Room 50), 35 Old Queen Street, Westminster, S.W. 1. |
| No date | New Town Hall for Cork. Limited to Architects living or practising in Ireland. |
| No date | Concert Pavilion to seat approximately 2,000. Estimated cost £100,000. Assessor, Sir Edwin Cooper, F.R.I.B.A. Premiums: £300, £200, and £100. Apply Town Clerk, Municipal Offices, Bournemouth. Deposit £2 2s. (cheque). |
| No date | The Crown Agents for the Colonies, acting on behalf of the Government of the Straits Settlements, invite competitive designs for the reinforced concrete work required in connection with the construction of a new general post office at Singapore. Tentative designs, for which no fees will be paid, are required in the first instance, from which it is proposed to select a design and specify its adoption in the contract for the construction of the building. The firm whose design is so adopted will be subsequently engaged to prepare full detail plans, specification, quantities, &c., for an approved fee. Drawings can be seen and further details of the competition obtained from the Crown Agents for the Colonies, 4 Millbank, Westminster, S.W. 1, quoting Z/Straits Settlements 5664. |

## Competition News

### *Salford Union Homes.*

The plans of Mr. Charles Swain, Manchester, for the erection of homes on land adjoining the Salford Union Infirmary at Hope have been approved by the Board. The estimated cost of the buildings is £48,454.

### *Colombo Town Hall and Municipal Buildings Competition.*

The following awards have been made in the competition for the proposed new municipal offices for Colombo: First, Mr. Joseph Edwards, M.A., A.R.I.B.A.; second, Mr. W. H. Bourne, F.R.I.B.A., assistant consulting architect to the Government of the United Provinces, Allahabad.

### *Hills Estate, Douglas, Competition.*

The design of Mr. N. H. N. Darby, P.A.S.I., of Liverpool, has been awarded first place in the Hills Estate, Douglas, Isle of Man, competition. The second place was secured by Mr. Ewart Crellin, of Douglas.

## Rates of Wages in the Building Trade

During the past month the only alterations made in the rates of builders' wages in the provincial towns were at Salisbury and Stonehaven. In the other towns the rates remain the same as those published in our issue of January 10.

Wednesday, February 14, 1923

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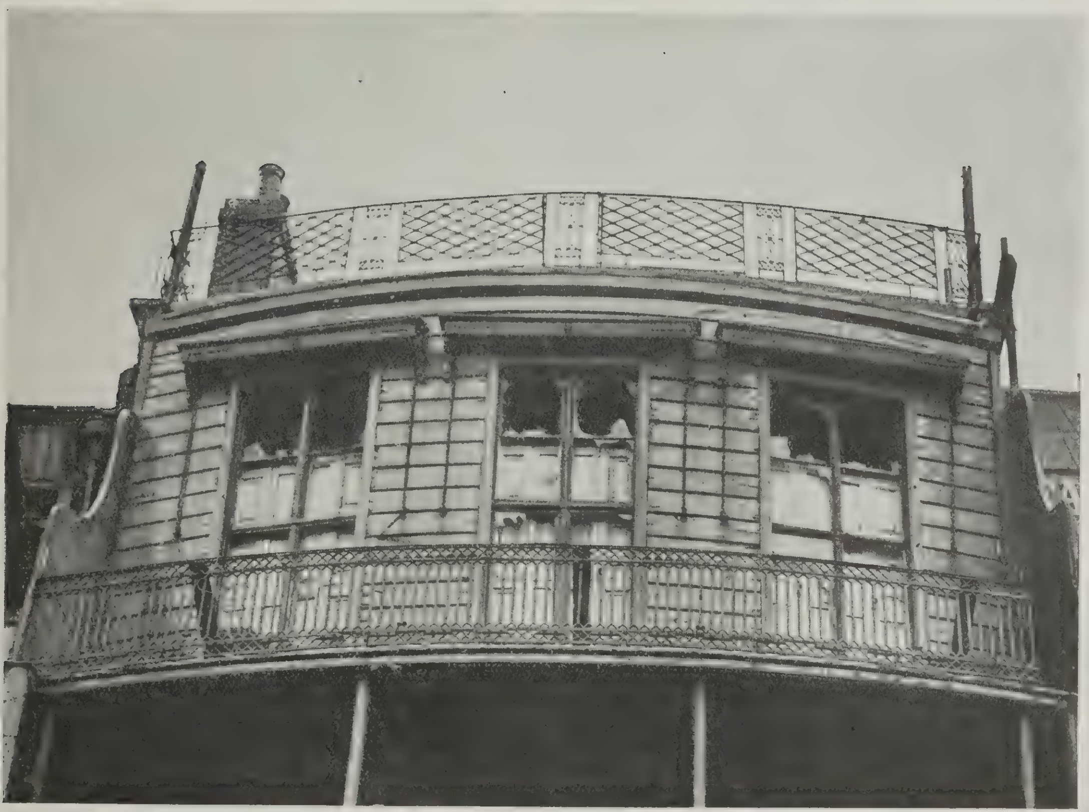
# THE ARCHITECTS' JOURNAL & Architectural Engineer

*With which is incorporated "The Builders' Journal."*

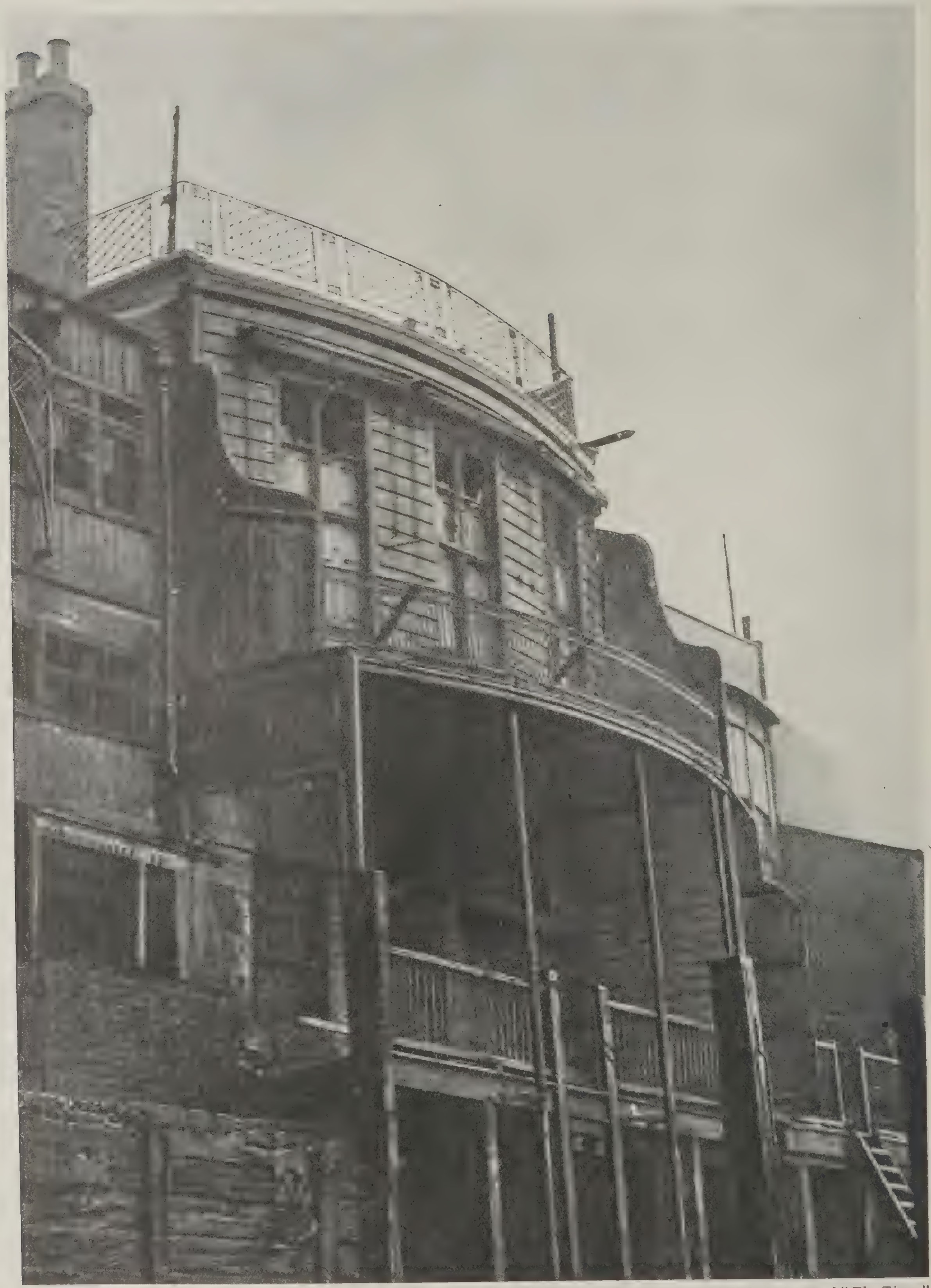


[*Reproduced by courtesy of "The Times."*

A LIMEHOUSE LANDMARK:
THE OLD HARBOURMASTER'S HOUSE, WHICH IS TO BE DEMOLISHED.

27-29 Tothill Street, Westminster, S.W.1.

# Architecture of the Eighteenth Century. 19.—The Old Harbourmaster's House, Limehouse



*[Reproduced by courtesy of "The Times."*

The old harbourmaster's house at Limehouse is marked down for demolition. It is out of use and deserted now, and urchins have flung stones through the glass of the windows. The house is of the Queen Anne period, and was once a handsome structure. The frontage to Narrow Street is probably as the eighteenth-century builders left it, but a big room, with curved French windows giving on to a balcony overlooking the river, was probably added in Georgian days. There is a flat roof with a decorative protecting grille.

THE
ARCHITECTS' JOURNAL
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Wednesday, February 14, 1923 Volume LVII. No. 1467

# Why not a Publicity Campaign?

PUBLICITY has become an integral part of the fabric of modern organization. No one, neither monarch nor tradesman, politician nor actress, can afford to dispense with it. A well-known and popular author was once heard to exclaim, "I do not feel *safe* unless my name appears in at least one paper every day." In the turmoil of modern life the insistent hammer-beat of the publicity agent is essential to keep the public up to the mark, whether it be to buy a patent pill, to visit a farce, to read the best-seller, or to vote for a politician. The excuse for the procedure, which is one that must be objected to by many more sober-minded citizens, is that it works. People do buy the pills, visit the farce, read the best-seller and vote for the politician. The actual mental process entailed must be left to the psychologist to explain; the end is said to justify the means, and the means vary. They vary from blatancy of illuminated sky-signs to the subtly-worded news paragraphs, from the polychromatic hoarding to a photograph of the quiet "home-life," from systematic circularizing to a parade of strange sartorial sandwichmen, and from sporadic stunts to carefully organized campaigns.

If a trade or an organization wishes the public to buy its goods, or to patronize its services, it must resort to some sort of publicity. Even those organizations which would appear to have a monopoly cannot afford to dispense with advertisement. It might, for instance, be thought that Londoners must patronize, in their millions, their underground railways, whether or no they are urged to do so by pictorial or statistical posters. So, too, it might be thought that people must build without an external stimulus to urge them to it. Yet we know they are holding back: they have waited so long, that procrastination has indeed become their medium of existence, and if they scent the change of a fall in prices they will defer again. Those who know, however, realize that now is the moment for building—now, and through the coming year. Why, therefore, should not the building trade come into line with other great trade organizations and, resorting to publicity, force home to a pusillanimous public the necessity of building now?

We read of a prolonged publicity campaign which is to take place in America during the coming year on behalf of the book trade, urging, month by month, the American citizen to buy books—books to educate himself and his children, books to entertain and to amuse, books to increase his efficiency and to widen his outlook, books for the fireside and books for the holiday. The American booksellers are combining to strike this note everywhere and to turn every occasion, every season and every event into a cogent reason for book-buying. Yet the book trade is in no way so much in need of patronage as the building trade. Is this not then an example which might be followed on collective lines by the building trade organizations? A persistent note must, by dint of constant reiteration, strike a way into the brain of the British public so that it is finally convinced that now or never is the moment for building!

The exact lines along which a campaign should best be conducted we are not in a position to suggest. There are those who have made publicity their particular study and who know to a nicety what measures and artifices, what subtleties and blatancies to employ in order to influence public action. To such we would leave the actual organization of the campaign. Let it be understood that what we are urging is no mere competitive advertising between firms having similar goods to market or similar services to offer, but a combined undertaking on the part of all building trade organizations to sear into the public consciousness the necessity of building now. Incidentally there are certain misconceptions that might be removed. One is, that there is a particular building season. Modern materials have enabled the modern contractor to transcend the limitations of the seasons, and building operations can now proceed at all times of the year. Another incidental service which such a campaign might perform would be, by implication and suggestion rather than direct request, to persuade every prospective building-owner to employ proper architectural services. Every contractor prefers a job of which an architect is in charge, and although the public, until recently, seemed to be losing sight of the difference in function between the architect and the builder, the nation would soon suffer if it failed to avail itself of services which, by training and temperament, the architect is particularly qualified to supply.

We do not doubt that the result of such a campaign, if conducted on *decent* lines, calculated to stimulate and not to offend (a gentle and determined pressure, rather than a harsh aggression), would be in a very short time an immense increase in building activity. We have only to observe how other undertakings have enlarged their scope by just these means which we are advocating. The underground railways have been cited, gas producers afford another example. The public attitude towards building is just now unique. The desire to build is urgent, yet there is a distinct holding back. This is partly due to temerity and partly to uncertainty as to immediate future conditions in the building trade. The prospective builder-owner fears both a rise and a fall. If there is to be a further decline, he will await its advent before signing a contract; if there is to be an immediate rise during the period of preliminary site negotiations and plan preparations, he would resent his lost opportunity and await once more the downward curve! A well-organized publicity campaign, as distinct from mere individual advertising, would do more than anything else to dispel these fears and promote the necessary confidence.

The building industry is organized upon such thoroughly sound and comprehensive lines (it might, indeed, afford an example to other industries) that there should be no difficulty in conducting such a campaign as we have in mind. The Building Trade Exhibition is a publicity undertaking that is immensely appreciated, although its appeal is more to a special than a general public. It might, however, form the basis of a prolonged campaign directed towards the general imagination and made to include every person as a potential builder-owner: the artisan no less than the captain of industry, the village tradesman no less than the vast corporate body, the suburban dweller no less than the landed proprietor. The reverberations of such a building revival as might result from such a procedure would be immense, for the ramifications of the building trade extend through decoration to household equipment and furnishing. Thus a real and important step would be accomplished towards the establishment of a general trade revival which it is the hope of every one of us to see during the coming year.

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## Salisbury's Spire

The spire of Salisbury Cathedral, which has reared its 404 ft. of height above the valley of the Avon for 600 years, is believed to be unsafe, and Messrs. Forsythe and Maule have been appointed to overhaul it. Many years ago it was found to be 23 in. out of the perpendicular, but this was not regarded as a dangerous inclination. It is now feared, however, that the vibration caused by heavy motor traffic has seriously endangered its stability. Salisbury spire, though exceeded in height by Amiens (422 ft.) and by Strasburg (488 ft.), is infinitely more lovely than these lofty rivals. It grows easily and naturally out of its tower and its tapering lines are as perfect as may be. The timber framework erected as a scaffold during the progress of the building still remains inside the spire and helps to strengthen it. It is arranged in nine stages and weighs about 15 tons. Much interesting information on the construction of the spire, as well as many plans and other drawings, are given in Francis Price's "Antiquities of Salisbury," 1774.

## The New Building Guild

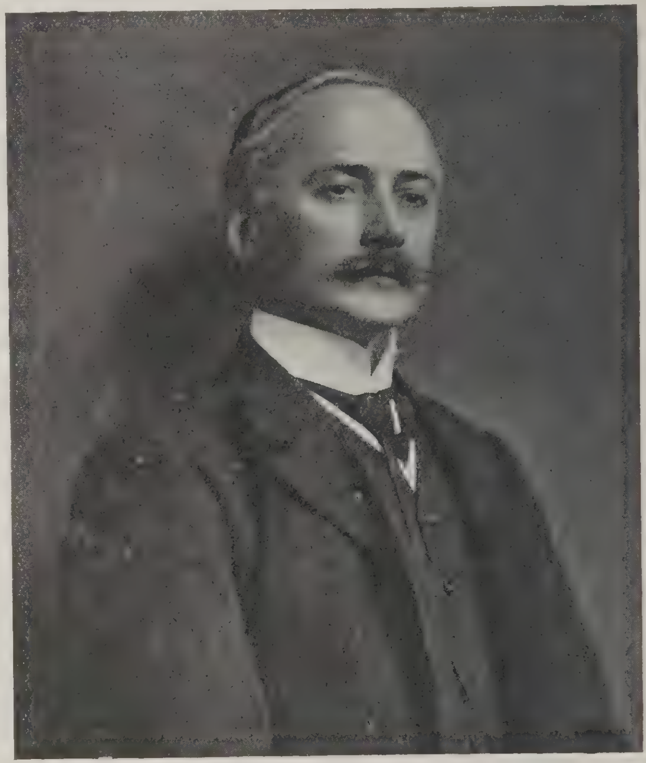
Like the phœnix the Building Guild arises from the ashes of its dead self. "Guild Housing, Limited," is the title under which a number of new Guild contractors, with offices and works at Acton, return to their arduous enterprise. A standard code for Guild contractors has been drawn up and provides, *inter alia*, for the hiring of capital at a fixed rate of interest without powers of control, but subject to withdrawal at suitable notice; for the payment of wages, as far as possible, during bad weather and for holidays; and for the allotment of all surplus earnings to the improvements of service. Administration is on a salary basis. The Guild system, as the promoters frankly admit, has yet to prove that it can not only hire capital successfully, but can also do more efficient work. The new experiment will be watched with interest.

## Protecting the Past

Why is it that those proposing to erect big buildings in London nearly always try to get hold of a site that is already occupied by something of architectural and historical value? There are many, many square miles of ground in London covered by third- and fourth-rate property that is crying out to be replaced; yet this is all passed by as though it did not exist. Covetous eyes seem to turn instinctively towards the things that all well-disposed people wish to preserve. The Masons propose to erect a great temple, and promptly decide to buy up the Adelphi; commercial people want sites in the City, and craftily they tempt the needy Church with offers of much gold for the City churches; a cinematograph company wish to build a picture house, and straightway make assault upon the secluded precinct of a venerable square. Are these people actuated by what Edgar Allan Poe would have called "The Imp of the Perverse," dealing destruction all around in mere malevolent delight of so doing; or are they merely indifferent to all interests except those of personal glorification or money-making? The latter, we fear, is the true explanation. Not till the idea of communal interest and responsible citizenship is generally apprehended may these onslaughts be expected to cease. Until then it is the duty of all who have a respect for our architectural heritage to band themselves together against the invader.

## Sir John Burnet: Royal Gold Medallist

The nomination of Sir John Burnet, A.R.A., R.S.A., F.R.I.B.A., for this year's Royal gold medal will give general satisfaction. It was a foregone certainty, indeed, that Sir John would one day receive the medal; his record of work accomplished clearly marked him out for this high distinction. Sir John Burnet is one of the most predominant and pervasive architects of his time. By example he has done probably more than any of his contemporaries to re-establish a sane tradition of British architecture. He possesses in a rare degree the power of expressing modern structure in truly significant architectural form—an ability that is probably traceable to the fact that while at the Ecole des Beaux-Arts he studied engineering as well as architecture. The natural and perhaps inevitable expression of this training was the Kodak Building in Kingsway—an essay in pure form. But Sir John's reputation is far from depending upon one building; to his credit stand many works of rare architectural distinction both in England and Scotland. In London we have the great British Museum extension, the insurance building in Aldwych, and the giant Adelaide House at London Bridge, now in course of erection—a magnificent architectural treatment of a modified skyscraper—besides many other buildings of lesser importance. In Scotland Sir John's works are legion; among them may be mentioned the Royal Institute of Fine Arts, the Athenæum, the Barony Church, the Infirmary extension, Atlantic and Waterloo Chambers, the Union Bank of Scotland Head Office, all in Glasgow, and many others. One of Sir John's most recent tasks has been the design of some forty war cemeteries in the East for the Imperial War Graves Commission. Sir John was born in Glasgow, the son of an architect, sixty-four years ago. After studying at the Beaux-Arts he travelled in Germany, Italy, and America. Besides the distinctions given above he has those of Hon. LL.D. (Glasgow), and F.S.A. (Scot.). He is also a member of the Société Generale des Architectes Français, and of the American Institute of Architects.



SIR JOHN BURNET, A.R.A., R.S.A., F.R.I.B.A.

# Registration of Architects

### By "OBSERVER"

I CANNOT go back so far as Mr. Middleton and claim to have had a share in drafting the earlier Registration Bills, but I remember the time when any mention at the Institute of Registration or of the Society of Architects was as a red rag to a bull. That was long ago, and the Society began to reap its reward for long and consistent advocacy of the cause when the Institute became converted to registration and began to look about for means by which to accomplish its end.

It was about the time when Mr. Leonard Stokes was president of the Institute and the late Mr. George Bond was president of the Society that the Society of Architects purchased the lease of its premises in Bedford Square. Whether this was taken by Mr. Stokes as an indication that the Society had also entered on a new lease of life, which it was not likely readily to relinquish, I do not know, but the fact remains that the president of the Institute was present at the opening of the Society's new premises, and that shortly afterwards the first feeler from the Institute as to the possibilities of some alliance with the Society on the registration question was put out. This was followed by a tentative agreement between the councils of the two bodies as to the terms of a Registration Bill in principle, and of the conditions under which the members of the Society were to be absorbed into the Institute.

Presently, and for the first time, the president of the Institute was a guest at the Society's annual dinner, which function was generally looked upon at that time as the Society's last of its kind, in view of Mr. Leonard Stokes's statement on that occasion that if there was any honour in the Institute the agreement between the two councils would be ratified by the R.I.B.A. Unfortunately for Mr. Leonard Stokes's reputation as a prophet, the council of the Institute discovered at the eleventh hour that it had no power to enter into an agreement with the council of the Society, which latter body was then on the eve of passing a winding-up resolution.

If these negotiations did nothing else they afforded opportunities for the architectural wits of the day to allude to "flirtations with a flapper" and the coming "bond of union," and no doubt it was this sense of humour which prevented the termination of the negotiations from being taken too seriously at the time, and opened the way to much friendly intercourse between the members of the two bodies, which resulted in clearing away a great deal of misunderstanding and in keeping ajar the door to future conferences on this subject.

It was the circumstances caused by the outbreak of war which followed fast on the breakdown of the negotiations referred to that led to the members of the two organizations working still more closely together on many of the committees which were organized to meet the emergencies of the time, and when hostilities ceased the two bodies were probably in closer relationship in regard to professional matters than at any other time.

It naturally followed that when the Institute was able again to take up the thread of its work in regard to registration, it turned once more to the Society, this time with an invitation to join the Unification and Registration Committee, charged with the duty of drawing up a plan for the unification and registration of architects. The Society came to the conference with a proposal already agreed in principle by its council for the accomplishment of registration by federation, and it was the secretary of the Society who was selected to submit the federation proposal in detail at the same time that the honorary secretary of the Institute was entrusted with the task of submitting an alternative one for getting the whole of the architects in the kingdom into the Institute as a preliminary to registration. From its earlier experience the Society saw the snag in the Institute's proposals, viz., the difficulty of absorbing the members of other bodies and unattached architects into an organization the large majority of whose members were very naturally jealous of the privileges they had obtained after much tribulation.

The committee, however, preferred the Institute scheme, and the Society's representatives, desirous for unity and prepared to subordinate their views if registration could be obtained by other methods, threw in their lot with the majority and worked in support of a proposal which obviously meant the end of the Society by the absorption of its members into the Institute. The Society's representatives proved to be better prophets in their way than was Mr. Leonard Stokes in his, because the position which they foresaw came to pass when dissensions arose between some of the Institute's representatives on the committee, who very strongly objected to "dilution" of the Institute membership by architects who, it was supposed, were to be admitted on preferential terms. The result was that a minority party of the committee, being very much more businesslike than the majority, adopted such tactics as ensured the overthrow of the existing R.I.B.A. Council and the substitution of a new council pledged to registration before unity and the immediate production of a Registration Bill.

The first tactical mistake which the new council made was to alienate many of its friends within the Institute by purporting to disband the Unification and Registration Committee and to discharge its members, the large majority of whom had been appointed by other constituent bodies. Its next tactical error was to draft and present a Registration Bill without consulting other interested parties, and in the meantime to turn down a request from representatives of the Unification and Registration Committee that the committee might be permitted to complete the work which it had been entrusted with on behalf of the whole profession. The logical outcome of all this was that when the draft R.I.B.A. Registration Bill was presented to the Institute meeting on January 29 a resolution was passed that the Bill be not considered until the other architectural bodies and interests had been consulted.

The present position, therefore, is not due so much to any inherent defects which may exist in the R.I.B.A. draft Bill, because there was little or no discussion at the Institute meeting on the Bill itself, but the position is due rather to the manner in which the whole affair has been mishandled on questions of procedure and policy by the council of the R.I.B.A. This is a matter which can very easily be adjusted, and if the final result is the presentation to Parliament of an agreed Registration Bill, no one will grudge the time which has been expended, but not necessarily wasted, in dealing with the matter so far.

The air has been cleared to the extent of demonstrating that the Institute cannot hope to achieve registration except by the good-will of all concerned, and it seems clear that we must approach the problem afresh, and it would be well to do so this time as architects, and not as bodies representing professional men enclosed in water-tight compartments indicating varying degrees of qualification. We are architects first and members of architectural bodies afterwards, and if we can get away from the idea that bargaining for terms of registration and membership between professional bodies is a necessary precedent to registration we shall have gone a long way to securing that unity of thought and action which is an essential preliminary to the achievement of statutory registration.

If some of us in the process are called upon to make what we may consider to be sacrifices, are these not in reality more apparent than real? Are we likely really and permanently to suffer by including in a Registration Bill, as we must do, all bona-fide practitioners of architecture whether they come up to our personal standard of qualification or not? Are these not much more of a menace to us and to the profession generally if they remain outside the fold than they would be if they were brought within its discipline, and is it not better that they should be brought in and controlled rather than be left as free lances who can and do compete with us on very much better terms from outside than they could from inside?

If we hope to attain registration we must protect all vested interests whether we like it or not, and the sooner we do it the better. If the Institute had taken up registration and accomplished it years ago, as it might have done, we should by this time have been wondering why in the past we made mountains out of molehills instead of making one bold bid for success.

The present situation is that of two architectural bodies both pledged to registration in principle, and therefore neither of them desirous of opposing the other on points of detail if it can be avoided. In fact, the only point at issue is one of detail, and inasmuch as the Institute and its allied societies are one body for all practical purposes, and the Architectural Association is closely associated with the Institute and has contracted itself out of architectural politics, the whole matter is narrowed down time after time to the question of an agreement between the Institute and the Society on registration. This being so, and the Unification and Registration Committee having proved to be an unwieldy body largely dominated by the Institute and torn by dissensions amongst the Institute representatives thereon, the way out of the present *impasse* would seem to be in the direction of a small joint Registration Board of the R.I.B.A. and the Society formed to settle their differences on points of detail and to produce an agreed Bill for the registration of architects as such, and not a measure complicated by or dependent on any proposal for a closer union between the two bodies than is indicated by a joint Registration Board.

The advantage of this would be that all contentious points relating to transfers of members, etc., would be ruled out, and each body, while giving due attention to the registration question in the interests of the whole profession, would be free to devote much time, now wasted in controversy on matters which are not essential to the accomplishment of registration, to the development of their respective activities in other directions, such as education and other pressing problems of particular urgency affecting their own members and the profession as it exists at present. The chances are that this joint work on registration would probably lead to joint action in other directions in matters of professional interest, and the energies of the two bodies would become more co-ordinated and conserved while each would preserve its autonomy and continue to fill that useful place in the profession which it has attained by separate endeavour, and foster that spirit of friendly rivalry in the advancement of architecture and the professional interests of architects, which must be to the good of all concerned.

# The New Building for the Swedish Chamber of Commerce

### D. B. NIVEN and H. WIGGLESWORTH, FF.R.I.B.A., Architects

THE Council of the Swedish Chamber of Commerce for the United Kingdom, when determining to build a new home to serve as a focus for Swedish trade interests, showed a happy discrimination in selecting and acquiring a corner site in Trinity Square. Out of the noisy turmoil of the City's militant life, Trinity Square is close to some of the most important commercial markets: Lloyd's Register of Shipping, the Corn Exchange, the Commercial Sale Rooms, the Baltic, are all in the immediate neighbourhood, and the presence of the new offices of the Port of London Authority, which adjoin the Swedish Chamber, is a further notable indication of the growing value and importance of this historic spot.

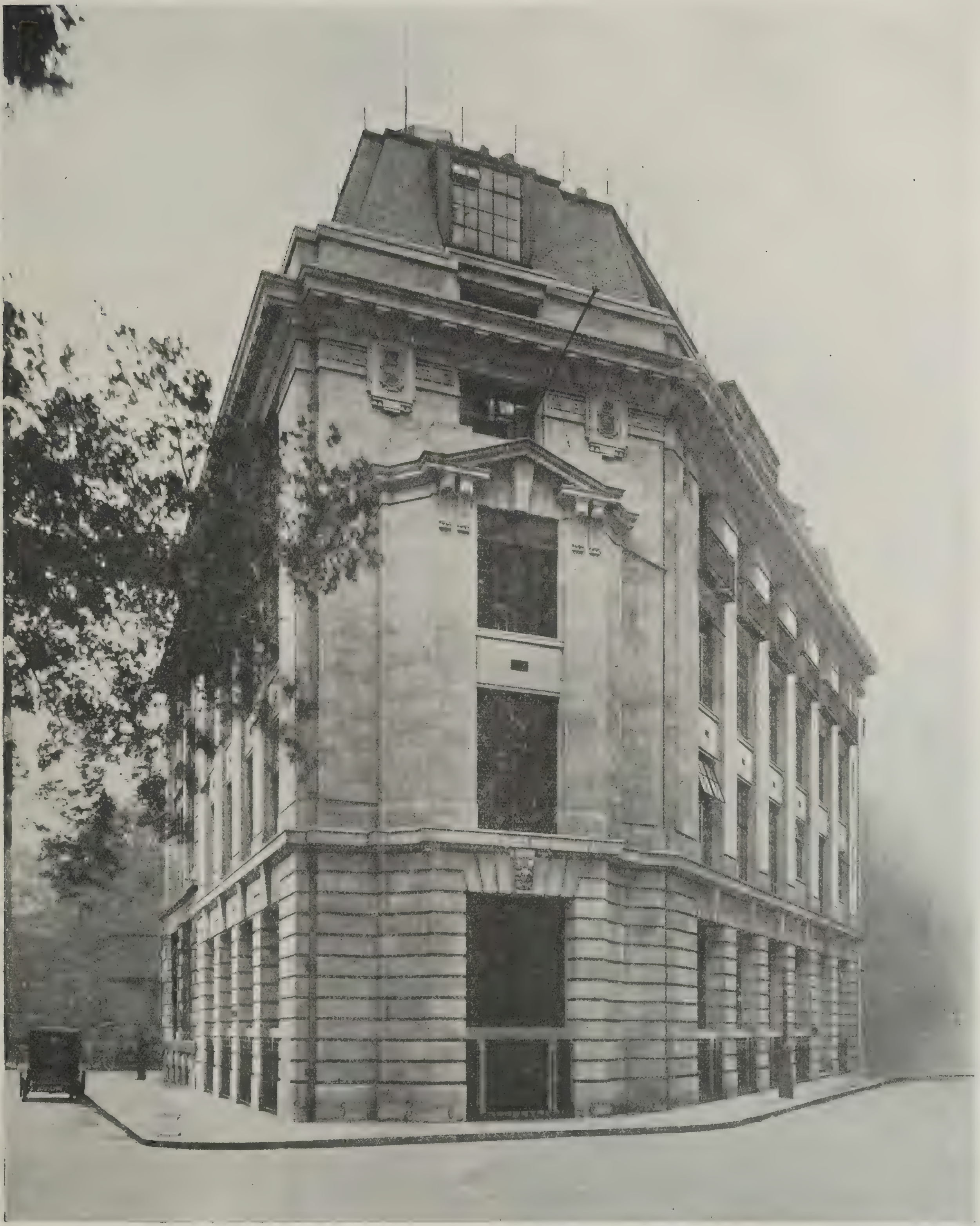
It has been said that "the City" is gradually moving westwards. Perhaps its *arms* are moving westwards, but the erection of such important buildings as this and the adjacent P.L.A., with other big buildings going up in King William Street, Moorgate, and on London Bridge, shows that the London of Wren, the Lord Mayors, and Gog and Magog still has its *feet* firmly planted near the old bridge across which goes, as went five hundred years ago, the greatest business of the day. And large ships cannot pass beyond this point. The bustle and activity on this part of the Thames are enormous. Ships from every nation discharge their cargoes; the river teems with shipping, from enormous steamers to tiny fishing boats.

London is, just here, almost Venetian. The mud-larks dipping their feet into the water from the embankment steps; the red sails of the barges glistening in the "Pool"; the dancing wavelets; the shouts; and, most Venetian-like of all, the dazzling white cupola and spire of Wren's St. Magnus surmounting the near houses at the head of the bridge.

The accompanying plans show the peculiar shape of the site. The rectangular area contiguous to Trinity Square is conjoined to an irregular truncated triangle. The architects, with a view to reserving the larger area for the accommodation of the chamber and offices, placed the entrance hall, staircase, and lavatories at the narrowest end. The three upper floors are occupied by the chamber and its offices, the lower floors being available for tenants. The entrance hall is of generous dimensions. The lift is placed axially with the entrance doorway. The ground floor level is raised some feet above the pavement, so as to ensure good light to the basement offices. The second floor has been sub-divided to meet the needs of the secretaries and staff, and has direct access to the floor above by means of a private staircase.

It will be seen from the plan that the lift faces one upon entering, whilst the staircase ascends upon one's right. In modern buildings of great height it is, perhaps, better that the passenger lift should be made the central, and the stairs a subsidiary, feature. In these days of hurry, only upon occasions of ceremony and leisure has one time to pant up the stairs!

The third floor is for the use of the members. Here is the council chamber, which occupies the whole front towards Trinity Square, and commands a delightful, possibly unique, view of Trinity Gardens, the Tower Bridge, the Tower itself, the Mint, with glimpses of the river and its shipping. Such a view, which would attract everyone, must be especially refreshing to the Swedish people, far from the lakes and fiords of their native land. The level of the main cornice, as determined by the surveyor to the ground landlord, cuts across the chamber at an awkward level, so the windows have been disposed in two storeys, as shown in our illustration. The home-like, domestic character of this room has been obtained without extravagant details. The walls are simply panelled with enriched plaster mouldings, with dado of walnut. The ceiling is coved, panelled, and decoratively moulded. A portrait of



THE SWEDISH CHAMBER OF COMMERCE, LONDON.

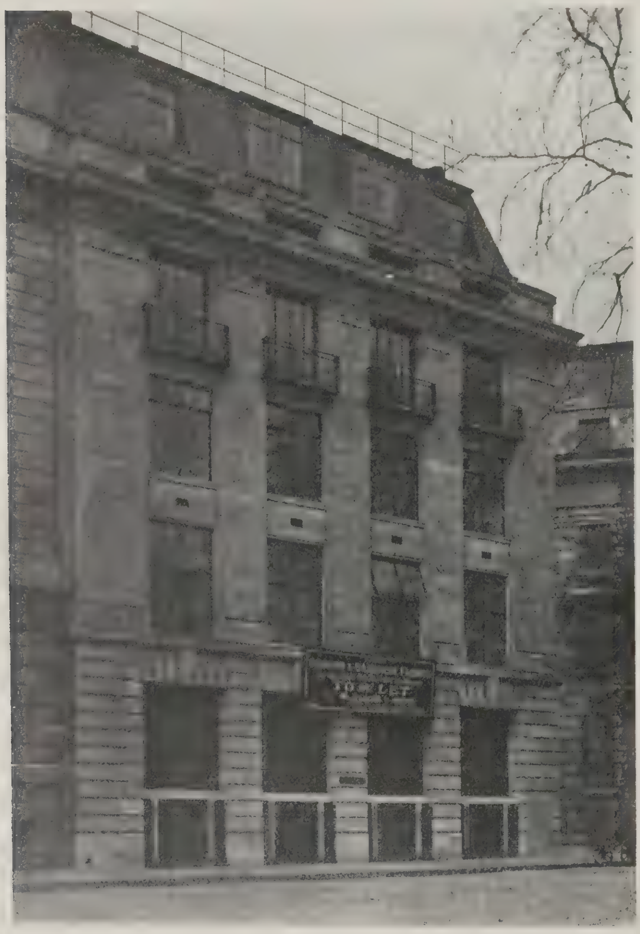
D. B. NIVEN AND H. WIGGLESWORTH, FF.R.I.B.A., ARCHITECTS.

the King of Sweden (presented to the Chamber by His Majesty) adorns the chimney-breast. The Swedish colours, blue and gold, prevail in carpet and curtains, and the rich walnut furniture is copied from the best Queen Anne models, supplemented by some beautiful contemporary specimens.

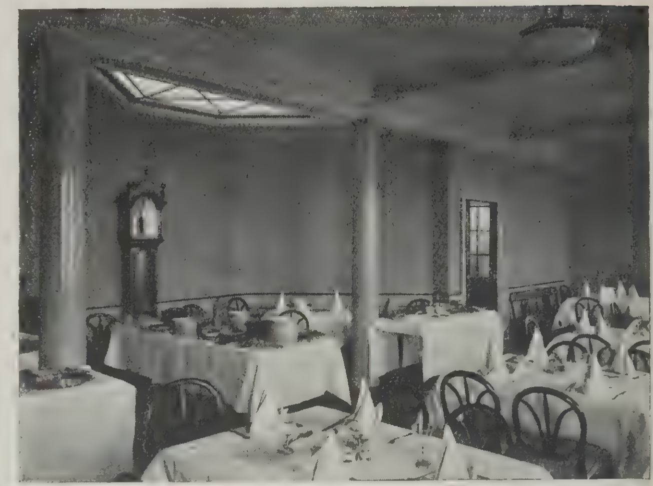
The commodious lounge-hall, which gives access to the council chamber, is equally well furnished. An " antique " portrait of Charles XII hangs in the semi-circular recess of the staircase. The pale face is that of a visionary, and explains to students of history this monarch's romantic and meteoric career. Above the council chamber, upon the fourth floor, are placed the members' dining-room, which we illustrate, and the kitchen and service rooms. The flat roof is a superb vantage point for a bird's-eye view of London. It is proposed ultimately to convert the roof into a garden. Its potentiality for this purpose is very evident.

Neither fantasy nor fashion seem to have swayed the architects' conception of the whole project : rather they have endeavoured to impress upon the building a modern character without sacrificing the vital traditions of architecture. The façades are of Portland stone throughout built in a simple rhythmical sequence of alternating piers and windows carefully proportioned, the whole crowned by a wide projecting enriched cornice. At the salient angle a stone bay has been devised to correct the irregularity of the site and to mask to some extent the awkward angle of Muscovy Street. The position of the wrought iron balconies emphasizes the domestic character and importance of the third and council chamber floor.

The members' dining-room is very well lighted, and its windows look over the river up which Swedish sailors bring their ships. An old-fashioned hob-grate has been refixed in the fireplace, the mantel of which has been kept very simple in design. The oval picture hung above (shown in the illustration on page 290) is also old, and highly valued by the Chamber. This supplies the only touch of colour in the room.



THE SWEDISH CHAMBER OF COMMERCE, LONDON: SIDE ELEVATION.



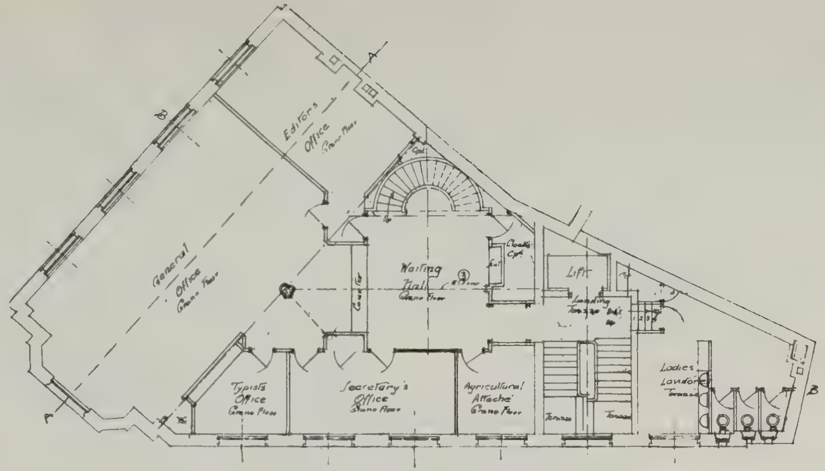
THE CLUB DINING-ROOM.

The skeleton construction of the building is steel, carried upon a raft of reinforced concrete. A raft was adopted to obviate the necessity of excavating to the ballast, which slopes from a considerably lower level down to the bed of the river. One great column was found to be sufficient as support in the central area. This has assured great elasticity in the planning and arrangements of the different floors. The floors, of fire-resisting material throughout, are finished with granolithic, except in the hall and main staircase, where slightly polished Roman stone is used, and some of the more important rooms are of wood block. Gas cooking apparatus is installed in the kitchen, a hood, with horizontal ventilating shaft, carrying off the fumes so effectually that there is an entire absence of smell. The construction and workmanship of the building as carried out by Messrs. Holliday and Greenwood, Ltd., the general contractors, maintains the high standard expected of and given by the best London builders.

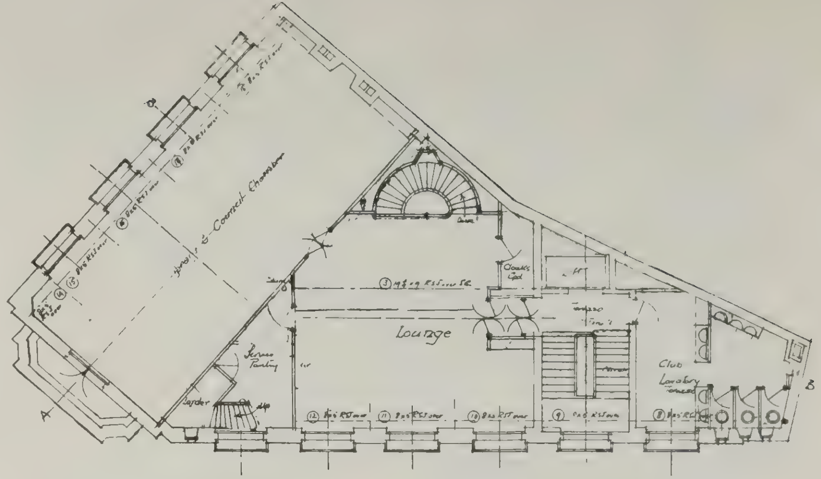
Count Wrangel, the late Minister to the Court of St. James's, laid the foundation stone, with Mr. Branting, the Swedish Premier, acting as sponsor. The building was formally opened by the Crown Prince of Sweden in the presence of a distinguished company representative of State and commerce of Sweden and of the United Kingdom.

Architecture always profits by the close personal interest of clients with knowledge and taste, and this the Swedish community possess in a remarkable degree. The valuable assistance given by the representatives of the Chamber is warmly acknowledged by the architects, Messrs. Niven and Wigglesworth, who found it both helpful and inspiring and consider it contributed largely to the result achieved. The architects also wish to record their appreciation of the valuable services rendered throughout the undertaking by their assistant, Mr. G. Maxwell Aylwin. The Swedish nation, though a small one, is obviously enterprising, and is to be congratulated upon a notable contribution to British commercial architecture.

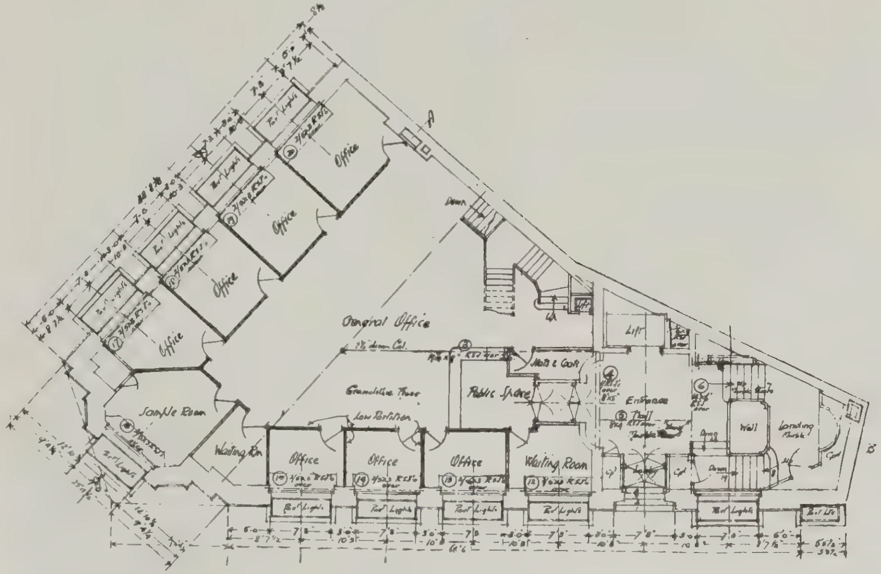
Messrs. Holliday and Greenwood, Ltd., were the general contractors, and the sub-contractors were as follows: Mr. Laurence Turner (carved stonework and chimney-pieces and fibrous plasterwork); Stuart's Granolithic Co., Ltd. (reinforced concrete construction); Moreland, Hayne & Co. (steelwork); Kleine Patent Fire-resisting Flooring Syndicate, Ltd. (fireproof floors and partitions); R. E. Pearse & Co., Ltd. (casements and casement fittings); Dent and Hellyer, Ltd. (plumbing and sanitary work, sanitary ware and fittings); Acme Flooring and Paving Co., Ltd. (flooring, wood block and parquet); Bryon & Co. (wall tiles, and mosaic, marble, and stone flooring); Electrical Installations, Ltd. (electric wiring); Yannedis & Co. (door furniture—locks, electric bell plates, &c.); Waygood-Otis (lift); J. H. Nicholson & Co., Ltd. (heating and ventilating); Briffault Range Co. (cooking fittings); C. Hall, South Hampstead Art Metal Works (wrought ironwork).



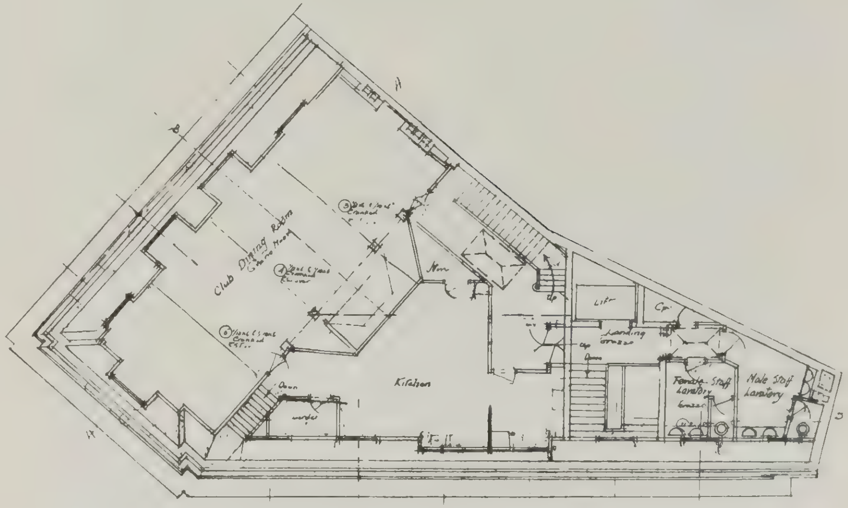
SECOND FLOOR PLAN.



THIRD FLOOR PLAN.



GROUND FLOOR PLAN.



FOURTH FLOOR PLAN.

THE SWEDISH CHAMBER OF COMMERCE, LONDON.

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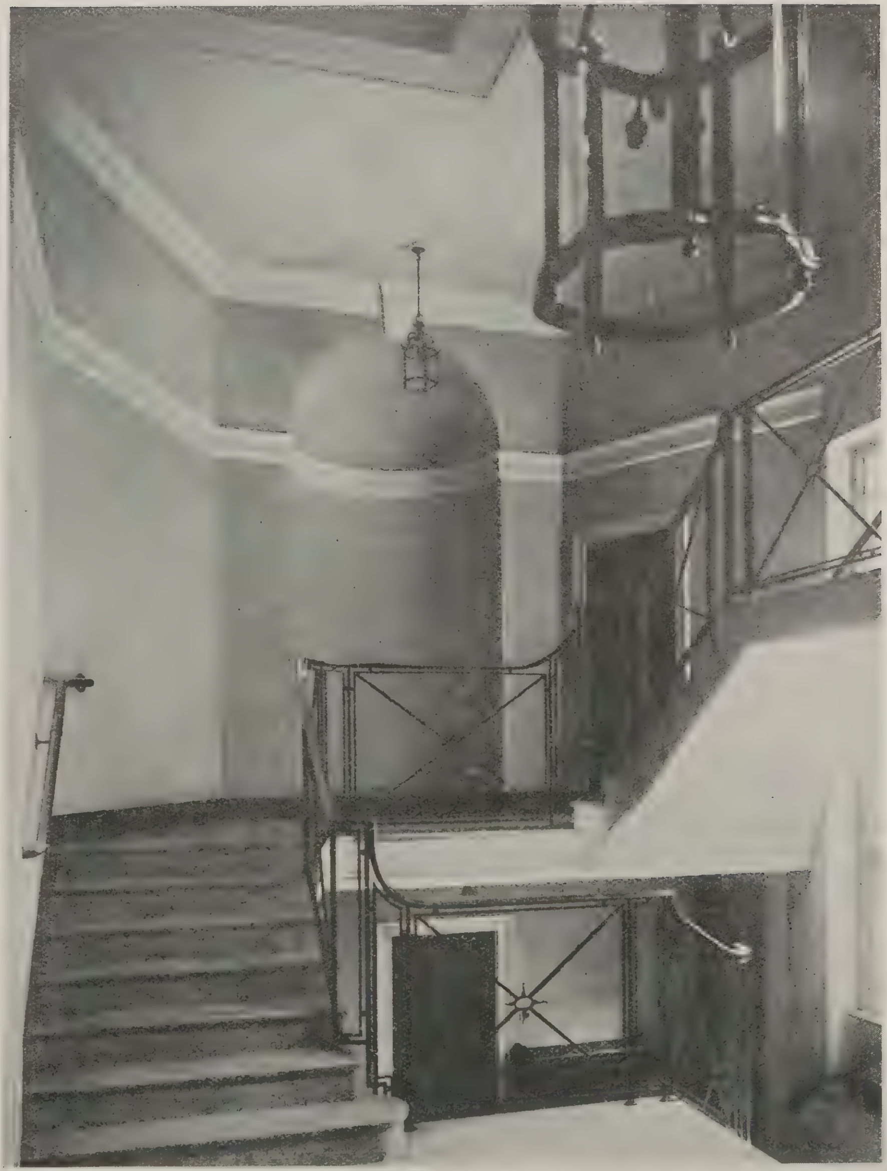
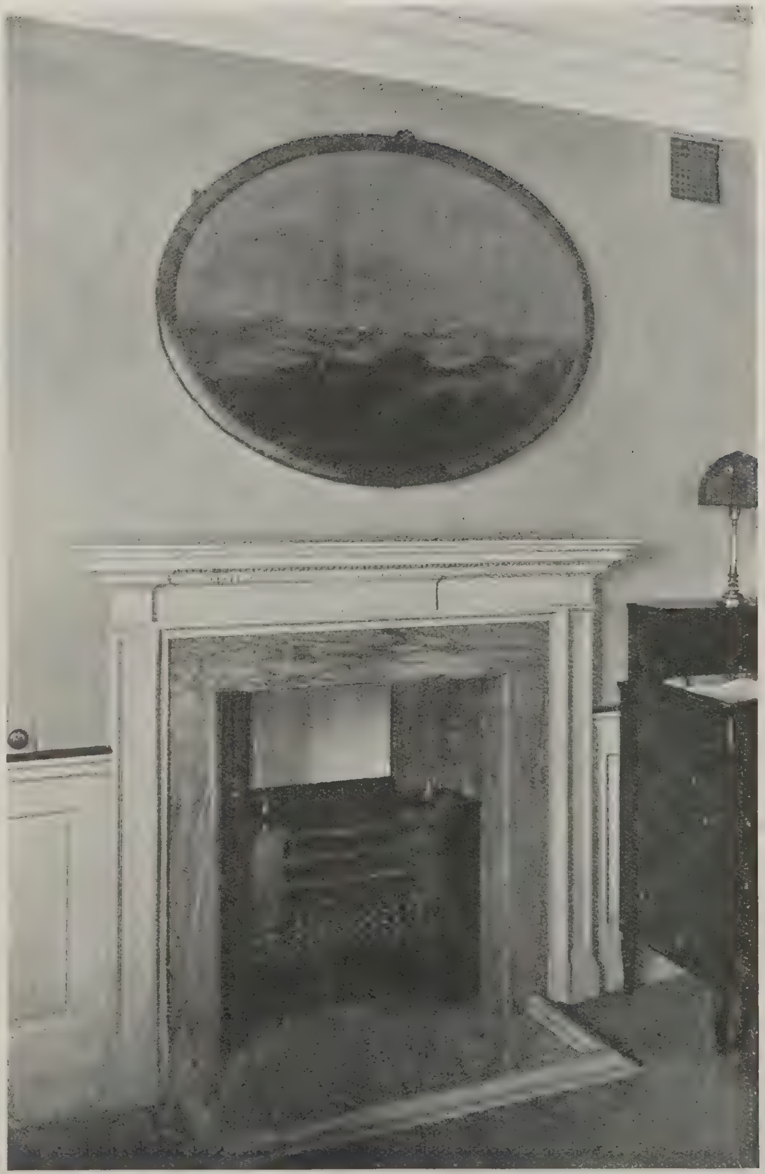
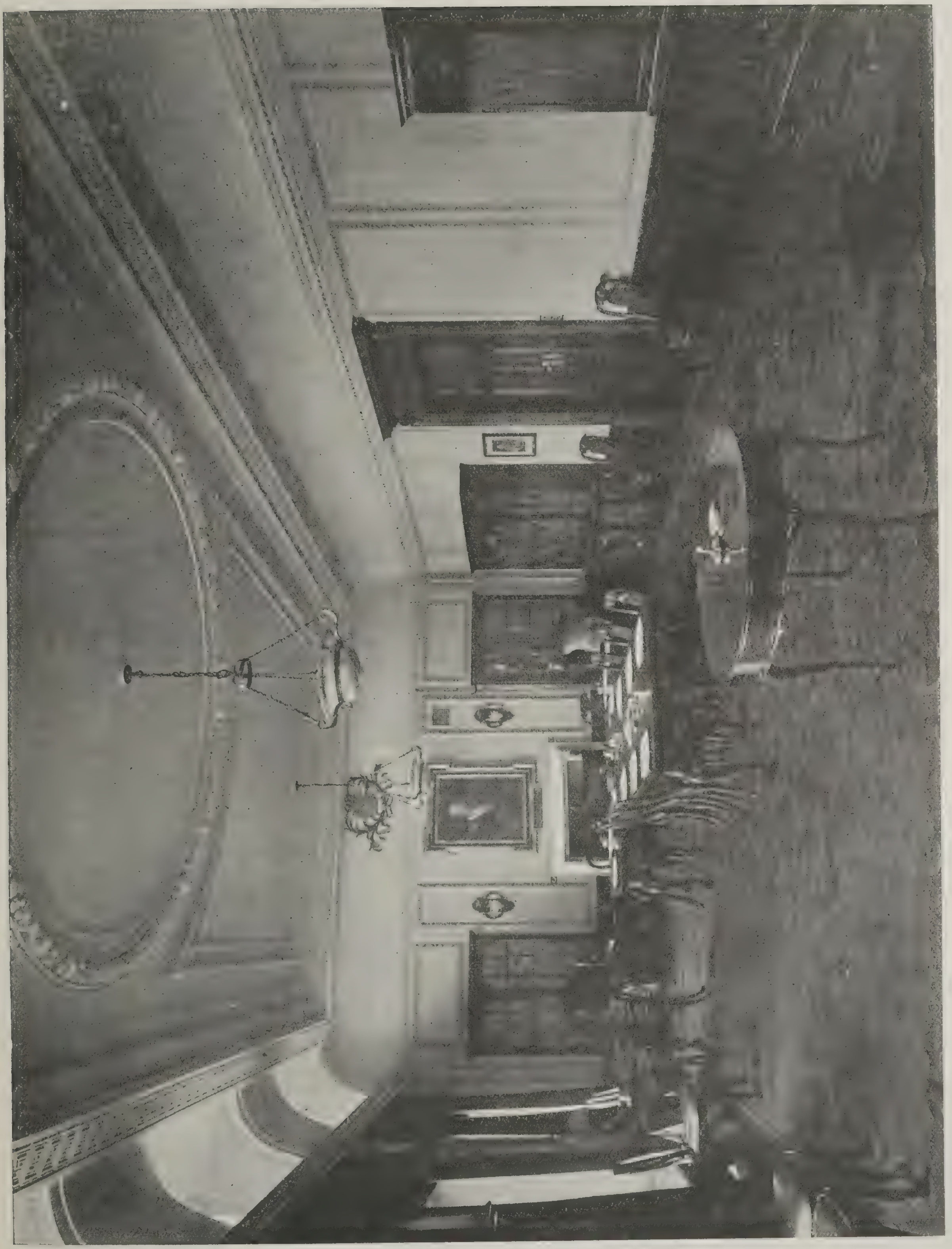


THE MAIN STAIRCASE.



AN OLD HOB-GRATE IN THE CLUB DINING-ROOM.

THE SWEDISH CHAMBER OF COMMERCE, LONDON. D. B. NIVEN AND H. WIGGLESWORTH, FF.R.I.B.A., ARCHITECTS.



THE SWEDISH CHAMBER OF COMMERCE, LONDON: THE COUNCIL CHAMBER.

D. B. NIVEN AND H. WIGGLESWORTH, FF.R.I.B.A., ARCHITECTS.

# London's Unhealthy Areas

## A Chadwick Lecture

### By G. TOPHAM FORREST, F.R.I.B.A., Architect to the L.C.C.

When I received an invitation from the Chadwick Trustees to deliver two lectures, it seemed to me that I could not choose a more fitting subject for at least one of them than "London's Unhealthy Areas." I felt that if Sir Edwin Chadwick were alive to-day he would be gravely concerned that such areas exist and would give earnest thought to the possibility of their elimination. Moreover, any attempt at a solution would assuredly have been readily welcomed by him.

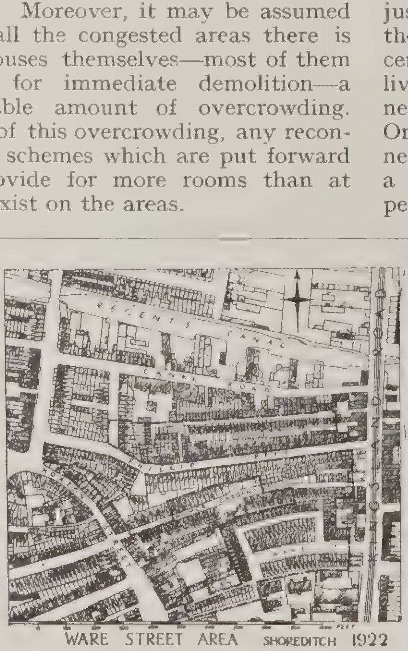
The question of effectively dealing with London's congested areas was one which for many years before the war exercised the minds of those interested in housing. Various remedies were suggested, all of them worthy of consideration, since they were the outcome of knowledge and experience. But it need hardly be said that post-war conditions have intensified and complicated the problem—to such a degree indeed that the difficulties in the way of reaching a satisfactory solution appear to be almost insurmountable. That, however, would be no excuse for failing to seek one—at least it would not be in my case, since as architect to the London County Council I am bound to examine the problem and to suggest means by which it may be solved. That was what I set out to do when I took up my duties in London.

At the outset I think I should make it clear, however, that the London County Council accepts no responsibility for my opinions or conclusions. If a solution of the problem can be discovered, if within a short time we could completely reconstruct these areas, no relief would thereby be afforded to the existing shortage of houses. The question of the elimination of the areas is a special one, quite distinct from the question of the provision of additional houses to meet the general shortage. Moreover, it may be assumed that in all the congested areas there is in the houses themselves—most of them only fit for immediate demolition—a considerable amount of overcrowding. Because of this overcrowding, any reconstruction schemes which are put forward must provide for more rooms than at present exist on the areas.

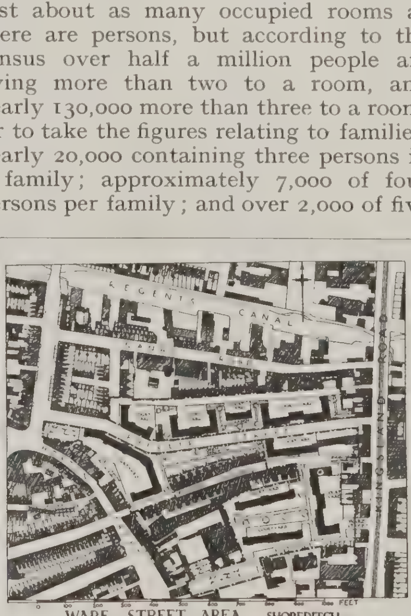
My examination of the subject has been focused on wiping out the slums and providing the inhabitants with a type of building which shall at once give clean, healthful, and pleasant accommodation.

The Housing Act says that when the houses on any area are so bad in themselves and so congested as to be dangerous to the health of the inhabitants or of their neighbours, and that the most satisfactory method of dealing with the evils is by clearance and reconstruction, then such areas are unhealthy within the meaning of the Act. According to a publication issued by the London County Council in November, 1921, there were in the year 1919 about 1,900 groups of three or more houses which were either insanitary or so congested and badly arranged or badly situated that they required to be dealt with. These comprised over 24,000 houses occupied by more than 180,000 persons. There is also an enormous amount of overcrowding in London, as was revealed by the last census. Of course, it does not follow that all areas in which there is overcrowding are necessarily unhealthy as defined by the Act—that is to say, such as can only be remedied by reconstruction; but overcrowding and unhealthy conditions are closely related. The census shows that the 4½ million people in London occupy upwards of 4,000,000 rooms. The distribution of population over the county is, however, by no means equal. Taking the county as a whole, the average number of persons to the acre is 60, but in the northern portion of Saint-George-in-the-East there are nearly 260; in part of Stepney and in Bethnal Green approximately 200. Moreover, as the areas for which these figures are given include all open spaces, the actual density is much higher. Again, in the county there are just about as many occupied rooms as there are persons, but according to the census over half a million people are living more than two to a room, and nearly 130,000 more than three to a room. Or to take the figures relating to families, nearly 20,000 containing three persons in a family; approximately 7,000 of four persons per family; and over 2,000 of five persons per family are each living in one room.

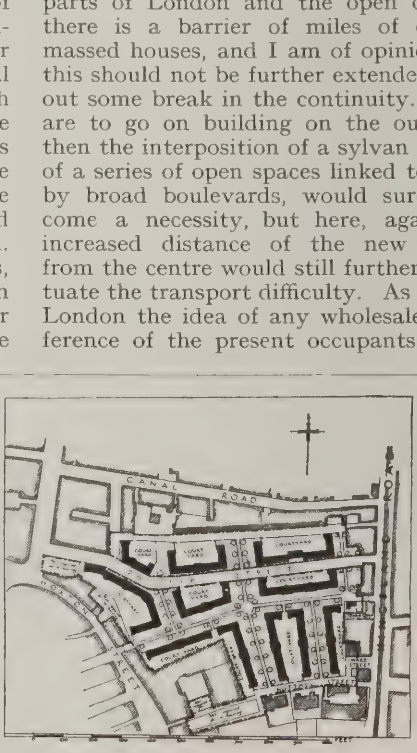
The problem is something more than one of magnitude. The moment we begin to examine it closely we discover seemingly endless difficulties in the way of arriving at a satisfactory solution. A very considerable proportion of the people living in the congested areas are the families of workers who must of necessity live near to where they exercise their calling: for example, the dockers, many kinds of transport workers, the market porters, public service workers, such as gas-workers, water-service workers, police, firemen, postal servants, sewermen, scavengers, etc. Some, therefore, at least of the population of the congested areas must remain in their present locality, and this constitutes a very real difficulty when we come to deal with the question of demolishing the slum houses. Of course, a number of the inhabitants might be housed outside London, but even then the breadwinners would have to travel to their work-places, which are probably within reasonable distance of where they now live. The distance from the centre of Birmingham to the open country is only 2½ miles, comparatively easy walking distance. In Liverpool the corresponding distance is only 2 miles, but in London it is from 6 to 7 miles. The conclusion reached is that if the people are to be rehoused it must be on the areas themselves and not some six or eight miles away. A further question as regards transferring the people to the outskirts is its effect on London as it already exists. Between the central parts of London and the open country there is a barrier of miles of densely massed houses, and I am of opinion that this should not be further extended without some break in the continuity. If we are to go on building on the outskirts, then the interposition of a sylvan belt, or of a series of open spaces linked together by broad boulevards, would surely become a necessity, but here, again, the increased distance of the new houses from the centre would still further accentuate the transport difficulty. As regards London the idea of any wholesale transference of the present occupants of the



WARE STREET AREA SHOREDITCH 1922



WARE STREET AREA SHOREDITCH.
PROPOSED DEVELOPMENT
NUMBER OF PERSONS DISPLACED 2648
" " RE HOUSED WITHIN AREA 2160
" " ELSEWHERE 488
NUMBER OF PERSONS PER ACRE 296



WARE STREET AREA SHOREDITCH
DEVELOPMENT ON BROAD PRE-WAR LINES
NUMBER OF PERSONS ACCOMMODATED 3079
APPROXIMATE " " DISPLACED 2893
SURPLUS OVER DISPLACEMENT 186
NUMBER OF PERSONS PER ACRE 333

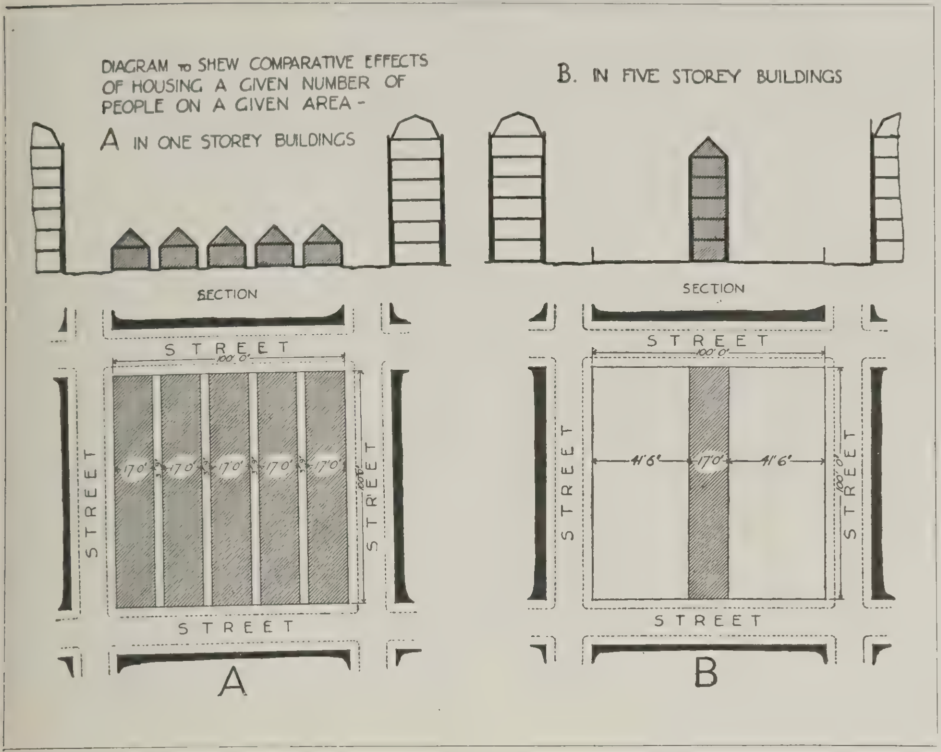


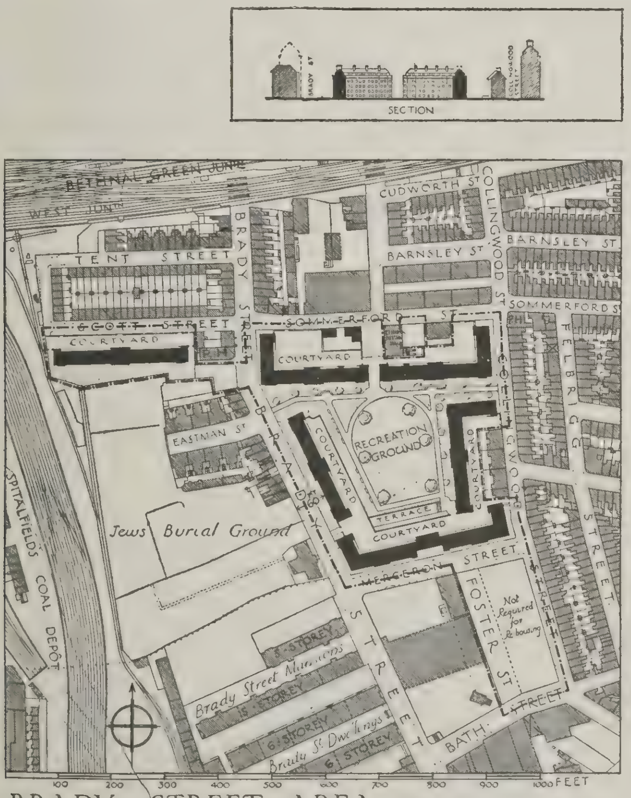
DIAGRAM TO SHEW COMPARATIVE EFFECTS OF HOUSING A GIVEN NUMBER OF PEOPLE ON A GIVEN AREA -
A IN ONE STOREY BUILDINGS
B. IN FIVE STOREY BUILDINGS
SECTION
SECTION
STREET
100' 0"
17'0"
41'6"
A
B

central congested areas to the outskirts, as a means whereby the problem of the slums can be solved, is at best but partially practicable.

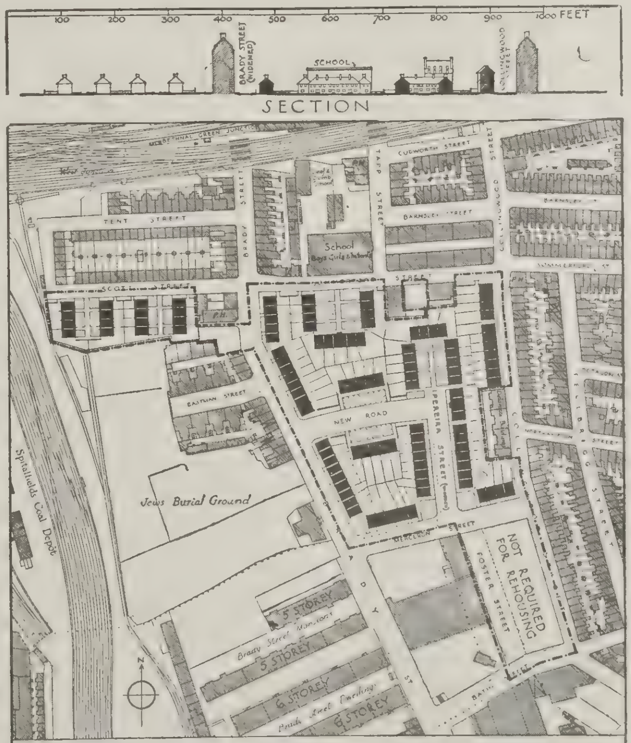
It will be appreciated that the idea of the creation of new dormitory districts on the outskirts is an altogether different thing from the creation of new townships, complete in themselves, situated some distance from the metropolis, but connected with it by quick and cheap means of transport. This idea of the formation of new townships to meet the needs of a general expansion of the population has, in my opinion, everything to recommend it. The problem which is complicated by the fact that present-day conditions make it necessary in nearly every case to deal with each particular area as a separate and distinct unit, as if no other congested area existed. In practice it comes to this, that unless we can find upon the area itself a site or sites upon which an initial block can be built, no beginning can be made with the clearance, unless we first obtain a vacant site elsewhere and build upon it accommodation for the people to be displaced from the first section of the area. In pre-war days the conditions were different. The need for discovering a satisfactory way of dealing with the problem is one of extreme urgency.

With regard to the areas already being dealt with by the London County Council the only hope of remedy is by clearance and reconstruction. As to the most suitable type of building to be employed in the reconstruction we shall consider cottages, three-story cottage flats, and also what are usually known as block dwellings, that is, buildings of more than three stories, and I think we shall discover that the only practical solution of the problem is by means of buildings of the latter class. Let it at once be understood that by no process of reconditioning can the houses on the areas be rendered fit for human habitation.

Coming now to the question of the actual clearance of the areas, we are at once confronted with the fact that clearance can only be done in small sections at a time, each large enough for one block of



BRADY STREET AREA. BETHNAL GREEN.
APPROVED DEVELOPMENT
⅛ MILE



PLAN TO DEMONSTRATE THE EFFECT ON REHOUSING WHICH WOULD BE OBTAINED BY A COTTAGE SCHEME WITH AS MANY AS 23 COTTAGES TO THE ACRE

THE MAXIMUM HOUSING ACCOMMODATION AT TWO TO A HABITABLE ROOM, WOULD BE 791 PERSONS

LOSS OF PERSONS AS COMPARED WITH A 5 STOREY BLOCK-DWELLING SCHEME WOULD BE 835 PERSONS

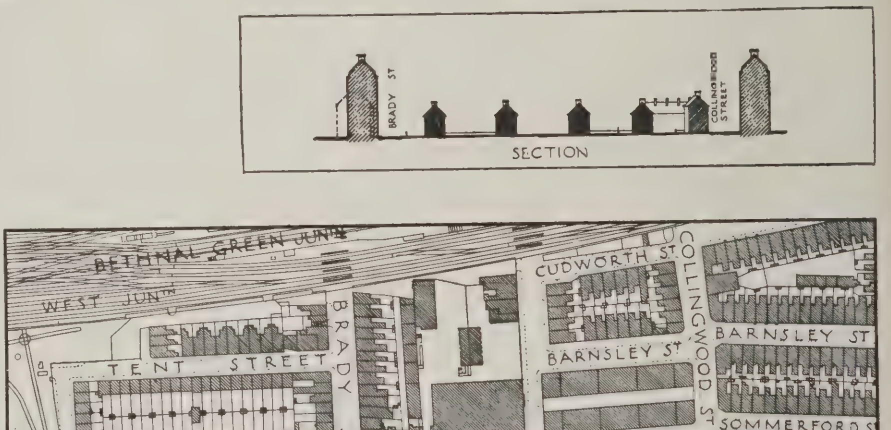
BRADY STREET AREA. BETHNAL GREEN.
COTTAGE DEVELOPMENT

buildings. This limitation is a dominating factor in planning the lay-out of the reconstruction. In the Ware Street area to be cleared, if the tongue of land in the middle could have been included a much better result would have been obtained.

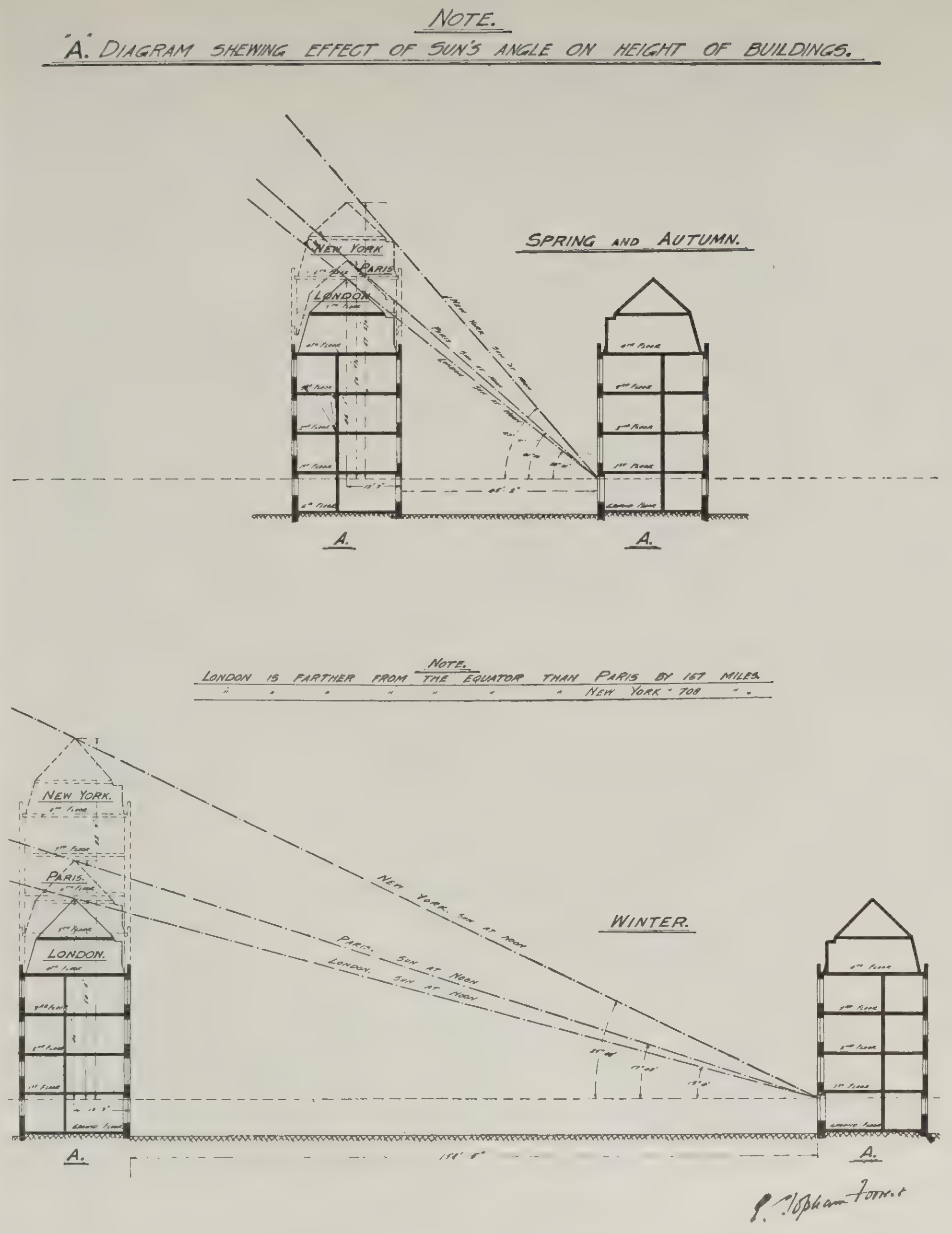
In the hypothetical reconstruction on the basis that a more generous clearance were possible, we obtain a more pleasing lay-out and the valuable land is fully utilized. Moreover, accommodation for more than the whole of the displaced persons is provided on the area itself, whereas in the approved scheme, to which we are forced by present conditions, some 490 persons have to be housed elsewhere. In the actual scheme of lay-out shown the new housing sites have been secured without constructing new roads. The question of roads is one which in present circumstances calls for most careful consideration. It is, of course, important that mean streets, courts, and alleys should be blotted out and their sites thrown into the sites for new buildings. But wherever possible existing roads sufficient to meet the needs of the area should be retained and, if necessary, improved, rather than that entirely new roads should be constructed. This is dictated by the necessity for economy. Moreover, in cases where there is a possibility of any roads on the area becoming at a future date through traffic routes, the new buildings along such roads must be set back sufficiently to allow of future widening at a minimum of cost. All the new buildings to be built on the area as approved are five-story block dwellings, which is the type of building usually employed in central areas. The question at once arises whether this is the most satisfactory type for the purpose. I realize, of course, that it does not always find favour with certain members of the public who are interested in housing, but I would emphasize that our present problem is not that of reconstructing a huge area of London, but rather that of rehousing healthily on a restricted area the large number of people who already live there. As you know, the L.C.C. on all its new estates in the suburbs has, up to the present, confined its building operations to houses of the cottage type, with generally satisfactory results. But with regard to the central congested areas which we are considering, this type of construction is out of the question.

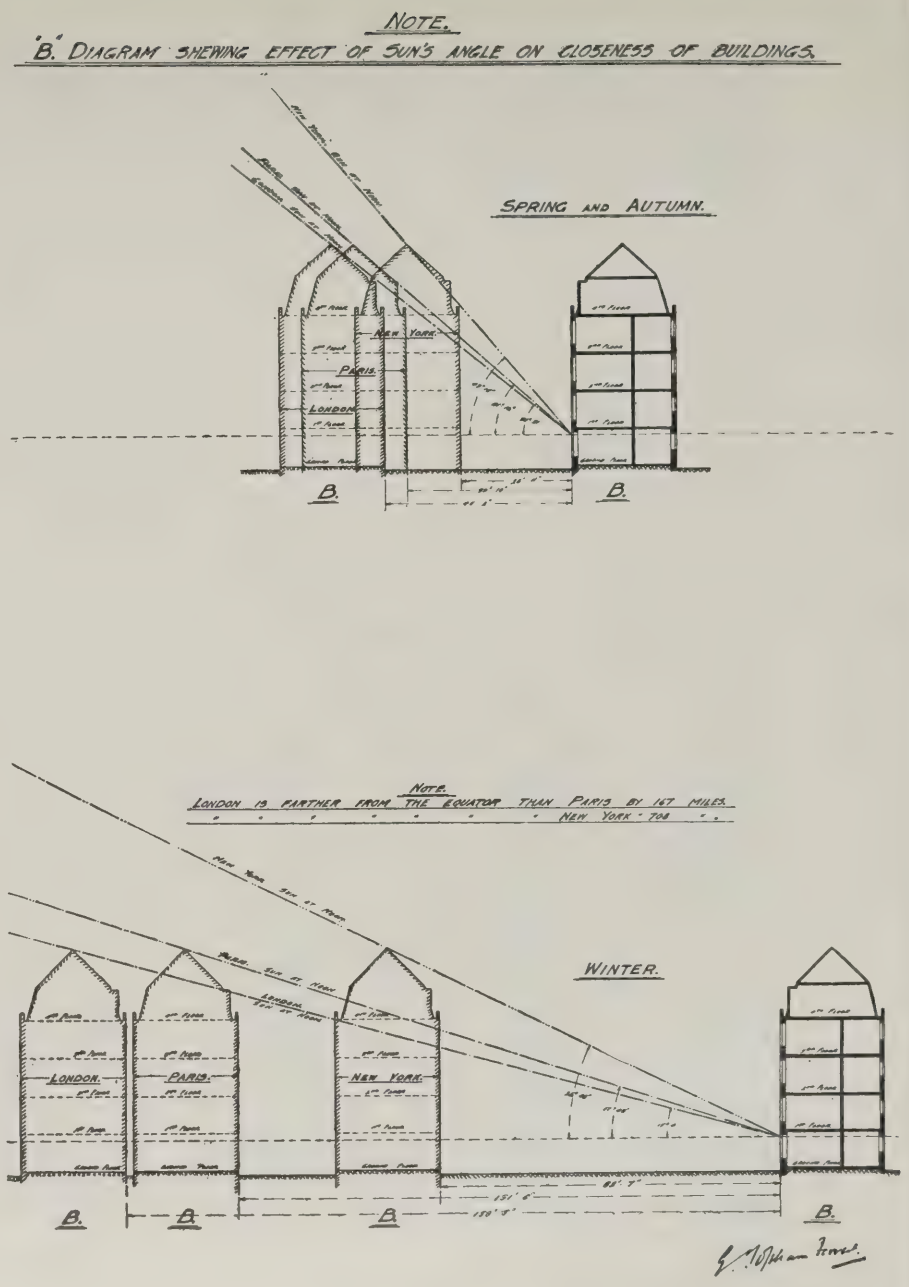
In the plan of the reconstruction of the Brady Street area as approved, 1,600 persons, that is, 85 per cent. of those displaced, will be rehoused. It was not possible to rehouse all the people and at the same time provide a recreation ground of 1½ acres, very badly needed in this congested neighbourhood. If the area was laid out with twenty-three cottages to the acre, which is utilizing the same ground to the limit of its hygienic capacity, we should only be able to rehouse less than 800 people, and no recreation space could be provided. In the planning of the reconstruction of an unhealthy area there are two fundamental requirements: The first is that the new buildings comprised by the reconstruction shall be healthy in themselves; the second that it shall not be possible in the future for the buildings to become unhealthy owing to alterations of the property immediately adjoining. That is to say, the planning must be so arranged that there can be no possibility of the slum being perpetuated. It is this second requirement which presents the greater difficulty; because before it can be met, it is essential to forecast what the possible and probable future development of the adjoining property will be. In making this forecast it must first be realized that in all the old streets, courts, and alleys in and about unhealthy areas the owners are, under the London Building Act, at liberty, if they so desire, to build on the sites of existing houses business or industrial premises up to a height of 80 ft. above the level of the footway with, in addition, two stories in the roof. Moreover, most of the streets in question are considerably narrower than the minimum statutory width for new streets, which is 40 ft. So that you may have buildings approximately 100 ft. high abutting on a street very likely no more than 20 ft. wide.

A small area in one of the congested districts of London is now undergoing reconstruction (though not by the London County Council) by means of two- and three-story cottage flats. A factory to the north-east is actually being extended at the same time as the new houses are being erected, and it cannot be said that the houses on the two other sides will necessarily remain at their present height. As things stand the outlook towards the north for the people living in the longer row of cottages will consist of a factory wall, and if the remainder of the surrounding property is heightened, the cottages will lie, so to speak, in a well, and the effect on the circulation of air, to say nothing of the smoke, can be better imagined than described. In fact, I cannot see how cottages in a neighbourhood such as this can be prevented from approaching slum conditions in the future. On the right hand of the illustration we see what might have been done if the development had been by five-story blocks. Not only could more than the whole of the displaced people have been rehoused, but the possibility of a return to slum conditions in the future would have been obviated. We are therefore driven to the conclusion that the only practicable method of dealing with the congested areas is by a type of building



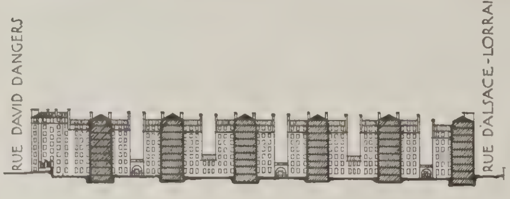
BRADY STREET AREA. BETHNAL GREEN
3-STOREY BLOCK DWELLING DEVELOPMENT
MAXIMUM HOUSING ACCOMMODATION 1,250 PERSONS
LOSS OF ACCOMMODATION AS COMPARED WITH A 5-STOREY BLOCK DWELLING SCHEME WOULD BE 378 PERSONS & NO RECREATION GROUND



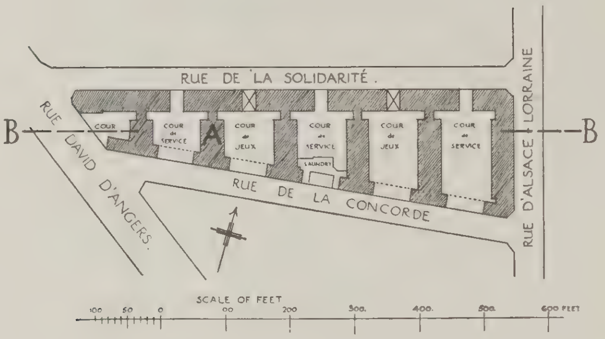


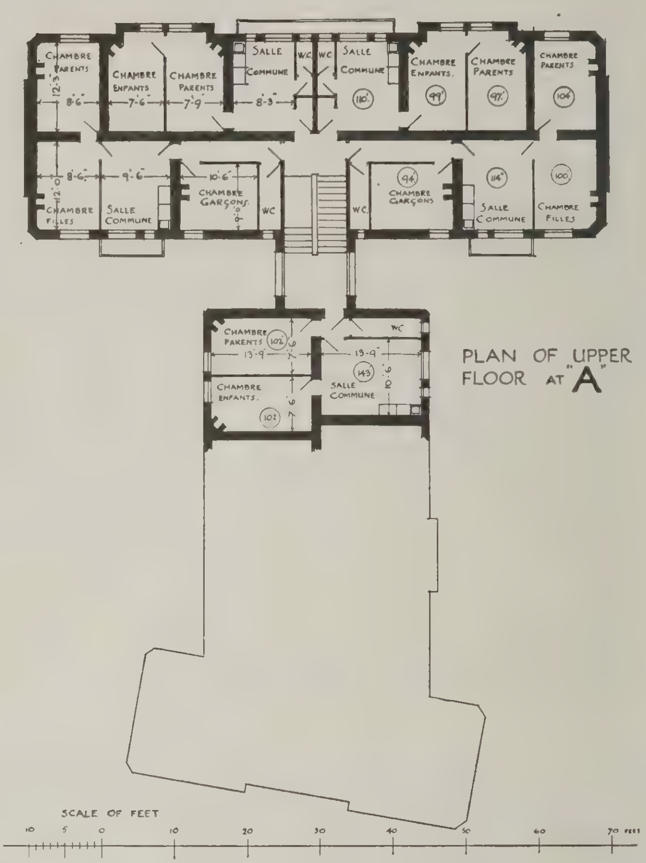
DIAGRAMS SHOWING THE EFFECT OF THE SUN'S ANGLE ON BUILDINGS IN LONDON, PARIS, AND NEW YORK.

## PARIS : SOLIDARITÉ ST GROUP OF WORKING CLASS DWELLINGS



SECTION B-B

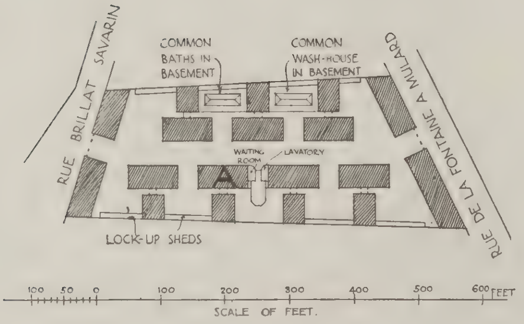


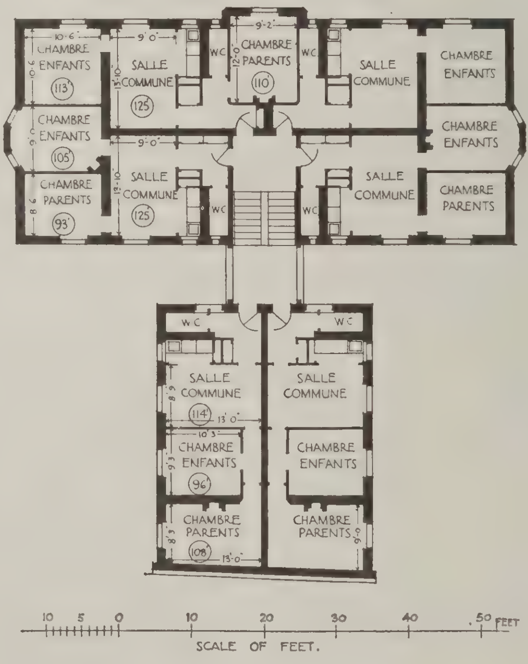


PLAN OF UPPER FLOOR AT "A"

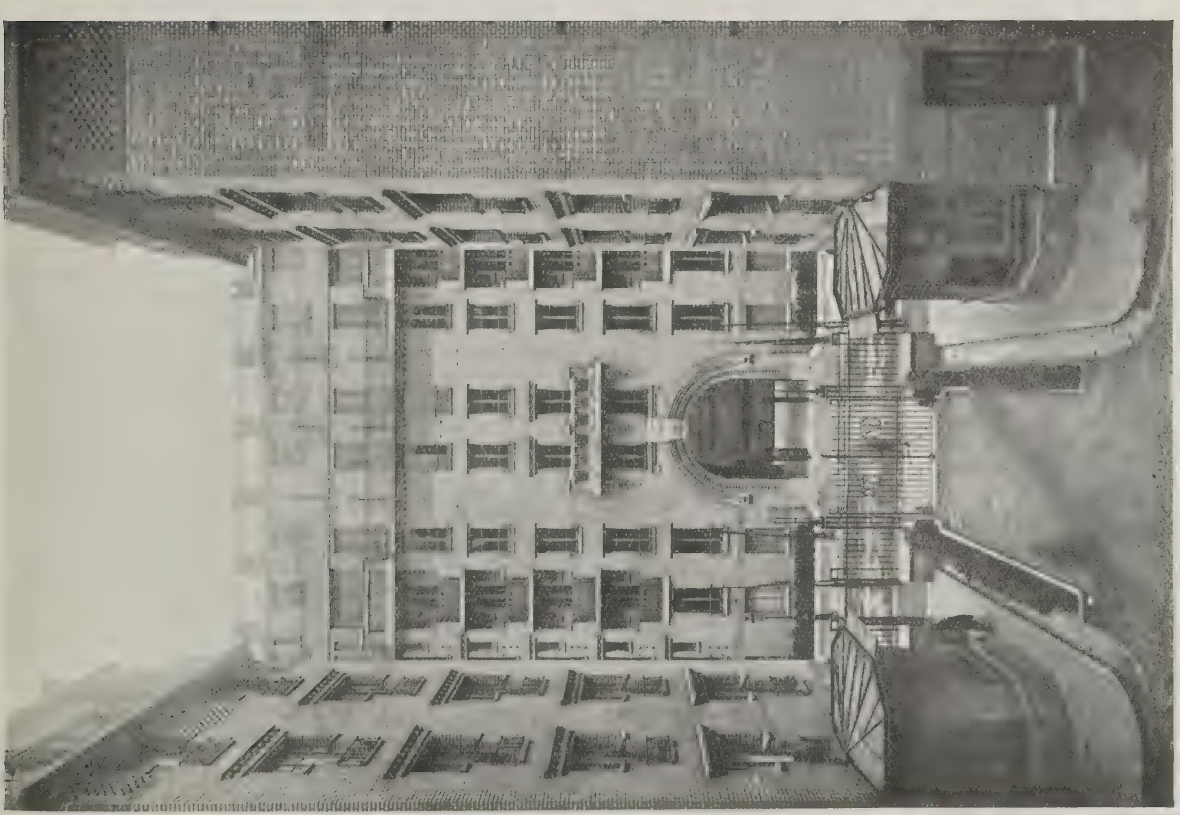
## PARIS : FONTAINE-A-MULARD ST GROUP OF WORKING CLASS DWELLINGS

PLAN OF UPPER FLOOR AT A

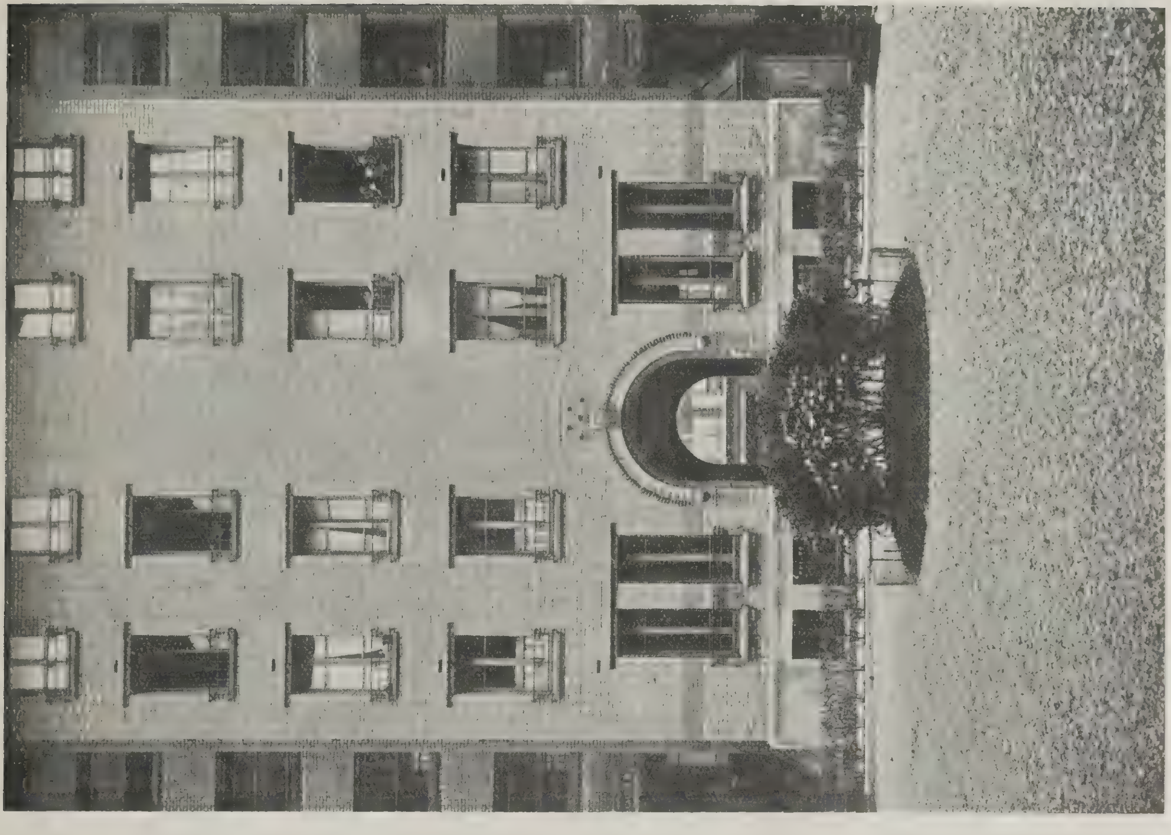

RUE BRILLAT SAVARIN
COMMON BATHS IN BASEMENT
COMMON WASH-HOUSE IN BASEMENT
WAITING ROOM
LAVATORY
A
LOCK-UP SHEDS
RUE DE LA FONTAINE A MULARD
100 50 0 100 200 300 400 500 600 FEET
SCALE OF FEET.



TYPICAL WORKING-CLASS DWELLINGS IN PARIS.

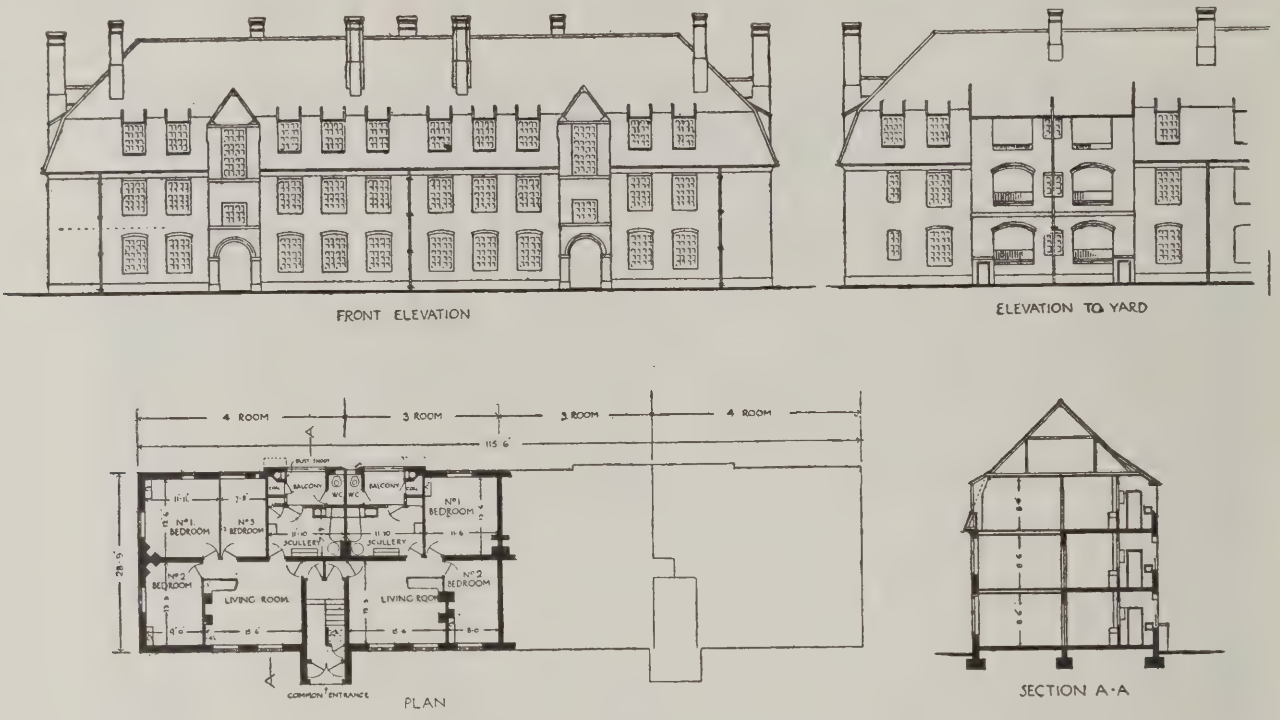


THE MAIN ENTRANCE.



THE BACK ELEVATION.

A BLOCK OF WORKING-CLASS DWELLINGS IN PARIS.



FRONT ELEVATION

ELEVATION TO YARD

PLAN

SECTION A·A

THREE-STORY COTTAGE FLATS.

having more than two stories. Let us, therefore, see how far three-story flats will go to meet the requirements.

In the plan showing how the Brady Street area might have been laid out with three-story cottage flats, only 1,250 of the displaced persons would be rehoused, that is, nearly 380 less than in five-story dwellings, and no recreation space could be provided. It is clear, therefore, that, generally speaking, central area rehousing cannot be accomplished by three-story buildings. Buildings of three stories containing cottage flats would be very suitable for sites in the inner suburbs, in order to provide rehousing accommodation for people at present living in congested areas who it would be necessary to displace so that clearances of such areas might be begun. Suitable sites for working-class dwellings in the inner suburbs are few and far between. It is, therefore, clearly desirable that fuller use should be made of them than is possible with a cottage development, and as one-and-a-half times as many people can be put on to a given area by three-story buildings as can by two-story cottages, it follows that the three-story buildings containing cottage flats have much to recommend them. I do not claim that housing by three-story cottage flats is necessarily cheaper than by cottages, but I think it will be found that their cost will be no greater. This type of building has, however, a limitation—it is not suitable for lettings smaller than three rooms.

I have an idea of three-story cottage flats such as might be employed on the estates I have in mind. The two lower stories are enclosed by brick walls, and the topmost story is entirely within the roof. The rooms are rather larger than is usual in the working-class dwellings in England. This extra size has been obtained by throwing the space usually appropriated by passageways into the rooms themselves. Because of this the bedrooms as well as the "kitchenette" communicate directly with the living-room. This arrangement has certain advantages; it reduces the amount of housework to a minimum, and enables the mother of a young family to go about her duties whilst the younger children are always under her immediate supervision. Each flat has a private covered-in balcony in which domestic washing can be dried, and where the younger children can play—again under the mother's eye. Buildings of this class would not meet the rehousing needs of London's congested central areas, and we therefore turn to the consideration of dwellings of more than three stories. It will be realized that whatever the height of buildings used in the reconstructed areas, special regard will have to be had to the fact that the buildings must be so disposed in relation to each other and to the surrounding buildings as will permit of a sufficient amount of sunlight and air both in and about the buildings to satisfy hygienic requirements. It may not perhaps be generally appreciated that, geographically, London is a northern city. It is about 700 miles more northerly than New York, which city, it may be remarked, is situated at about the same distance from the equator as Naples. London is also 167 miles more northerly than Paris. Because of this northerly situation the sun in London at noon is relatively to Paris and New York much lower in the heavens, in mid-winter reaching only about 15 degrees above the horizon, and in the spring and autumn under 39 degrees. It follows that the shadows cast by London's buildings are longer than those cast by buildings of the same height in Paris, and very much longer than in New York.

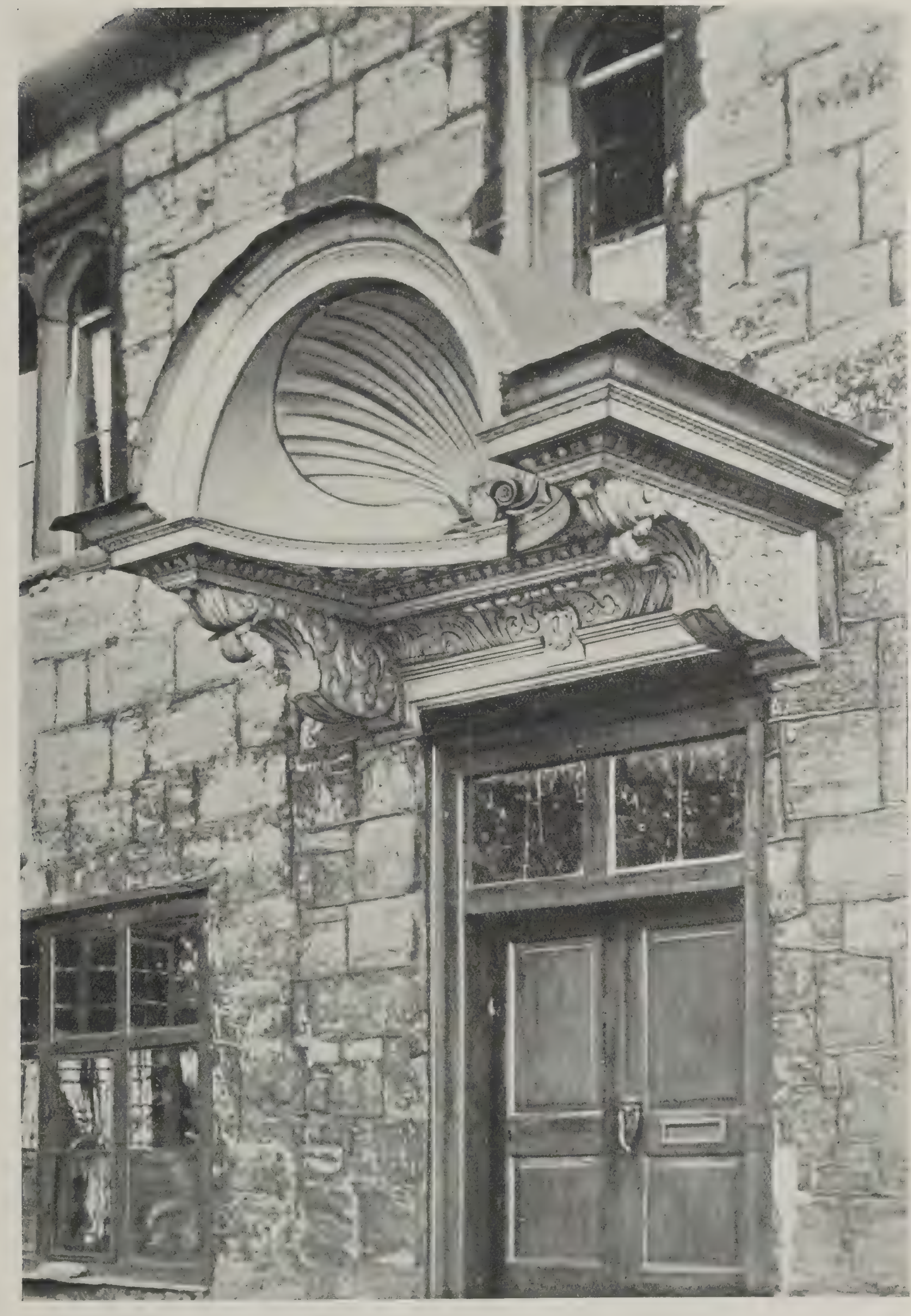
The diagram shows how in five-story buildings facing due south the direct rays of the sun are obstructed at high noon in winter, and also in spring and autumn, by similar buildings opposite them. From this it will be seen that in winter in Paris, buildings of at least a story higher, and in New York at least four stories higher, could be built without causing any greater obstruction to light than would five-story buildings in London. Or to put it another way: Buildings of nine stories in New York and of six stories in Paris would throw shadows no longer than do five-story buildings in London.

The other diagram shows what the minimum distance must be between buildings of five stories in London, in Paris, and in New York in mid-winter, and also in the spring and autumn, if even a modicum of sunlight is to be obtained in the ground-floor rooms. It will be seen how much farther apart in winter the buildings must be in London, namely, about 158 ft., as against 131 ft. in Paris, and 82 ft. in New York. The law in London permits buildings of, say, five stories to be as near each other as their own height, but this means that the ground floors can only have direct sunlight for something less than six months out of the twelve, and for the greater part of even that period they will not have more than an hour or so a day. I would suggest, therefore, that it is not desirable that buildings whose walls are, say, 45 ft. high should be much nearer together than about 60 ft., and if economic considerations would permit, I should, of course, prefer that buildings should be kept away from one another to a distance equal to about twice their height, so as to secure the kind of lighting you get in suburban districts with 40 ft. roads and houses of only two or three stories, set back in their small forecourts.

Block dwellings in Paris are much higher than in London, but because of the latitude of Paris the conditions as regards light are, of course, much better than they would be in London. The porter's lodge is on each side of the entrance. In the Paris buildings of this class there is always a porter whose duties include supervision of those who enter or leave the buildings.

(*To be continued.*)

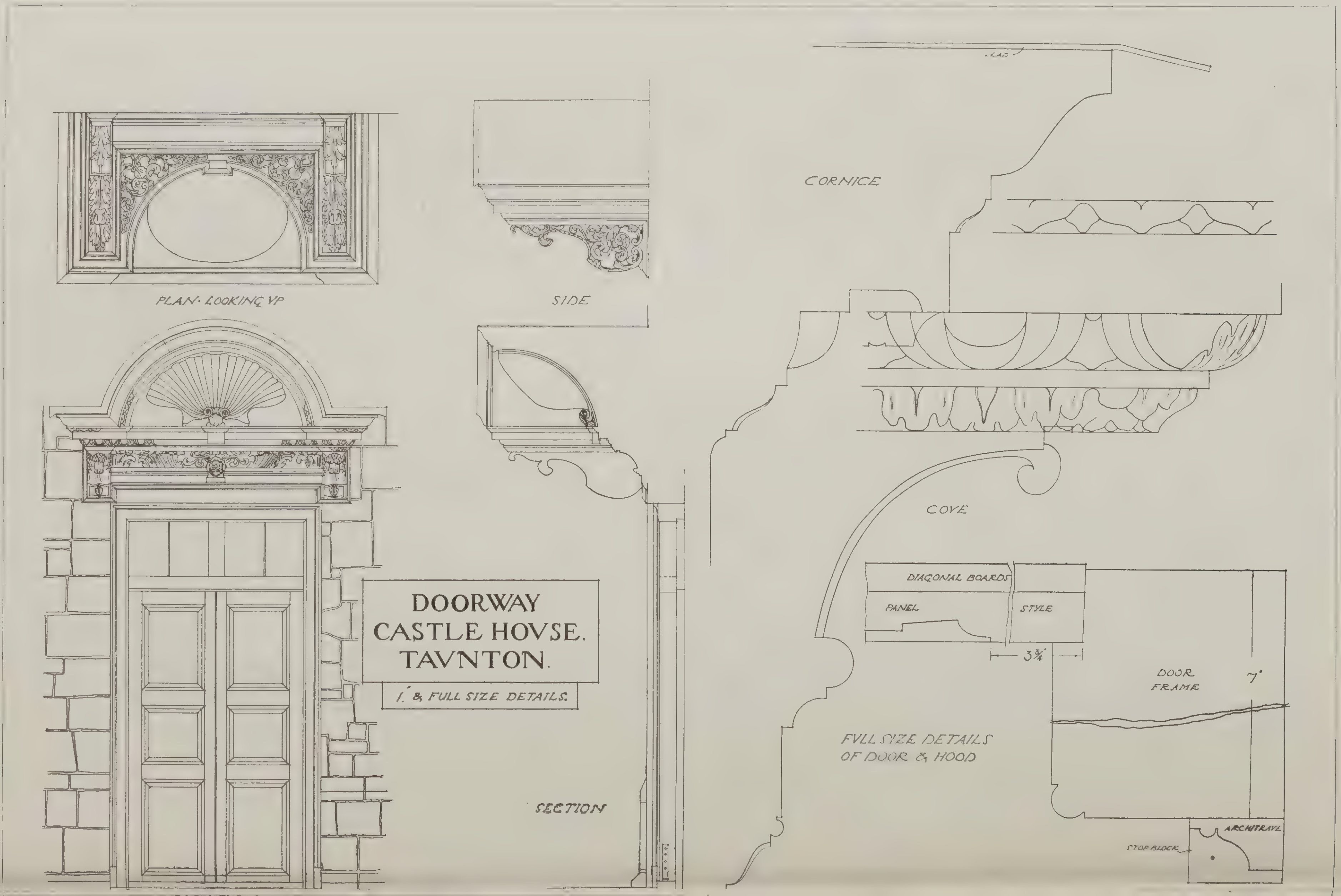
# Doorway to Castle House, Taunton, Somerset

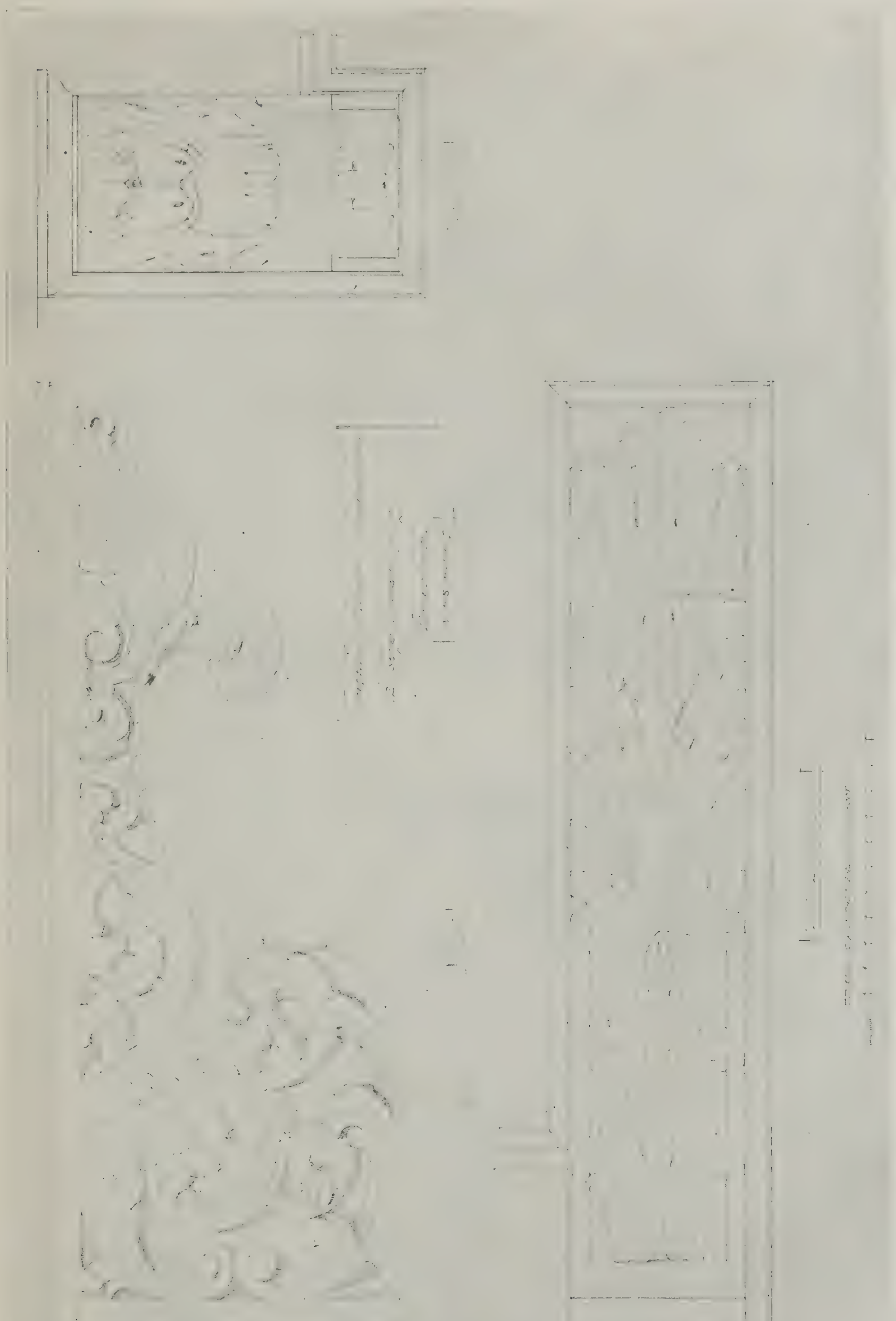


Castle House stands on the right of the gatehouse of the Great Hall of Taunton Castle. The date of its foundation is uncertain. Measured drawings of the doorway appear on the succeeding pages.

# Measured Drawings. 22.—Doorway to Castle House, Taunton, Somerset

Measured and Drawn by W. H. B. Harris

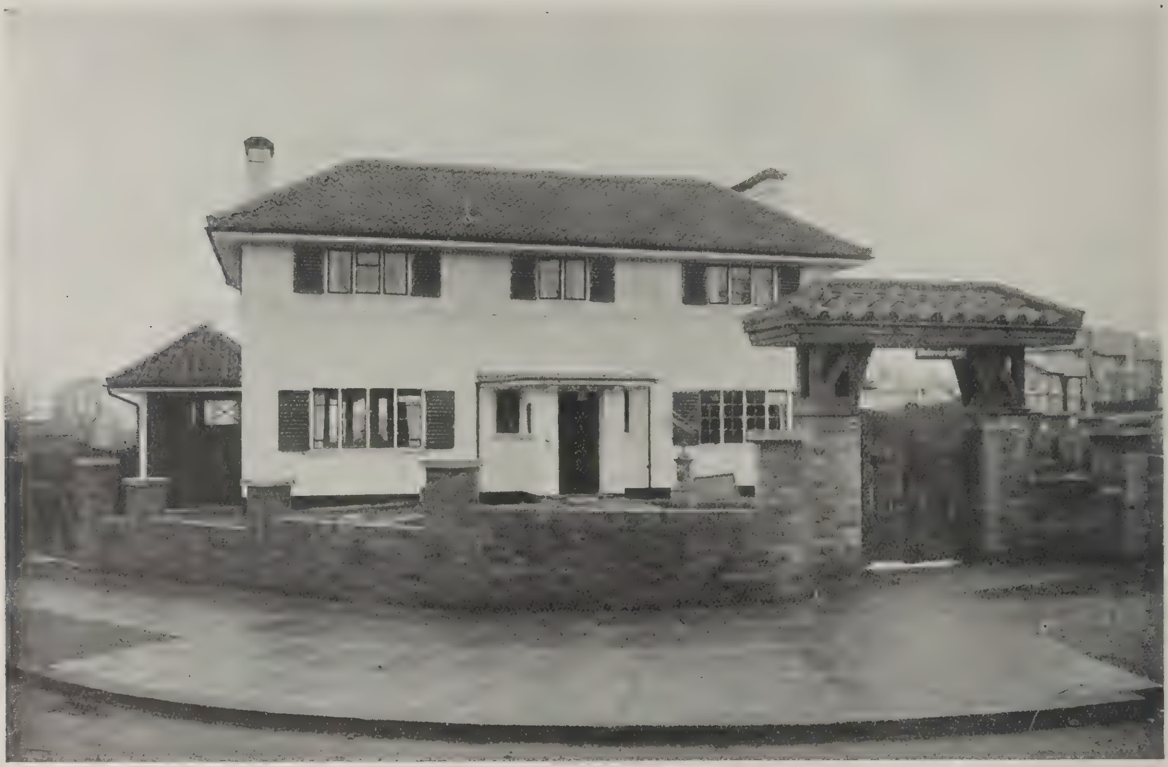




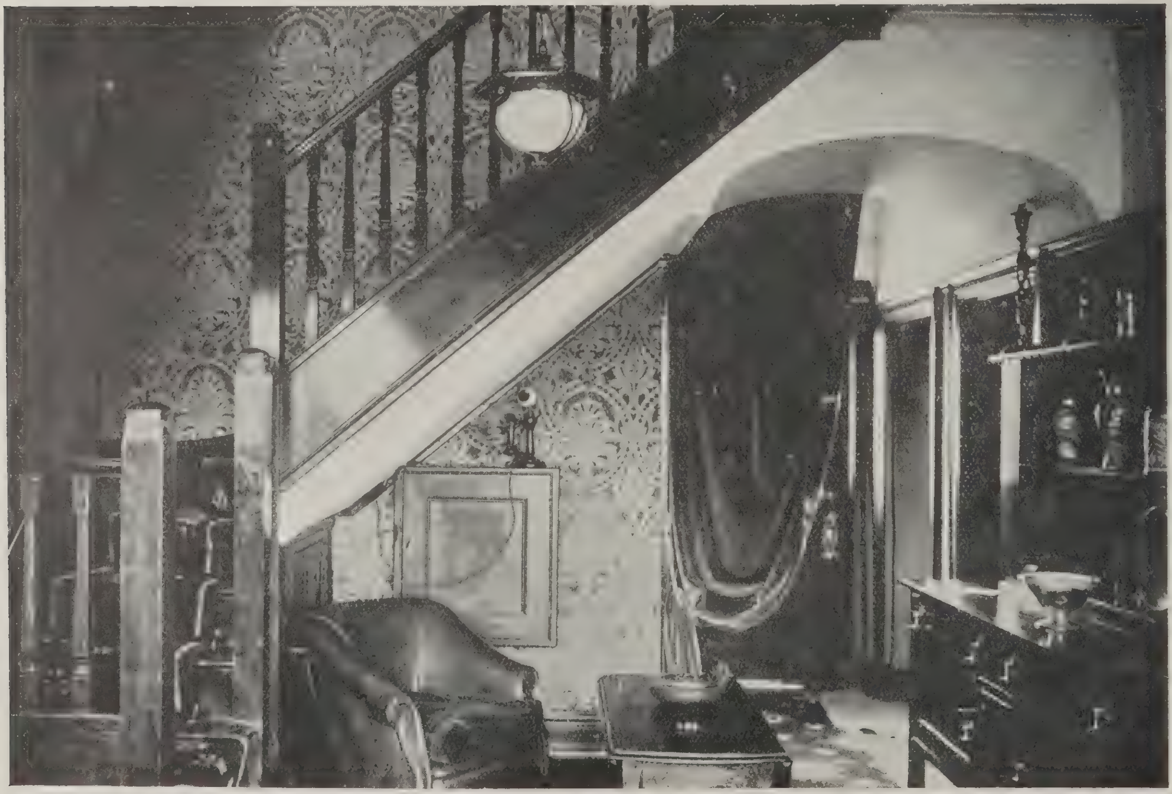
The doorway is of the late seventeenth century, and the panelling within the house belongs to about the same date, although some of the interior is Tudor.

# House at Temple Fortune, Golders Green

W. E. Masters and F. T. Dear, AA.R.I.B.A., Architects



A GENERAL VIEW.



*Photos: Architects' Journal.*

THE ENTRANCE HALL.

## HOUSE AT TEMPLE FORTUNE, GOLDERS GREEN.

W. E. MASTERS AND F. T. DEAR, A.A.R.I.B.A., ARCHITECTS.

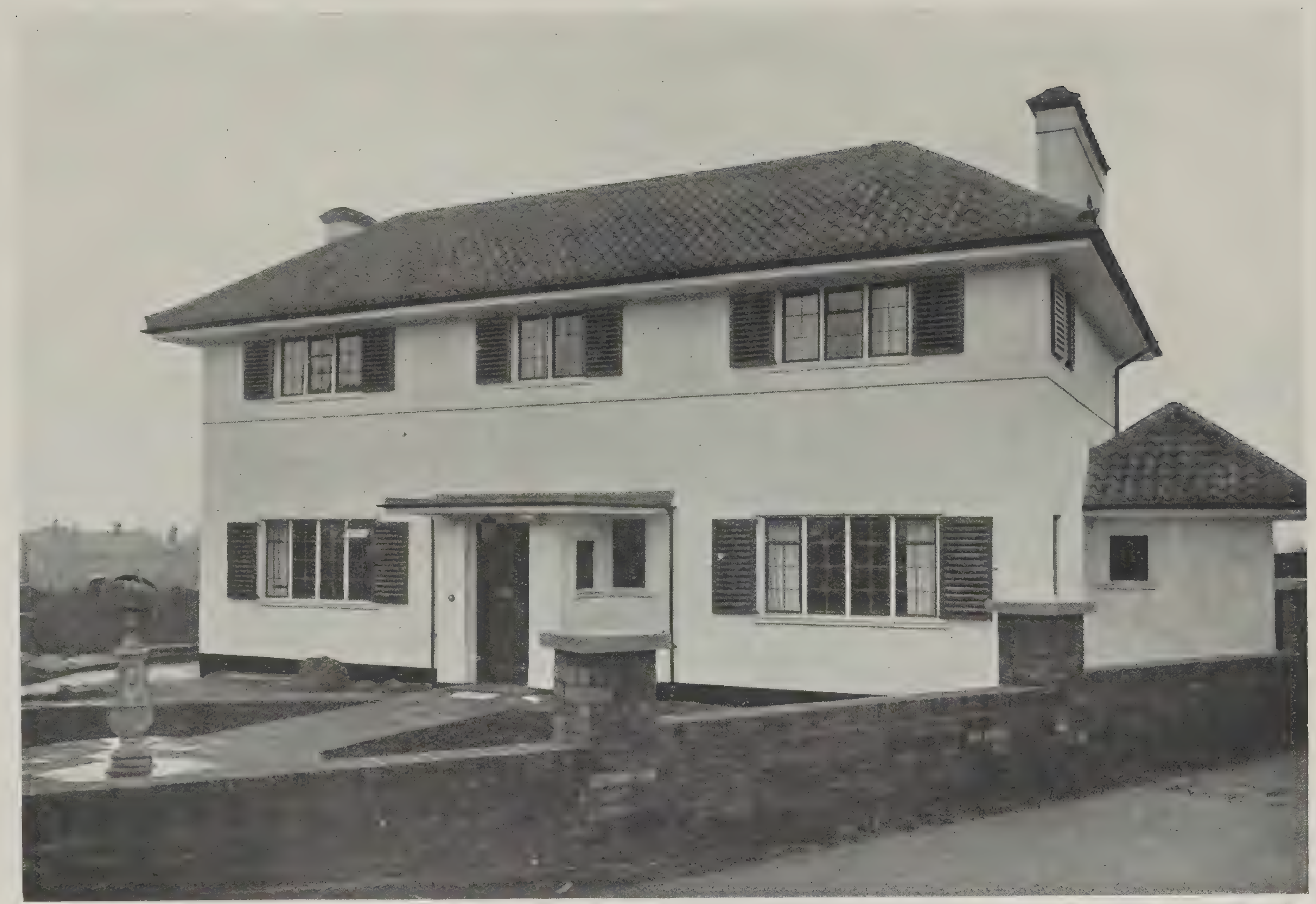
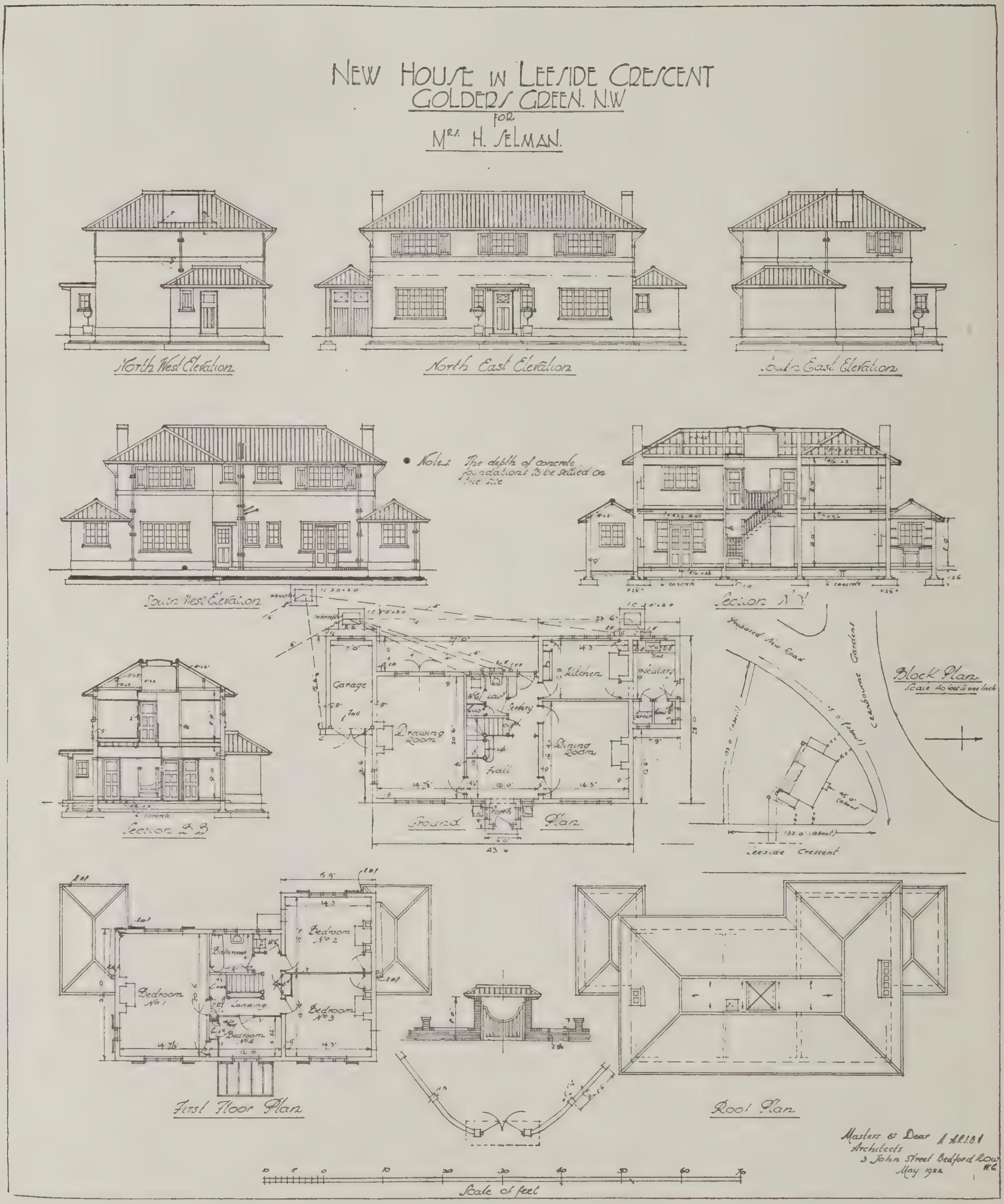


*Photo: Architects' Journal.*

The house here illustrated (plans of which appear on page 304) has been erected at Temple Fortune, Golders Green, on the axial line of a corner site. It is approached across a formal garden, of which a sundial forms the central feature, and has a lych-gate at the entrance from the road. Simplicity is the keynote both in plan and elevation, and the proportion and disposition of windows, overhanging eaves, and the red-tiled roof give it a charming and dignified appearance.



HOUSE AT TEMPLE FORTUNE, GOLDERS GREEN.

W. E. MASTERS AND F. T. DEAR, AA.R.I.B.A., ARCHITECTS.

# The Presentation of Prizes at the R.I.B.A.

## Viscount Leverhulme's Youthful Dream

MR. PAUL WATERHOUSE, P.R.I.B.A., in his annual address to architectural students of the nstitute, delivered on Monday evening, ast week (prior to the distribution of rizes), spoke on "Clients," a subject, e said, so fraught with pitfalls that it vas almost ranked among the indelicacies f conversation. Proceeding, Mr. Waterhouse said :—

"I do not remember to have ever heard . responsible architect with clients of is own speak publicly upon the topic. The reason for this lack of utterance may ossibly lie in the fear that no man can ossibly speak from experience of clients n the past without hopelessly alienating he clients of the future. I have no such ear; for in the first place the employers f my past energies have seldom or never ailed to deserve the kindest things I an say of them, and in the second I do ot propose to utter anything to-night n the subject of clients in general that ould bring any blush, but that of satisfaction, to their honest cheeks.

"Do you all know what a client is? The word has a strange origin, and has n the course of history partly, I believe, through the action and attitude of lawyers, turned itself upside down.

"A powerful Roman, on whom waited a hungry crowd of dependents, was wont to call himself their patron or *patronus*, and the dependents, who didn't mind what name they took so long as they got his favours, were dubbed clients. Literally, I understand, the word means one who listens eagerly, and, therefore, so long as our employers are waiting like faithful hounds with ears cocked to catch our lightest word we may appropriately call them clients. But in this age of ours the *queue* system for employers of architects is, I believe, confined to one or two rather grave cases, and until it becomes a nuisance of general application I am given to think that the word is, from an antiquarian point of view, rather misapplied. The patron was the legal protector of his clients. Hence came the modern application of the word client to a solicitor's or barrister's employer. The application soothes the lawyers, but I have never heard of a lawyer who went the length of setting himself up as a *patronus*.

"Anyhow, there are the clients for you—or there may be—and I mean to talk about them, even if I venture, out of respect for the class, occasionally to call them employers.

"A great part of your business, if you are going to swim and not to sink, will consist in the successful treatment of your employers. You will please observe that I have escaped using the word 'management.'

"I escaped it on purpose, because any idea of illicit persuasion, of cajolement, or of deceptive encouragement is entirely foreign to what I have to say to-night.

"There is one very simple, very obvious and very rational condition embodied from the very beginning in every transaction between an architect and his employer. It is so radical and integral that it astonishes me to find how frequently it is entirely overlooked by both parties.

"The client's outlook on the coming job is hedged in like most fields of logical enterprise by two data, which you may call, if you are in a logical mood, the major and minor premises. But since the word premises is liable to be misunderstood in connection with architecture, and since these two data are of equal cogency, and are not necessarily pulling in the same direction, I prefer to call them the two counterpoises.

"One of these, of course, is the house (or other building) that the employer wants and the other is the sum of money he is content to spend. Observe, I do not say the house he first asks for or the sum he first names.

VISCOUNT LEVERHULME.
(*From a Caricature by H. de C.*)
"And so, you see, I *am* an architect!"

"And when I thus differentiate I am not at all implying that he is going to be screwed up to a building more costly than he wants or can afford, but simply that you and he, acting on one another, may modify these conditions at a very early stage in various directions.

"Anyhow, there are these two elements—the price offered and the building wanted. Will they fit one another? It is a hundred to one that they will not. If they do not, it is well to remember that this misfit is probably nobody's fault.

"At this stage it will be your privilege to point out to your employer that something has got to give way. The original idea of the house must be reduced or the sum of money must be increased. If you are both honest and really capable, no embarrassment attends the explanation. But you must be quite sure in your own mind that you are capable of working without extravagance.

"The expedient at this stage of deceiving your client or yourself with an approximate estimate based on an unreasonably low factor of price is, of course, unpardonable as well as very impolitic.

"You should always make approximate estimates and, I entreat you, always keep them. Start an approximate estimate book as soon as you have a brass plate, check each estimate with the contract figure, check it also with the final account, and keep it till you can hand it over to your office successor.

"When you have satisfied your employer about price and he has satisfied himself about size and degree of luxury or simplicity, there remains still, as we all know, the great question of agreement on questions of taste. Here is, or may be, the hardest trial of all. You may, it is true, come to a parting of the ways at which your ways must literally be parted. Your conscience as an artist may compel the severance. But it should not come before you have made sure that it is art, not obstinacy, that is stiffening your backbone, and until you have realized that there is more than one way of doing even a work of art. Certainly you should never do a work of which you are ashamed, but there is a difference between shame and mere disappointment, and you may be able, by substituting simplicity for your own choice in display, to achieve a triumph—not of mediocrity, but modesty. It is in cases where your patron asks for the too much rather than the too little that your profession of faith is most likely to be put to the trial.

"Shall we remember here to come back for a moment to the more elementary essence of your craft, that architecture, as I have said elsewhere, is not so much a noun as an adverb. And the adverb is not 'how much' but how.

"The client pays for his house to be built. The builder builds it. The whole business of 'how' it is built is yours.

"It is with no disrespect towards clients that I tell you that they are of different kinds. Being human beings, they can hardly fail to differ. And these differences which make them so interesting as employers are partly differences of mentality and partly differences both of taste and of wealth. It is your business to be perfectly respectful students of these differences, not merely in your own interests but in theirs. Remember, it is you who stand, not as antagonists before your employers, but as mediators between them and the fulfilment of their own desires. There are some people who find great difficulty in expressing their needs. To them you will be helpful in guiding that expression. There are some who do not fully know their needs and who look to you for initiation into likely directions. Others there are who require your services chiefly because they rightly look upon an architect as the doorkeeper of building enterprise, just as a solicitor is the doorkeeper of law. It is well at the outset to discover by observation and with tact what is the light in which you are viewed, and if possible to make sure without any derogation from your office as artists that you do to the utmost of your ability supply, along with your artistry, that guidance, that prompting, or that specially businesslike alacrity which your employer quite legitimately seeks.

"You will find some clients—both individuals and bodies corporate—who do not trust you. I do not blame them, for their attitude is caused either by unhappy experience in the past or by incorrect information as to the nature of an architect. It is best in such cases to make sure at an early stage of your own intention to be scrupulously worthy of trust, and, if possible, to convince your client in such a way as to change his mind. I say this not for your sake, nor wholly for his sake, but for the sake of the job.

"I once had such a client—he was a corporate one—on a fairly large scale. Banking on the certainty that I should lead that body corporate into an expenditure 20 per cent. in advance of the contract, the said body cut my authorized expenditure down accordingly. I, being honest, robbed the building of certain things which I should have dearly liked to have incorporated in it, and came out of the final accounts triumphant. At least, I thought it was a triumph until I met the committee, when I discovered that my parsimony was a genuine disappointment. Let us gather from this experience, not that we may always exceed our orders, but rather that, if we all unite in keeping up the general reputation for working to a fixed figure, we shall kill that reputation for expansion, the rumour of which had led my friends into a temper of insufficient confidence.

"But there are other minds who equally need our respect. There are employers to whom the achievement of a really fine building is of greater importance than the saving of money.

"It will happen to you if you become moderately busy men that you will be simultaneously the stewards of the finances of employers, some of whom are at opposite extremes in this respect; and I know nothing more difficult than the exercise of brain demanded by having to turn, perhaps in the very same morning, to the interests of those who demand rigid economy, those who look for a perfect building, and those, again, on whose behalf decisions have to be taken on doubts, in which the counterpoise of perfection and cash has to be very evenly weighed.

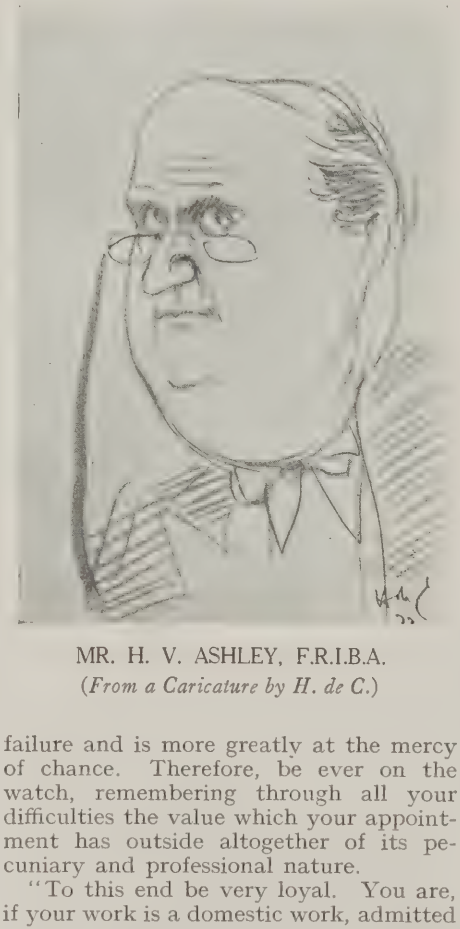
"No large building, however carefully planned and specified, gets through its whole course of creation without any variations. These variations are beset at every turn by the question of cost, and every question of cost has to be judged by one criterion only—that of the inclinations of the client. I say 'of his inclinations,' which is not the same as saying his 'wealth,' and by no manner of means the same as your personal wishes.

"You will think that I am degrading architecture to the level of rather sordid finance. Let me put the thing in another light. If an employer were to bring you an irregular mass of costly marble, and were to say to you, 'It strikes me that this queer-shaped but precious block might be so cut that we could obtain from it material for the jambs and pediment of a doorway. It is unique, no man can obtain more of it; it is so valuable that we must not leave any of it unused.'

"With what gaiety of heart would you set your ingenuity to work to get some original design achieved which would employ every ounce of that material and call for no more. My young friends, the stipulated price named for his building by a client whose means or legitimate wishes are limited is just such a block of precious marble.

"If you have *carte blanche* it is another matter, and if the *carte blanche* relates not to money only, but to a free exercise of your own fancy, you are lucky indeed. But, remember, the greater the trust the greater the responsibility; and remember also that the best architecture is wrought as a rule from the conflict with limitations.

"Remember, again, that quite apart from the question of future favours there is no friend like an old client. The relationship of architect and employer is one of a most intimate and delightful nature when nothing mars its perfection. The architect is, on the whole, the more likely of the two parties to disturb the smooth surface of that delicate relationship, for he has more opportunities of failure and is more greatly at the mercy of chance. Therefore, be ever on the watch, remembering through all your difficulties the value which your appointment has outside altogether of its pecuniary and professional nature.



MR. H. V. ASHLEY, F.R.I.B.A.
(*From a Caricature by H. de C.*)

"To this end be very loyal. You are, if your work is a domestic work, admitted to an interior knowledge of your client's family life, which is very near that of the doctor, and very like that of the solicitor.

"Never tell stories of one client to another. Consider the financial side of your transaction as a confidential secret and regard as sacred all intimacy to which you are admitted.

"If trouble comes between you, search your own mind for the cause of it, remembering that your employer, being a gentleman, may shrink from telling you what is the real cause of the break.

"Now let me talk quite boldly about the unspeakable subject of asking for work. You and I know that it 'isn't done,' but when we have said that we have said what isn't historically true. But between sending a letter of definite appeal direct to the projector of a building and lying low there are a great many fine shades of discreet or indiscreet suggestions, and persons have been known to draw the line for themselves at various points between zero and the boiling point I am not going to tell you where the right line is except that, speaking in terms of the thermometer, I believe it is somewhere between zero and freezing point and that the further it is below 32 deg the better. I do not suggest that a man should keep his candle under a bushel, but he should not push it under people's noses.

"I have, however, one appeal to make Every man who does in any degree propose his own employment, except by the legitimate means of competition and the like, not only does injustice to the more modest and loyal practitioners, not only breaks the code of our etiquette, which is after all, a sportsmanlike agreement with one another, but he paves the way for a possible breakdown of the conditions under which we all live and work.

"Consider for a moment the strain under which we should all live if the solicitation for work were general, and if we felt it our duty to ourselves, our wives and our families, to be always out on the warpath attacking every opening and besieging every likely promoter of building enterprise.

"Gentlemen, if you wish our profession to 'live happily ever after' and to be respected by those to whom we owe our opportunities, set your faces against self-recommendation.

"The best people don't do it. Be best people.

"In conclusion, I hope for you all that you may enjoy from the outset—through all the successes, disappointments and worries of honourable and happy careers those pleasures and satisfactions which have been my own cherished possessions —the friendship and trust of good clients.

"That they are long-suffering, that they often give that friendship where it is little merited, and bestow that trust in a degree which seems scarcely deserved, I for my own part know only too well.

"Long live the good clients!"

Mr. Henry V. Ashley, F.R.I.B.A., in a review of the works submitted for the prizes and studentships, said: The work as a whole he believed to be better, both in quantity and quality, than that of last year. That was all to the good, but he felt sure the competitions were by no means as keenly contested as in pre-war days; he had had the records from 1899 to 1913 looked up, and found the average number of competitors for the Pugin to be ten compared with two this year, and for the Tite eighteen compared with nine. That falling-off could not by any means be attributed entirely to the war—there were plenty of students and plenty of schools—it was due, he believed, in quite a large measure, to the schools and their students working in watertight compartments. They had their own prizes and studentships, and in many cases the intensive training left the students too tired, or with neither time nor inclination for independent study or research. It was a great pity. He sometimes thought that students did not fully realize the opportunities presented to them in the prizes and studentships of the Royal Institute. In the first place, they had the opportunity of paying homage to those architects now passed away, who in their time achieved great things, and who founded these studentships; in the second place, they had the opportunity of carrying on the traditions of those elder students, the practising architects of to-day, who had always desired to uphold the dignity and high importance of the Institute; and lastly, by their own studies and researches, they had the opportunity of proving to the world how good a thing it was to advance the profession and practice of architecture.

In general terms the studentships might be taken in two divisions, viz., those involving study of and research into existing building work, and those involving the creation of something—or design. In the former they counted the measured drawings, the Pugin and the Owen Jones; in the latter, the Tite, Saxon Snell and Grissell prizes, with the Institute silver medal for essays; also the Henry Jarvis studentships. He liked to separate them in that way because the student by his research learnt how the builders of all ages built, how they laid out, devised, constructed, and embellished their buildings. Only by that means could the student hope to succeed in originating and creating buildings of his own; and the studentships offer him excellent opportunities—there were few obstructive conditions, no difficult clients, and the awards were made by sympathetic juries. With the verdicts of the juries this year he could honestly say he agreed.

With regard to the Tite prize, nine designs had been received, the subject being an Italian Embassy in a European capital. Many difficult problems were involved, and no single competitor had mastered all of them. Mr. J. C. Shepherd, who received the prize, had well earned the distinction, his planning generally, and the lay-out of the principal floor, his arrangements of the ambassador's quarters, with its terrace garden, and his treatment of the longitudinal section, were all very ably devised and logically worked out. The elevation, however, was not so successful. Miss Helen Chambers entirely merited the honourable mention for a fine design, excellently drawn. In many respects he thought the elevation was more effectively treated than the winner's. The design submitted by "Tishy" was treated very similarly to the other two. He commended the author for his effort; for his own part he should have recommended him for an honourable mention.

There were four entries for the Grissell prize, the subject for which was a design for a warehouse with certain requirements. The scheme prepared by Mr. P. Morrey had rightly gained the first place; it was a good example of what a warehouse should be. "Bluzz" submitted a scheme on somewhat similar lines, but his constructional details were not so well worked out. The design submitted under motto of a red Fleur-de-Lys was not good, and "Syntithemi" had far too much architecture of an indifferent kind in his elevations.

Viscount Leverhulme, in proposing a vote of thanks to the President, said it had been the dream of his youth and the maturer ambition of his riper years to be an architect. Instead of being an architect he had been adding to existing buildings ever since he was nine years of age, when he built a rabbit-hutch. His only regret had been when he had to cut down his architect's plans, and he never entered the church at Port Sunlight without thinking of the original designs which, for reasons of economy at the time, were never carried into effect.

It had been estimated that the old city of Athens must have cost about five hundred million sterling to build, and he thought the city fathers of Athens must have felt satisfaction that they had not cut down the cost because there was no part of the civilized world in which one could not see the influence of their buildings.

Mr. W. R. Davies, C.B., seconded the vote.

The prizes won by the students in the Institute competitions were then distributed by the President.

Previous to the meeting the following guests were entertained to dinner by the Council :—

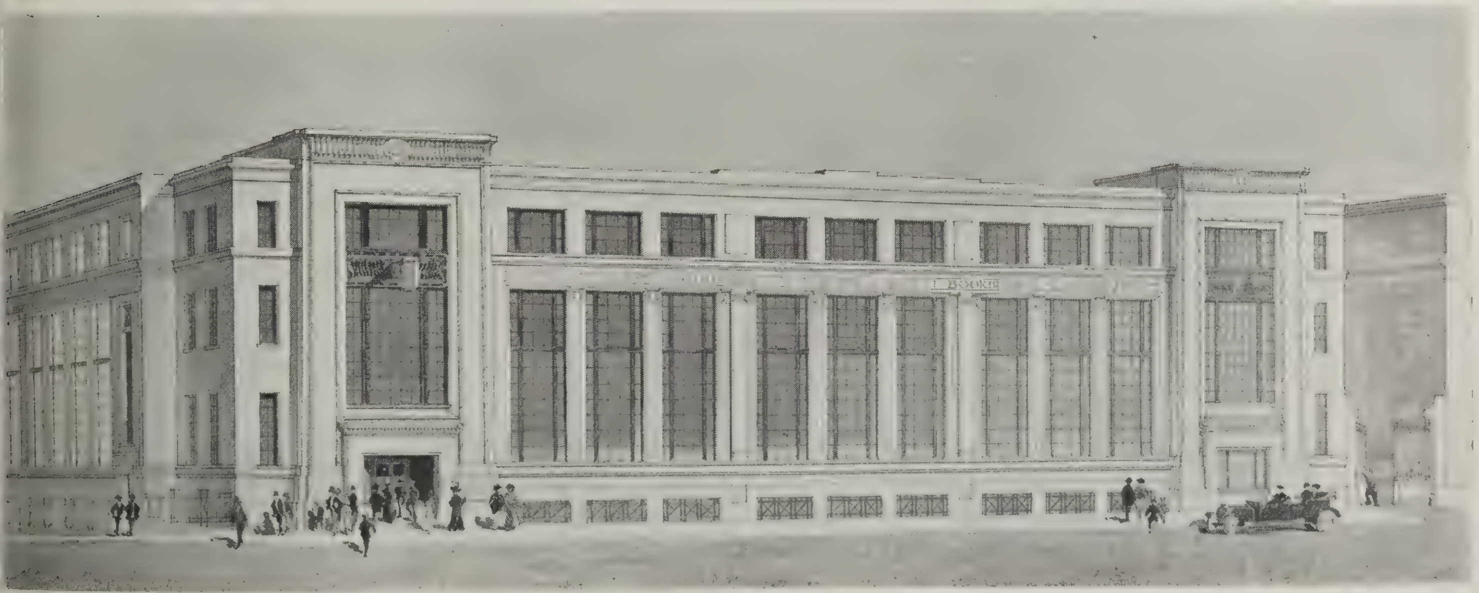
The Rt. Hon. Viscount Leverhulme; Mr. W. R. Davies, C.B.; Mr. Hugh Davies, Board of Education; Professor A. M. Hind, M.A., O.B.E.; Mr. Henry V. Ashley (F.); Mr. C. F. Filbey, winner of the Owen Jones studentship; Mr. W. T. Benslyn (A.), winner of the Godwin Bursary and Wimperis bequest; Mr. A. Newton Thorpe, winner of the Pugin studentship; Mr. Ernest G. Theakston (F.), winner of the Henry Saxon Snell prize; Mr. Percy Morrey, M.B.E. (A.), winner of the Grissell gold medal; Mr. Lionel B. Budden, M.A. (A.), winner of the Essay silver medal; Mr. Wesley Dougill, B.Arch. Liverpool (A.), winner of the Measured Drawings silver medal; Mr. J. C. Shepherd (A.), winner of the Tite prize.

### *Royal Gold Medallist,* 1923.

During the evening, the President said he had pleasure in announcing that the Council proposed to submit to the King the name of Sir John J. Burnet, A.R.A., as a fit recipient of the Royal gold medal for the current year.

## The Wren Bicentenary

The R.I.B.A. have completed their arrangements for the Christopher Wren bicentenary celebrations, which will begin on Monday, February 26, and will continue during the week. A memorial service will be held in St. Paul's Cathedral on the first day, and a visit will be paid to the crypt, where a memorial wreath will be laid on the tomb of Wren by the President. It was originally proposed that a procession should take place from the Mansion House to St. Paul's, but this proposal has been dropped, and members of the Royal Institute and others taking part will assemble in front of the Cathedral, and pass in procession up the steps.

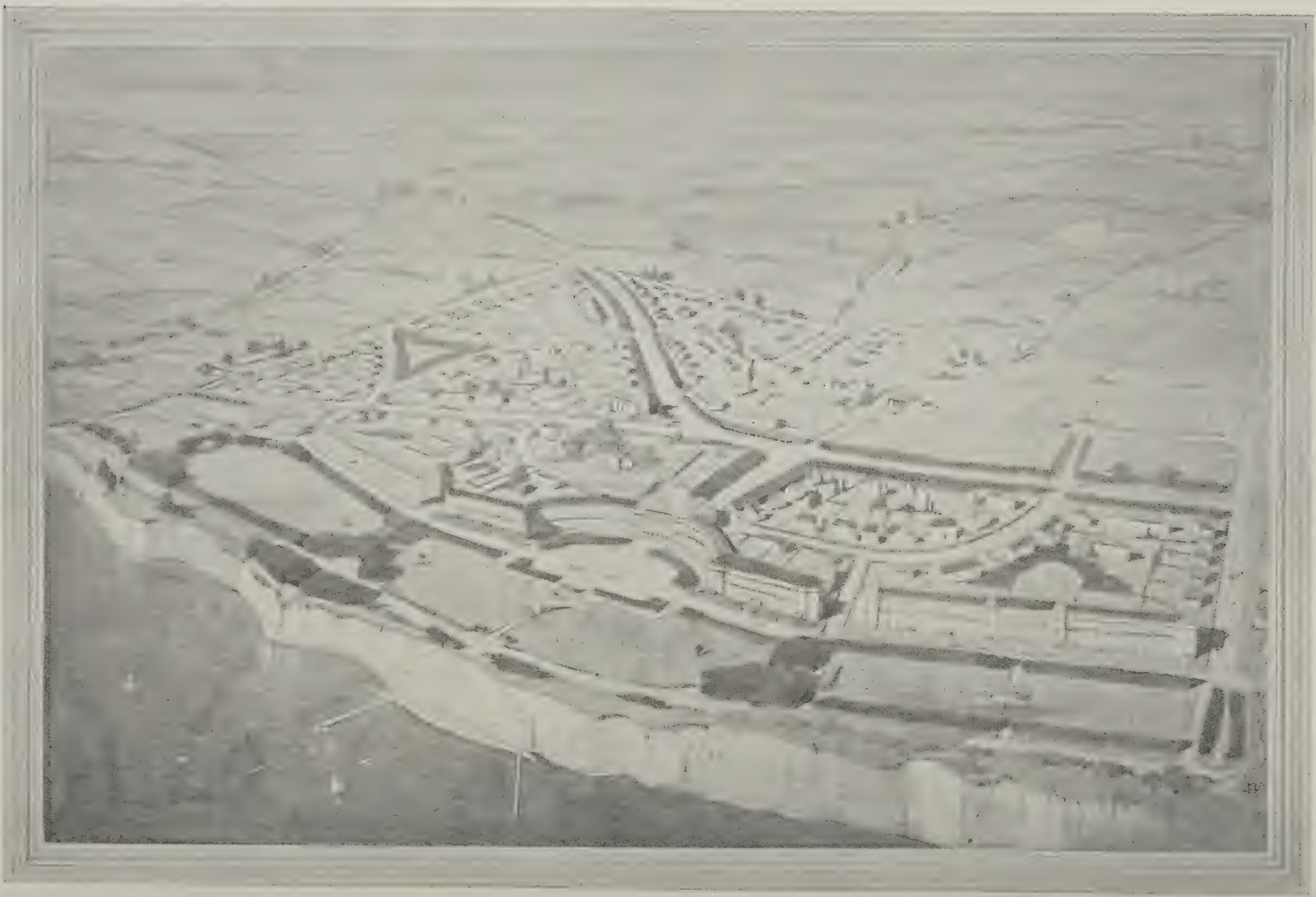


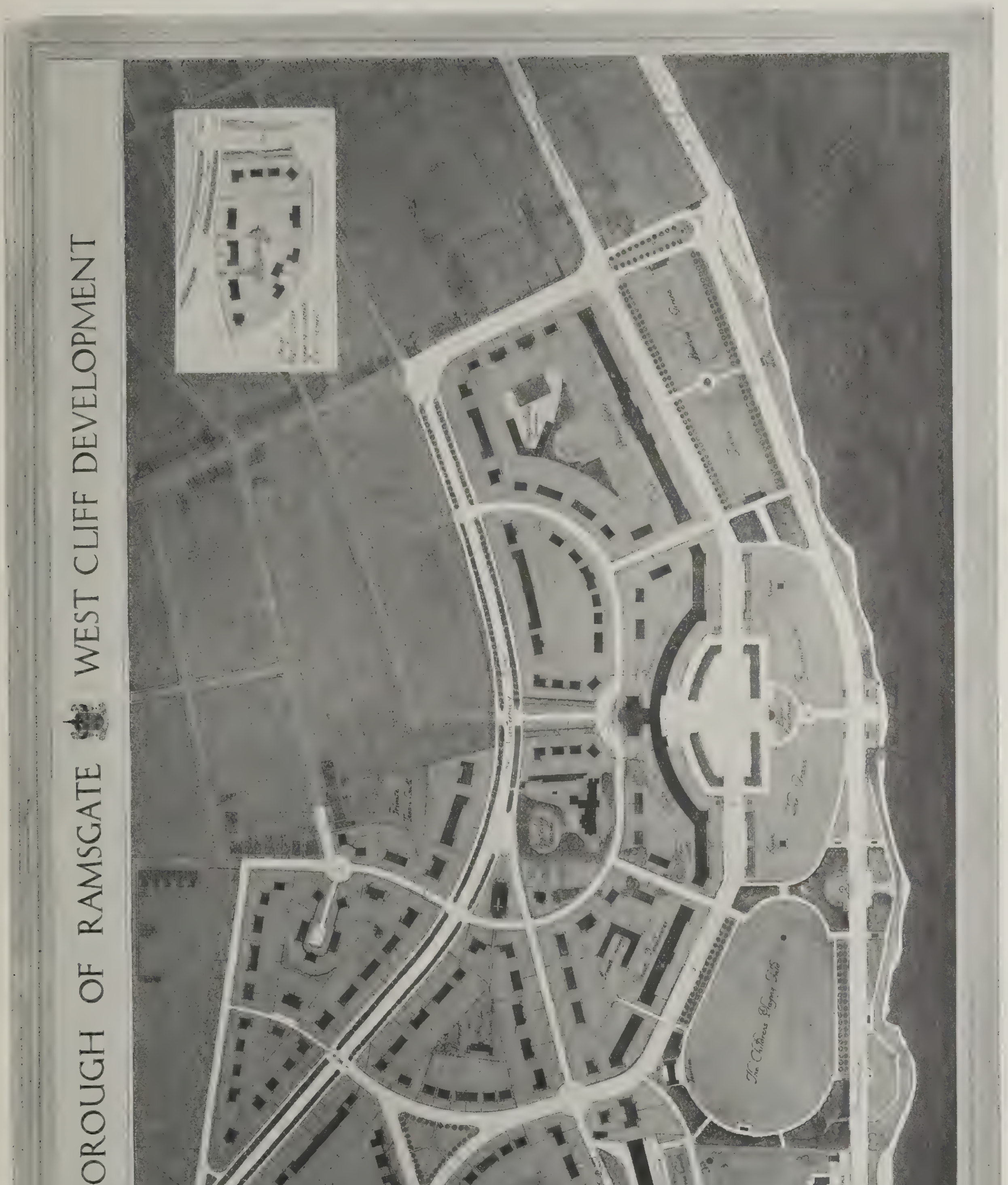
PREMISES FOR MESSRS. W. H. SMITH AND SON, STAMFORD STREET LONDON.

C. STANLEY PEACH, F.R.I.B.A., ARCHITECT.

Ramsgate West Cliff Development Competition : First Premiated Design

W. Harding Thomson and P. D. Hepworth, Architects





In the above design the chief factor which determined the lay-out was the desirability of presenting, as far as possible, an unbroken line of buildings facing the sea, with a succession of attractive gardens and recreation grounds along the cliffs.

# The New Parliament Buildings, Cairo

The new parliament buildings will stand in the centre of Cairo. It was difficult to find a suitable site, but as there existed a hall for the legislative assembly, it was thought desirable to convert that for the use of the senate and so save time and expense, and then to build out in the grounds the new chamber of deputies. This meant pulling down certain small unimportant buildings. The site, however, is still left somewhat congested, though it is hoped that before long it may be possible to open it up further when fresh accommodation can be found to replace other buildings.

The new building covers an area of approximately 3,000 square metres. The accommodation consists of the salle des séances, or chamber of deputies, with a gallery for the Press and the public, two committee rooms, ante-chamber and salon for the King, a room for the president, four other rooms for the ministers and vice-presidents, and four offices for the secretaries. In addition, a salle de pas perdus, connected to the old legislative assembly building, is provided, which can be used by both chambers.

There are two entrances and staircases for the Press and public, one for the general public, the other for the Press and reserved public, and these give access to the gallery of the chamber of deputies. There is a main entrance and vestibule under a colonnade for the deputies, and separate entrances in the colonnade of the wings for the King and the ministers. A buffet and considerable office accommodation is provided in the existing legislative assembly building. The general style of the exterior of the buildings is Renaissance based on the French Louis XVI period.

The salle des séances is circular in plan, roofed with a reinforced concrete dome. It provides accommodation for 235 deputies. The benches of mahogany, upholstered in leather, are arranged in a horseshoe formation and in tiers. About 100 fauteuils are arranged behind the back benches for the senate when special conferences of both houses are required. There is a raised daïs with a throne for the King when he opens Parliament, and accommodation for the speaker and the orator. The diameter of the hall is 21 metres, and the height to the top of the dome 21 metres from the general ground-floor level. The style of decoration of the interior of the hall is Renaissance and more classic than the exterior.

The decoration of the king's antechamber and salon is in the "Empire" style. For the rooms of the president and the ministers no definite style has been adhered to, and they are fairly simple in design.

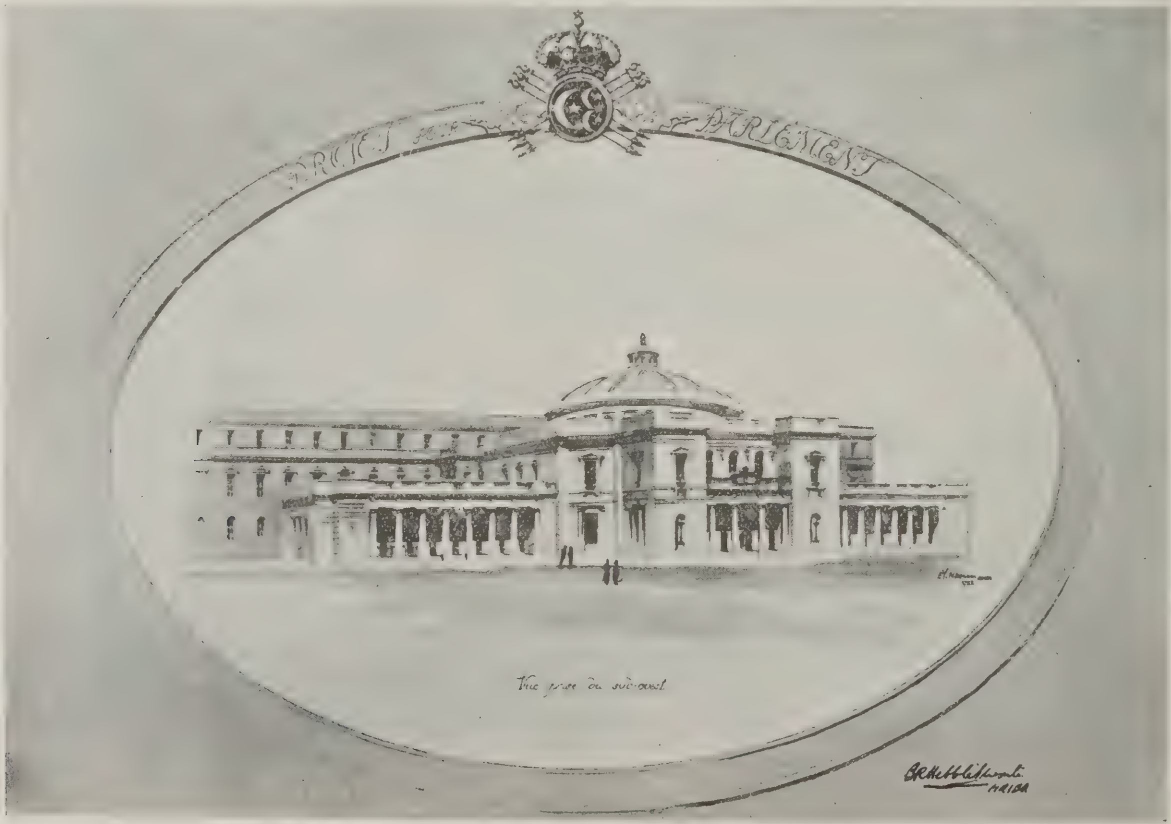
The decoration of the interior of the salle de pas perdus does not agree with the exterior, as it was thought desirable to have it in an adapted ancient Egyptian style. The columns are circular, of a diameter of 80 cms., and terminate in the palm-leaf capital. The whole will finally be richly painted in accordance with the style and period.

The preliminary plans were approved on August 12, 1922, and it is hoped that the buildings will be completed in March, 1923.

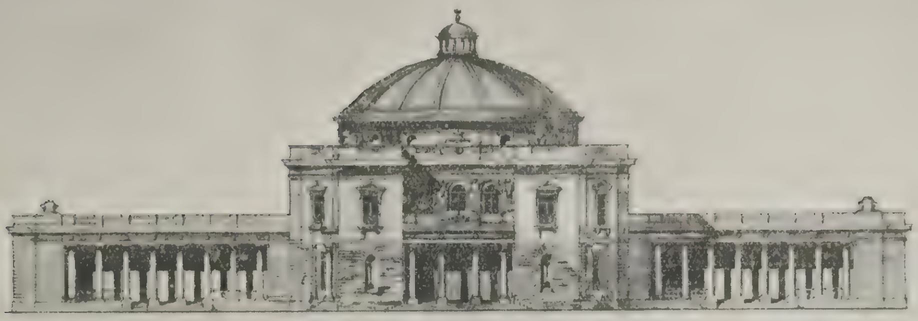
The architect is Mr. B. R. Hebblethwaite, A.R.I.B.A., and the whole of the drawings have been prepared in the architectural office of the State Buildings Dept., P.W.M.

# Architectural Art in the United States

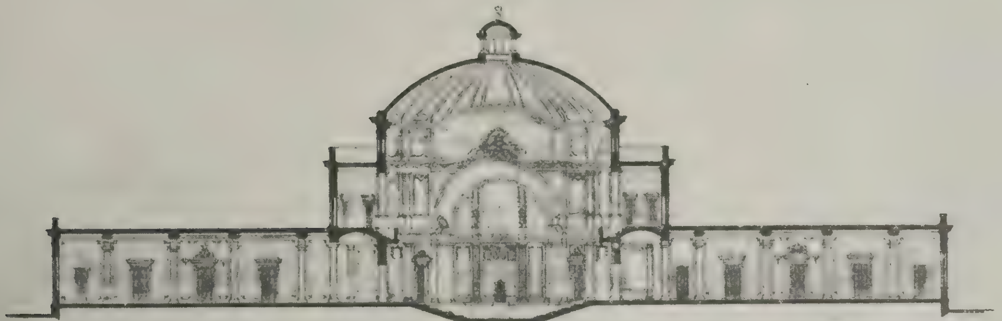
A large number of lantern slides, made as the result of a series of visits to the United States during a period of fifty years, were shown by Mr. J. Coulson Nicol, F.R.I.B.A., in delivering a paper on "Architectural Art in the United States," before the Birmingham Architectural Association. The speaker said that the energy and foresight of such cities as Chicago and Washington in laying down a city plan, and the general enthusiasm amongst the business men to see it carried through was without parallel in the older countries. He did not think that the great public buildings in the United States were finer than those in England and France, but they were on a much larger scale and were better placed. It was gratifying to find the very great admiration all Americans had for the English homes, both ancient and modern, and the intimate knowledge they had of the work of our best architects. The finest monumental buildings in the United States were usually the most modern. With regard to town planning, he said that in no country was the art better understood and more generally practised than in that country. An astonishing example of broad outlook was the scheme for the rebuilding of a large part of Chicago. It was brought forward and was being run by the business men of the city, and was backed by the inhabitants as a whole. It was too much to hope that something of the same kind could be done in Birmingham. The majority of the lantern slides exhibited were prepared from photos taken and sketches made by the lecturer in Spain, California, and the Middle West and East States.



THE NEW PARLIAMENT BUILDINGS, CAIRO.
B. R. HEBBLETHWAITE, A.R.I.B.A., ARCHITECT

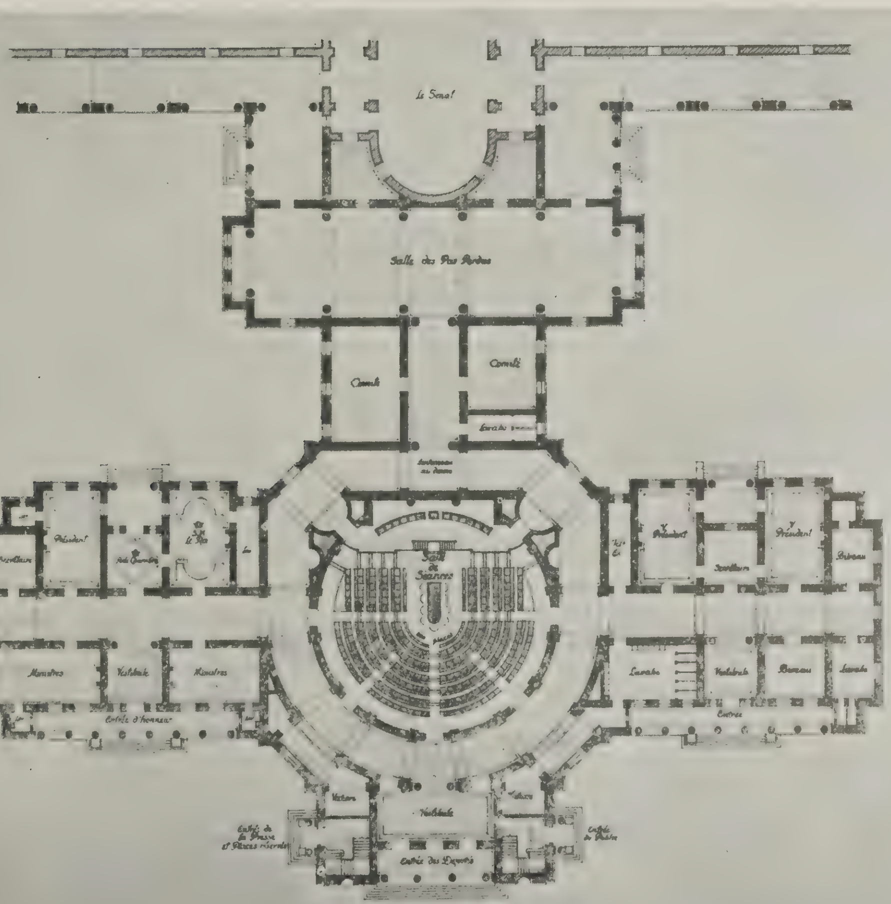


Façade Principale



Coupe Transversale

B R Hebblethwaite ARIBA



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THE NEW PARLIAMENT BUILDINGS, CAIRO. B. R. HEBBLETHWAITE, A.R.I.B.A., ARCHITECT.

# Correspondence

## "Waste"

*To the Editors of* THE ARCHITECTS' JOURNAL.

SIRS,—The leading article in your last issue entitled "Waste" draws attention to subjects that are badly in need of ventilation. For some reason or other they are never tackled in the professional Press—perhaps because of a disinclination to "tread on people's toes," or because it is thought that anything in the nature of adverse criticism will be attributed to professional jealousy or spite. In setting forth the position in general terms you have avoided giving offence, and have opened up a number of "banned" topics for profitable discussion. With this word of praise, may I pass to one or two criticisms of your article?

The grievances are well enough stated, but what of the remedies? It is not enough, surely, to wait for an improvement of professional conditions until the public is sufficiently educated in architecture. Cannot something *positive* be done for the private practitioner? In France every Prix de Rome man is assured of a Government commission. Why not establish a similar system in this country?

Then why should the great bulk of the State and municipal work be done by official departments? I suggest it should be put to the various authorities that every year a certain number of buildings be set apart for private architects—preferably for those who have shown themselves capable of doing good work.

The question of the uninformed building owner is a very ticklish one. Directors of companies, as you say, seem to have a positive knack of getting hold of the wrong architect. And how pleased they are with their monstrous erections! If some means could be found of putting them in touch with good architects, how great would be the improvement in our commercial architecture. Could not the R.I.B.A. do something in this matter?

LONDON ARCHITECT.

## Loading of Office Buildings

*To the Editors of* THE ARCHITECTS' JOURNAL.

SIRS,—In the recent paper read before the Royal Institute of British Architects descriptive of the New County Hall, it was stated that the floors were all designed for a loading of 100 lbs. per ft. super.

It would be instructive to learn what relation this bears to the actual loading.

The L.C.C.'s own regulations for steel frame buildings certainly call for a calculated loading of 100 lbs. per sq. ft. for offices, which presumably covers the worst case; but administrative offices are surely the most lightly loaded of any, and even an additional 10 per cent. on the steelwork of a huge building like the County Hall must represent a very substantial sum.

For the past month I have noticed twice a day the arduous demolition of the floors of a "temporary" office building in St. James's Park, the rooms of which have never probably carried, or were ever intended to carry, more than light office furniture and a few officials. Was this designed to some such theoretical loading?

NEMO.

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*To the Editors of* THE ARCHITECTS' JOURNAL.

SIRS,—In reply to your request for comments on the letter of "Nemo," I would suggest that we probably have the building regulations which we deserve. Architects of experience are, of course, fully aware that theoretical loadings, like 70 lbs. per sq. ft. in bedrooms and 100 lbs. in ordinary offices, are wildly improbable, except under the most exceptional circumstances, for which generous factors of safety are always provided.

But however flagrant the absurdity may be, who can afford to protest publicly, with any hope of professional backing? The merest suspicion of heresy against that blessed term "established practice," the very mildest plea for a little common sense, generally suffices to arouse the vociferous ire of somebody who hides his practical ignorance under an unctuous reverence for "sound and safe building." After all, we know that when imprisoned within our textbooks we are safe, and we generally play for safety all the time and hug our chains.

And we shall continue to do so until we can educate professional opinion through a new generation of young architects whose training has been more practical. It is futile to abuse the officials of local authorities or of Government departments, who can scarcely be expected to adopt standards less conservative than those which are indicated by published professional opinion. Equally useless is it to deride textbooks. They are too firmly established; and their authors have generally copied older textbooks, generation by generation, back to the time when fat commissions might be expected to result from writing a pseudo-scientific book of rules and dedicating it by permission to some Right Honourable architectural amateur.

Apparently the only cure is to catch our architects young, and to give them opportunities of coming into physical contact with those forces which they are supposed to control.

We do this with our young engineers: we send them into the shops, regardless of dirt and grease, and we compel them to make innumerable practical tests before we give them a professional status. But the young architect can obtain his A.R.I.B.A. without touching a tool or even testing a small stick, to say nothing of a beam, to destruction.

If the embryo architect cannot find time to lay his own bricks, to cut his own tenons, to set out his own rods and frame his own roof, and then in due course to act as foreman or clerk of works on his own design, let him at least be taught to learn his structural mechanics in such a way that forces and loads mean to him something more than mere figures. At least let him learn the laws of leverage with a 5 ft. rod and the kitchen weights, and the nature of roof stresses by building up model trusses with laths and string. Even one Saturday afternoon stolen from sport and devoted to building a floor with real joists and testing it with real bricks, would teach that which cannot be learned from a year of lectures or extracted from a whole shelf of textbooks.

The cost of materials for this kind of training can be almost infinitesimal, but its value is incalculable. Until it is adopted we shall never get architects who are also master craftsmen, who can build safely without waste. Until we do get such architects we must expect that extravagant anomalies in by-laws, regulations and textbooks will continue to tax unduly our industrial resources.

PERCY J. WALDRAM.

## Reinforced Concrete Calculations for Beginners

*To the Editors of* THE ARCHITECTS' JOURNAL.

SIRS,—On reading the article "Reinforced Concrete Calculations for Beginners—VI," by Professor Henry Adams, M.Inst.C.E., in your issue for January 17, I discovered an error which, although not likely to affect experienced designers, is likely to be very misleading for beginners. Professor Adams states: "We might have obtained an approximately correct section for a simple beam by making $95.b.d^2$ equal to the bending moment, in a similar manner we can find the approximate section for a continuous beam by making $120.b.d^2$ = bending moment." In the design of reinforced concrete beams and slabs the formula $BM = 95.b.d^2$ is correct for working stresses of 600 lb. per square inch on the concrete and 16,000 lb. per square inch on the steel whether the beam or slab is simply supported or continuous, and the amount of tension steel required is $\cdot 00675\, b.d$. The formula $BM = 120.b.d^2$ is approximately correct for stresses of 700 lb. per square inch on the concrete and 16,000 lb. per square inch on the steel, the required amount of steel being $\cdot 0087\, b.d$.

The above figures are on the assumption that the modular ratio is 15.

The number by which $b.d^2$ is multiplied in the above formulæ varies only with the allowable stresses on the materials and not according to the method of support or loading.

Possibly Professor Adams meant that $BM = \frac{WL}{8} = 120\, b.d^2$ gives approximately the same result as $BM = \frac{WL}{10} = 95\, b.d^2$. Or expressed in words: if the bending moment on a *continuous beam* is calculated as though the beam was *simply supported*, the factor 120, used instead of 95, will correct the error.

This is rather an unusual method of procedure, and he must have overlooked the fact that he had previously calculated the BM as $\frac{WL}{10}$

READER.

*To the Editors of* THE ARCHITECTS' JOURNAL.

SIRS,—I thank "Reader" for his criticisms, but I do not agree with him that "the number by which $b.d^2$ is multilied varies only with the allowable tresses on the materials and not according to the methods of support or loading." 'or a given load the section required and lso the amount of reinforcement will ertainly vary according to the method f support and also of loading. If he had aid the multiplier depends only on the llowable stress and the true bending noment he would have been correct. He s right in assuming that what was in ny mind was that if the beam be taken s simply supported, 120 $b.d^2$ will give he equivalent section for a continuous eam.

HENRY ADAMS.

## The Press and the Architect

*To the Editors of* THE ARCHITECTS' JOURNAL.

SIRS,—Your journal is to be congratulated on its efforts to secure justice for the architect from the lay Press. It is not that the architect desires personal advertisement, but that the public should be taught that the success of any building is due, at least, just as much to design as to construction. Unfortunately, the lay Press are not the only offenders. In the cinema, when important new buildings are screened, the name of the architect is never given, and the same omission occurs on many of the posters exhibited on the railways. Why should not the name of the architect of any building in course of erection be displayed in a manner similar to that of the builder? Much of the indifference of the public is due to the curious modesty of the architect. The profession should use every means within its power to impress upon the public that there are such people as architects, and that buildings have to be designed as well as built. It does not seem to be realized that the planning and designing of buildings is an art only to be laboriously acquired.

"OBSERVER."

# The Purchase and Selection of Timber

THE fifth of the series of public lectures at the Northern Polytechnic, London, was given by Mr. Montague L. Meyer upon "The Purchase and Selection of Timber."

Raw or unmanufactured timber, said Mr. Meyer, is divided into two classes—softwoods and hardwoods. It is rare to find an individual who is an expert in both. I do not propose to discuss hardwoods because they comprise only a very small proportion of the timber which is used in construction and are of such numerous varieties, with so many different types of each variety, that it would be impossible in a short lecture to tell you anything of any lasting value.

Softwoods are produced from coniferous or cone-bearing trees, and although there are many species of these, when they are sawn up and ready for use they are reduced to two types, namely, the redwood and whitewood which come from European countries, and the pine and spruce from Northern America.

The timber merchants and consumers in the United Kingdom generally favour the use of European woods.

It is much easier to make a selection of sawn timber than it is of round timber. In the latter the defects are more or less hidden. In the former they are exposed to view. There are four defects which should always be kept in mind: knots, sap, splits or shakes, and rot.

To take the first: knots are unpleasant things. We should all prefer to have wood without them, but that is almost impossible. Avoid, however, the black knot—it is dead and will probably fall out. The tight or live knot, when not too large, need be no cause for serious anxiety if the timber is being used for frame work or carcassing.

Sap need not worry you unless it be discoloured. If it is so, that is a serious defect, as the wood, unless very carefully treated, will rapidly decay. Timber with bright sap is perfectly sound and quite suitable for general purposes.

Shakes or splits are of two kinds. The first, and less serious, is a straight split which occurs during the seasoning of a piece of wood. It is generally visible from the ends. The second is the cross shake, which is a bad defect and proves that the timber is not straight grained.

Rot or doat is not so easily visible as you may think. You cannot look at a pile of wood and be able to say with certainty that there is or is not rot in the parcel.

There are two kinds of doat—hard and soft. You do not find this defect all over a piece of wood, but in patches and blotches, dark brown in colour. It is a disease and for constructional purposes should be avoided as such. When you go on your tour of inspection or selection, you must also bear in mind that there is such a thing as dead wood—timber cut from trees which have died before being felled.

For constructional purposes it should be left alone, as it breaks off short immediately it receives a strain.

We have now dealt with the ordinary defects which are found in timber.

There are, in addition, what may be termed disadvantages rather than faults.

For instance, pieces of wood with open grain at the ends show that the wood has been quickly grown, probably in a swampy district. Such pieces have not the strength or lasting power of slower grown and closer grained wood, and however attractive they are otherwise in appearance, they should be avoided except for cheap work of a temporary character. Then again, one should be careful of strong cross-grained timber. It is liable to twist, warp, and split. Its appearance is difficult to explain, but the words used by the technical expert on inspecting such a parcel would be—harsh and strong.

Wane is a technical term to describe timber which has rounded edges as opposed to square edges. This is caused by the sawmiller endeavouring to get too large a quantity of sawn timber out of a round tree. He has brought in some of the bark and, therefore, the edge where the bark is is rounded. Such timber is serviceable for cheap purposes, but for high-class construction would not be satisfactory.

I now propose to discuss a point which may be of some use to you in the future and may also tend to make the life of the timber merchant a little less harassing than it has hitherto been. I refer to specification and conditions as imposed by the architect upon the builder and by the builder upon the timber merchant.

As regards specification, always endeavour to confine yourself to those dimensions which may happen to be available in considerable quantities in the vicinity of the district where you propose building. If your job is a large one, it will often pay you to find out what is available before you start your plans and design your work according to what you can most economically obtain. For instance, if you want 2×4 or 2×5, you may find that those two sizes are very scarce and expensive, and yet $2\times4\frac{1}{2}$ is cheap and easy to obtain.

A further point as regards size is, never specify, if you can possibly avoid it, what is called "out sizes," such as $3\frac{1}{2}\times7\frac{1}{2}$. Wood is never imported in this dimension, and if you insist upon it, it would have to be cut out of much larger timber, and you would have to pay not only for the work of conversion, but also for the waste wood which would result.

Now, there are two reasons why it is not so necessary for the timber importer to inspect his purchases beforehand:—

Firstly, there are many well-known exporting firms abroad who have established shipping marks which are known and esteemed by both timber importers and users of wood.

There are hundreds of these marks, and a timber man does not know his business until he has pretty well mastered most of them. They are generally uniform year by year as regards quality and condition and, in any case, they are guaranteed to be so. If they are not, however, the timber importer has a claim upon the shipper for the damage or loss which is caused to him thereby.

Secondly, if the timber importer has a parcel which is not good, he can dispose of it for some less important use.

When you know the marks you can safely buy from the timber merchant the well-known brands without seeing them.

Timber in this country at the present time is approximately 100 per cent. above the pre-war value. In my opinion it is too high, and I do not think that we have yet reached the period of stability when the holding of large stocks can be regarded as a safe commercial operation. At some time or another I feel that there is bound to be a heavy fall in value.

The lecture was followed by a discussion in which a large number of the audience took part, including Mr. D. W. Ayre, A.R.I.B.A., Messrs. H. T. Deacon, H. W. Grainger, and A. Hewitt.

Mr. T. P. Bennett, F.R.I.B.A., in proposing a vote of thanks, referred to the efforts being made to reduce the cost of housing and other building works, and suggested that considerable assistance would be rendered by the timber trade if they published from time to time official lists of the sizes of timber most easily obtainable and those which were cheapest. This list should be published by the professional journals, and should be circulated officially by the R.I.B.A., L.M.B.A., Surveyors' Institute, Institution of Civil Engineers and other bodies.

# An Old Surbiton House Transformed

MUCH has been heard recently of the revival of craftsmanship; but practical evidence of this has hitherto been a little difficult to collect. One sees fine work being done in workshops and studios, fine specimens are periodically on view in exhibitions, occasional public lectures assure us that all is well.

Nevertheless, it is all rather remote from real life. We bestow heartfelt admiration on isolated examples of the craftsman's skill, but somehow fail to visualize them in everyday surroundings, which is, after all, what they were primarily intended to embellish. We seek new ideas in furnishing and decoration, new inspiration for our gardens, and find but cold comfort in a shop window or an exhibition stand.

The architect, before all men, must be conscious of this. It is impossible for him, with his multifarious activities, to keep abreast of every development of modern craftsmanship, to acquire an intimate acquaintance with every labour-saving device as it appears, and yet the insistence of clients can only be met by an encyclopædic knowledge of the latest in everything that pertains to house and garden equipment, from cooking ranges to curtains, from tennis courts to tulips.

Herein lies the charm, and the value, of "The Gazeway." It is as good as the Mappin Terraces at the Zoo. Nay, better, for the exhibits are not caged in, and visitors are allowed to touch.

An old house and, moreover, an extraordinarily ugly and inconvenient house, has been transformed into an abode that will appeal alike to the ultra-artistic and to the ultra-utilitarian, to the seeker after new things, and to the lover of the old. Messrs. Gaze, who are responsible for the achievement, have done a rare service to both architect and layman by affording a practical illustration of the service they can offer. The infinite variety of modern craftsmanship is here shown and, moreover, one can test the look and feel of things as they appear in an average house on an average day. There is none of the "to be looked at but not lived with" sensation about "The Gazeway." The chairs are evidently meant to sit in; one does so, and finds them good. One can discover here whether one would really like a yellow drawing-room or no, the nurseries look as though the small inhabitants would return at any minute—the bath is a sheer temptation.

Not everything will appeal to everybody, but that is the delight of it. One can wander from room to room holding exciting arguments with oneself—at any rate there is plenty to argue about. There is the stimulus of novelty, the shock of unaccustomed colour, the wonderment as to whether every device has all the advantages claimed for it. Seen, as here, under normal conditions, one has the best possible opportunity of arriving at an unprejudiced conclusion.

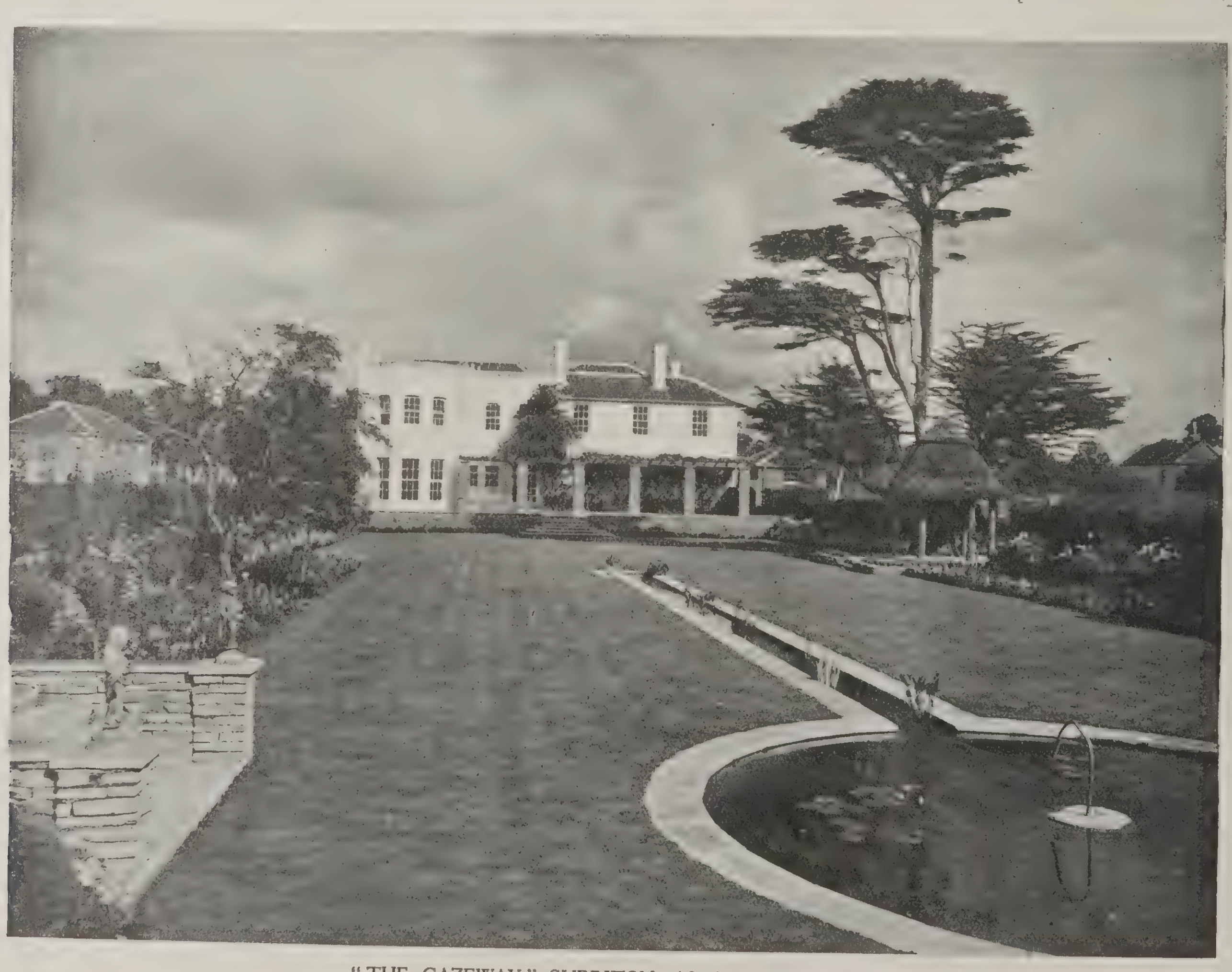
Concerning the gardens there can be no two opinions. They are the work of an artist. Transformed from the wilderness of a year ago, they are a revelation of what can be accomplished, a foreshadowing of the delights that are to come. There is quiet spaciousness about the wide lawns, old-world formality in the topiary garden beyond, while rose garden, rock garden, terrace garden, gardens too numerous to mention are all alike crammed with promise for the future.

One or two fine statuary groups are particularly worthy of mention, and the little lead figures that peer distractingly into the ponds and fountains invite one to bend down and examine the lilies and gold fish in their company.

All is not formal, however. The athletically disposed will inevitably linger by the hard tennis court with its electric lighting system for night use. Nursery folk will make straight for the corner dedicated to their use, complete with see-saw and swing, playhouse, and sand. A pond for "the young navigater" even is not forgotten. There is a wild bit, with a green bank and a little stream in which bluebells will presently be mirrored. And lastly, the presiding genius of the place has a crowded nursery of his own, packed with healthy babies of every size and shape. This is, perhaps, the nicest corner of all.

Every one, be he architect or layman, will find something to interest him in "The Gazeway." The owners extend a cordial invitation to all and sundry to "come and see," and a journey down to Surbiton will be well repaid.

E. N. B.



"THE GAZEWAY," SURBITON, AS IT IS TO-DAY.

# Tints and Towns

## By the Rt. Hon. J. R. CLYNES, M.P.

WHEN St. John saw the New Jerusalem coming down out of heaven, he saw it in colour; the jeweller as well as the architect and the mason had been concerned in its building. Each of the gems which formed the foundations of its twelve walls represented a specific tint, from the reddish-brown of the sardius and green of the chrysolite to the yellow of the topaz and the deep azure of the amethyst.

Outside the limits of the glowing Orient, cities in whose decorative scheme colour takes a definite place are rarely encountered. Two exceptions will jump to the traveller's mind—Venice, with the greens and blues and scarlets of her jalousies, and the pale pink of her palazzi; and Moscow, which has, I am told, a dazzling kaleidoscope of roofs in red and brown, blue and green, broken by sapphire and emerald and gold cupolas and gleaming white minarets—beauties, by the way, that I am not likely to be invited to view.

The English town of Tudor times must have presented a gay and vari-coloured aspect. The weathered red tiles, timbered fronts, and painted escutcheons and shop signs gave to the narrow, cobbled thoroughfares a many-tinted background. It was only with the arrival of the industrial revolution and crude utilitarianism of the nineteenth century that the love of colour was crushed out of the British people and our large centres of population became the leaden-hued and depressing huddle of sombre buildings we know too well.

Hints of reaction against the grim domination of stone and stucco and dingy brick are happily beginning to appear. Here and there an oasis of ivory white, terra-cotta, or tinted vitreous brick breaks the monotonous line of smoke-begrimed buildings. In some of the newer erections decorative designs in coloured wall-facings introduce livelier hues and suggest possibilities of varying and brightening the scenes of our daily toil.

As yet, however, little has been achieved in the direction of formulating definite colour-schemes in town-planning or improvement. With the ingrained national distrust of the bolder use of colour, British architects and builders are slow to realize the remarkable diversity in decorative possibilities which modern processes for the production of ceramics have placed in their hands.

A skilful gardener plans his herbaceous borders with the deliberate design of producing at different seasons certain pleasing combinations of colour. Why should not the architect, who is called upon to prepare plans for the erection of large blocks of buildings or to lay out a new residential area, take a leaf out of the gardener's book, and set himself to combine with stately and harmonious proportions a colour-scheme that will enhance the beauty of his work? One can imagine a combination of greys and yellows, browns and greens, blues and whites, or even gradations and shades of a single colour, in the façades of a thoroughfare, that would perceptibly mitigate the dreariness and depression which we have mistakenly come to believe to be inseparable from the grey skies of our island home.

Scientists and medical experts more and more emphasize the curative and health-giving properties of sunlight. Unfortunately, in these northern latitudes an adequate supply of sunshine cannot be turned on at our will. But its absence may be in some degree counterbalanced by utilizing every opportunity to bring into play the next best thing—those colours which delight the eye and subconsciously infuse man's being with lightness of heart and gaiety of spirit.

No inconsiderable part of the depression and listlessness which characterizes the life of the workers under the monotonous conditions of modern industrialism may be traced to the drabness and absence of light and shade in their environment.

If our streets and buildings presented to the citizen's eye the variety and beauty which spring from æsthetic employment of harmonious colouring, the whole tone of our industrial population would be beneficially affected. A light-hearted and cheery temper would be stimulated which would not merely lighten the burden of the daily task and eliminate a good deal of the friction, but insensibly educate eye and brain, and restore to our people some measure of that artistic perception of which they were robbed a hundred years ago by the crudities of the industrial revolution.

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# Law Report

## Roof and Roof Covering—Interesting Points

*Ellis v. Lapidge.*

Jan. 15. King's Bench Division.
Before Mr. Justice Shearman.

This was an action by Mr. Henry Ellis, of The Grove, Hampton Wick, against Mr. Macdonald Henry Lapidge, of Lower Teddington Road, Hampton Wick.

For the plaintiff, Mr. G. W. H. Jones said his client took The Grove, Hampton Wick, from the defendant under a lease dated September, 1918, for fourteen years at a yearly rent of £120. The premises included a dwelling-house, stable, greenhouses, and garden. The claim was for a declaration that defendant was liable to repair a lead flat and to keep greenhouses in repair; alternatively damages for alleged breach of covenant. The lead flat was so much out of condition that it was necessary to have a new one. His submission was that that work was a structural repair which fell on the landlord. If he were wrong on that, he asked that the lease should be rectified, because the correspondence and interviews between the parties showed that that particular liability should be placed on the landlord. His contention was that the lead flat or roof covering was part of the roof, which the landlord had to keep in structural repair. Defendant said it was plaintiff's duty to repair the greenhouses, but plaintiff contended that defendant should be liable, and he asked a rectification of the covenant so as to put that liability on the landlord. Plaintiff also said defendant had failed to repair the riverside frontage in accordance with his obligation, and he claimed under that heading damages for alleged breach of covenant.

Plaintiff also claimed £52 15s. 10d., money expended on structural repairs.

Mr. Charles Gordon Smith, surveyor, Cannon Street, London, gave evidence for the plaintiff as to the condition of the lead flat and other matters.

Mr. C. Tindale Davis, for the defendant, submitted that on the proper construction of the covenants in the lease there was no liability on the landlord in connection with any of the claims made.

After considerable argument between his Lordship and counsel, his Lordship in his judgment said that he would make a declaration that the landlord was liable to repair the lead flat and slates and the riverside frontage. There was evidence that the lead, which was part of the covering of the roof, was out of repair. "Structural repairs" had a well-understood legal meaning. But when premises were out of structural repair was a question of fact. Structural repair was something that repaired a dwelling-house itself. If the lead roof were absolutely worn out that was a matter of not being in structural repair.

Defendant said he was not responsible to repair the lead flat, because slates and lead roof did not come within his covenant. He referred to the other covenant and said that "a roof" was a different thing from "a roof cover," and that slates were not roof, but roof cover. It seemed to his Lordship that the two covenants, that of the landlord and that of the tenant, fitted into each other, and it was clear to him that looking at the landlord's covenant slates and lead flat were part of the roof. Therefore, if the lead flat or slates were out of structural repair the landlord must take action to do the work or pay damages. In his judgment the slates and lead flat were part of the roof and it followed that the roof covering was included in the roof, and subject to the landlord's covenant to repair the roof structure.

As to the greenhouses, there was another contention by the tenant that the landlord should repair them, but it was clear to his Lordship that upon the construction of the covenant there was no obligation upon the landlord to do so. They were not part of the dwelling-house. There was no reason for rectification.

His Lordship further said that the question of damages would be referred to an Official Referee if the parties did not reach an agreement between themselves. Costs were reserved.

# The Institution of Structural Engineers

The annual dinner of the Institution of Structural Engineers was held at the Savoy Hotel on Wednesday of last week. The chairman was the president of the Institution, Mr. E. Fiander Etchells, who is just concluding his third year of office as president.

A toast "to the pious memory of a great structural engineer" was proposed by Mr. Ewart S. Andrews, B.Sc., who said that he hoped to inaugurate a custom for future observance. We were apt to forget the debt of gratitude we owed to the memory of past masters of the profession, and among these was John Smeaton, designer and constructor of the Eddystone Lighthouse. The toast was honoured in silence.

The toast of "His Majesty's Services" was proposed by Sir Charles T. Ruthen, O.B.E., F.R.I.B.A. (member of Council of the Institution, Director-General of Housing), and was replied to by Major-General Sir Sefton Brancker, K.C.B., A.F.C., Director of Civil Aviation, who gave an interesting forecast of the developments that might shortly be expected in civil aviation. There would be, he said, great opportunities for structural engineers in the construction of aerodromes, sheds, and hangars.

The toast of "The Institution of Structural Engineers" was proposed by the Rt. Hon. Lord Riddell.

His Lordship said that he had proposed at the last of these functions the toast of "The Concrete Institute," and he was now proposing the same toast, but the name of the Institute had been altered. The advent of concrete had led to enormous developments in building, and had been followed by reinforced concrete, special steels, and many other new accessories. This had led, really, to the establishment of a new branch of engineering which had aptly been termed "Structural Engineering." The other specialist branches of engineering—mechanical and electrical — were each governed and held together by great specialist institutions, and it was only right that the new branch—the structural branch—should be so governed.

The president (Mr. Fiander Etchells) responded to the toast in his usual humorous vein.

The toast of the "Guests" was proposed by Major James Petrie, O.B.E. (vice-president), and responded to by the Rt. Hon. Mr. Justice Darling, and the Rev. F. H. Gillingham.

Amongst those present were the president, Mr. E. Fiander Etchells, A.M.Inst. C.E., hon. A.R.I.B.A., etc., and Mrs. Etchells; the Rt. Hon. Lord Riddell and Lady Riddell; the Rt. Hon. Mr. Justice Darling and Miss Darling; Rev. F. H. Gillingham and Mrs. Gillingham; Major Boyd-Carpenter, M.P., and Mrs. Carpenter; Sir Charles T. Ruthen, O.B.E., F.R.I.B.A., and Lady Ruthen; Sir Charles Morgan, C.B.E. (representing the Institution of Civil Engineers), and Lady Morgan; Mr. H. D. Searles-Wood (past-president, representing the Royal Institute of British Architects) and Miss Searles-Wood; Brigadier-General Hon. F. C. Stanley, C.M.G., D.S.O.; Major-General Sir Sefton Brancker, K.C.B., A.F.C.; Brigadier-General Magnus Mowat, C.B.E. (secretary of the Institution of Mechanical Engineers); Dr. H. H. Jeffcott (secretary of the Institution of Civil Engineers); Mr. E. J. Partridge (president of the Society of Architects) and Mrs. Partridge; Mr. W. H. Nicholls (president of the National Federation of Building Trades Employers); Mr. H. C. Johnston (president of the Institute of Clayworkers); Mr. I. Akerman (manager of "The Times"); and Captain M. G. Kiddy (secretary of the Institution of Structural Engineers).

In all there were over 250 members and guests present.

# List of Competitions Open

| Date of Delivery. | Competition. |
|---|---|
| Feb. 28 | Scheme for the distribution of drinking water for the town of Mantes-sur-Seine. Apply Mairie, Mantes, or at the offices of La Renaissance des Cités, 23 Rue Louis le Grand (11c). Premiums: 4,000, 3,000, and 2,000 francs. |
| March 31 | War Memorial in Crow Nest Park, Dewsbury. Assessor, Professor C. H. Reilly, O.B.E., M.A., F.R.I.B.A. A copy of the conditions together with plans of the site may be obtained on application to Mr. H. Dearden, A.R.I.B.A., Borough Surveyor, Town Hall, Dewsbury, on payment of one shilling. |
| April 15 | Buildings for the Polytechnic Institute, Reval. Premiums 200,000 marks, 150,000 marks, 100,000 marks. Apply Office National du Commerce Exterieur, 22 Avenue Victor Emmanuel III, Paris. (8e) The competition is an International one. |
| June 1 | New Municipal Buildings and Town Hall, Cork. Total cost not to exceed £120,000. Assessor Mr. Lucius O'Callaghan, F.R.I.A.I., A.R.H.A. The successful competitor will be appointed to carry out the work. Second and third premiums £200 and £100 respectively. Apply Mr. William Hegarty, Town Clerk, Cork. The competition is limited to architects living and practising in Ireland. |
| June 30 | Bridge over Nygaardsstrommen in Bergen. Apply Department of Overseas Trade (Room 50), 35 Old Queen Street, Westminster, S.W.1. |
| No date | Concert Pavilion, Bournemouth, to seat 2,000. Estimated cost £100,000. Assessor, Sir Edwin Cooper, F.R.I.B.A. Premiums: £300, £200, and £100. Apply Town Clerk, Municipal Offices, Bournemouth. Deposit £2 2s. (cheque). |
| No date | The Crown Agents for the Colonies, acting on behalf of the Government of the Straits Settlements, invite competitive designs for the reinforced concrete work required in connection with the construction of a new general post office at Singapore. Tentative designs, for which no fees will be paid, are required in the first instance, from which it is proposed to select a design and specify its adoption in the contract for the construction of the building. The firm whose design is so adopted will be subsequently engaged to prepare full detail plans, specification, quantities, &c., for an approved fee. Drawings can be seen and further details of the competition obtained from the Crown Agents for the Colonies, 4 Millbank, Westminster, S.W.1, quoting Z/Straits Settlements 5664. |

### *Port Said War Memorial Competition.*

The secretary of the R.I.B.A. writes us as follows: "In view of the fact that the supply of copies of the conditions of the above competition at Australia House is now exhausted, and that the time limit does not permit of further copies being obtained from Australia, the High Commissioner has asked me to state that the notices regarding the competition which you have been good enough to publish for some time past should now be withdrawn."

### *The Bergen Bridge Competition.*

The acting British Consul at Bergen has forwarded to the Department of Overseas Trade, 35 Old Queen Street, London, S.W.1, a memorandum giving the replies of the judging committee to certain questions which have been raised regarding details of the new bridge in Bergen, in connection with which a competition has been organized by the Municipality of Bergen. The memorandum is available for inspection by interested British firms at the Department of Overseas Trade (room 50). (Reference 6751/F.R./E.P.)

### *Bridlington Sea Front Development.*

The terms of the above competition have not yet been finally settled. Full particulars will appear as soon as conditions are decided.

# International Congress on Architectural Education.

The Council of the R.I.B.A. have decided to hold an International Congress on Architectural Education in London in the autumn of 1924.

The congress will consist of special meetings for the purpose of considering the history, position, and prospects of architectural education with special reference to the following points :—

The revision of the methods and system of obtaining professional qualifications.

The sources of study; the use of travel.

Prizes and awards of honour.

Preliminary studies.

Detailed subjects: Draughtsmanship; study of history; practical handwork; professional journals; contact with works.

Examinations: Standards; relation to practice; paid examiners.

Promotion of post-graduate studies: relation to preliminary and general education.

These meetings will be held for formal and informal discussion. Arrangements will also be made for social intercourse; visits to schools, museums, places of interest; a reception; an exhibition.

The subject of the congress, important at all times to architects, is more than ever important at the present day in view of the vital changes which are being introduced into British architectural education by the schools. It is hoped that a national and international exchange of ideas will lead to valuable future developments.

The organizing committee of the Board of Architectural Education will be glad to receive and consider suggestions for the greater success of the congress, which should be sent to the secretary of the Board of Architectural Education, 9 Conduit Street, W.1.

# London Master Builders' Sports Association

*League Table up to and including February 3rd.*

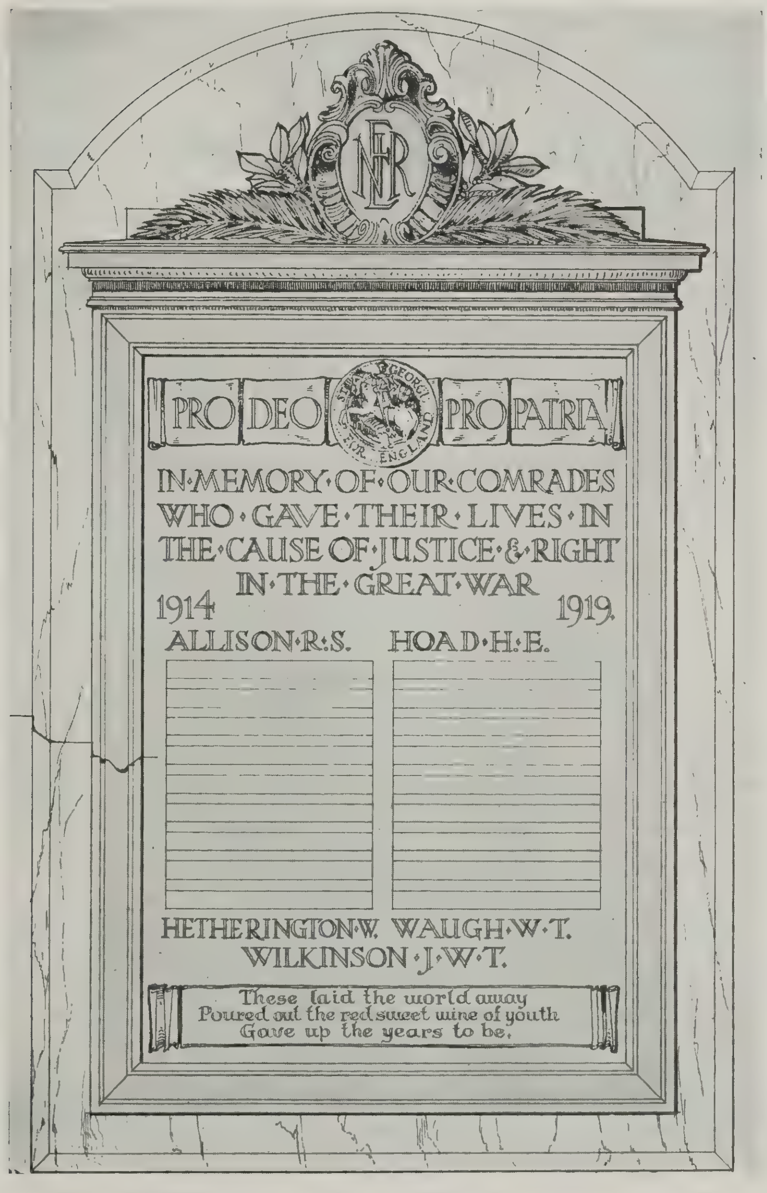
| | Plyd. | Wn. | Lst. | Drn. | Goals F. | Goals A. | Pts. |
|---|---|---|---|---|---|---|---|
| Perrycobow .. | 7 | 6 | 1 | 0 | 21 | 10 | 12 |
| Minter .. | 5 | 5 | 0 | 0 | 16 | 6 | 10 |
| Trocoll .. | 5 | 2 | 3 | 0 | 7 | 12 | 4 |
| Holancube .. | 2 | 1 | 1 | 0 | 4 | 4 | 2 |
| Higadillo .. | 5 | 1 | 4 | 0 | 6 | 12 | 2 |
| Holloway .. | 6 | 0 | 6 | 0 | 4 | 16 | 0 |

Saturday, February 3: Minter, 3; Holloway, 0.

ednesday, February 21, 1923 Vol. LVII. No. 1468

# THE ARCHITECTS' JOURNAL & Architectural Engineer

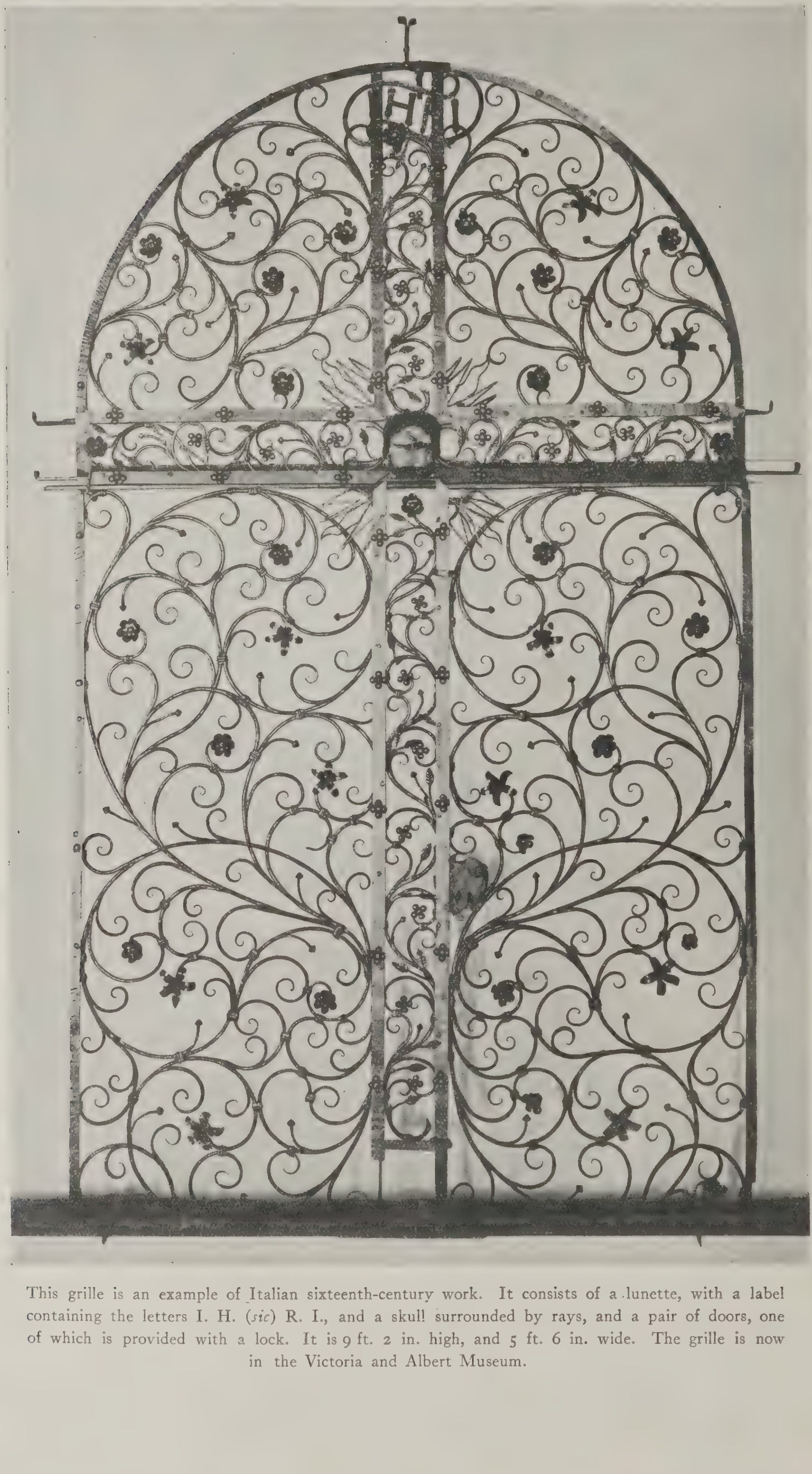
*With which is incorporated "The Builders' Journal."*



WAR MEMORIAL IN THE ACCOUNTANTS' DEPT. OF THE NORTH-EASTERN RAILWAY COMPANY, NEWCASTLE.
JOHN W. ENGLISH, M.S.A., ARCHITECT.

27-29 Tothill Street, Westminster, S.W.1.

# Details of Craftsmanship. 17.—An Italian Grille of Hammered Iron



This grille is an example of Italian sixteenth-century work. It consists of a lunette, with a label containing the letters I. H. (*sic*) R. I., and a skull surrounded by rays, and a pair of doors, one of which is provided with a lock. It is 9 ft. 2 in. high, and 5 ft. 6 in. wide. The grille is now in the Victoria and Albert Museum.

THE

ARCHITECTS' JOURNAL

27-29 Tothill Street, Westminster, S.W.1.

Wednesday, February 21, 1923

Volume LVII. No. 1468

# The Future of Industry

I HAVE been reading a letter by Lord Weir in "The Times" of January 13. It is headed "The Future of Industry," and in it Lord Weir states that his object is to draw attention to a factor governing our costs which he does not think is fully recognized as in a degree at least forming an entirely new element in the consideration of the wages question. Lord Weir, like the rest of us, is very much concerned with our industrial position, and has been following with some attention the recent debates in the House of Commons on unemployment, while also giving consideration to the Mining Association's note on conditions in the mining industry, and to the various schemes of the Government for the encouragement of enterprise and the quickening of industrial activity. He thinks the Labour Party is usefully employed in insisting on the recognition of the gravity of unemployment, but finds their marked dissatisfaction with the limited scope of the Government's schemes associated with a lack of suggestive, practical, and effective help, the only suggestions put forward by them being regarded by him as dangerous experiments.

We must have an improvement in trade, and he thinks we cannot afford to wait upon time to bring that about. He agrees with the Prime Minister, whom he quotes as having said, "Although I am not a pessimist and I do not believe we are going to disaster, I say without the smallest hesitation that unless in a reasonable time there is an improvement in the whole trade of the country, our population cannot be maintained in anything like decency and comfort on the present conditions."

Lord Weir is not a pessimist: he would describe himself as a sane optimist, and in justification points to the wonderful position in which Great Britain is to-day. In spite of the currency difficulties she is providing work for 85 per cent. of the trade union membership, her credit stands almost at par, and, above all, there is a unique undeveloped British Empire available for development.

What a list of solid assets! what a field for sane optimism! We must have the trade, we can have the trade, says Lord Weir, then why don't we have it? To that question he has his reply. It is because the cost of production is too high, the cost of living is too high, and there is a lack of confidence and enterprise.

If we continue to inquire why these things are, the whole purpose of his letter is to tell us. Listen to him. It is because of the "relativity in remuneration" which exists to-day in the wage-earning class. If that seems a little obscure, he makes it clearer by explaining that the relation of wages and hours between one block of industries and another differs to-day from 1914.

His explanation is further clarified by statistics. Lord Weir divides the great industries of this country into two blocks, one of which is exposed to foreign competition and feels the powerful influence which foreign consumers exercise on contracts and prices. The other is not so subject.

In the first block he places mining, agriculture, iron and steel, engineering and shipbuilding. In the second, railways, building trades, dock labourers, and municipal employees. He finds that in the first block the industries comprised are in receipt of wage rates ranging from 30 per cent. to 50 per cent. over the corresponding rates of 1914, while in the second block the percentage increase on the railways is 80 per cent. to 160 per cent., the building trades about 115 per cent., and for dock labourers well over 100 per cent.

It is this changed relativity which forms the new element in the consideration of the wages question. In fairness to Lord Weir it should be pointed out that when he contrasts the relativity of 1923 with the relativity of 1914 he is not to be taken as regarding the 1914 basis as fair, or as not looking forward to fairer relativity in future. He simply finds the present relativity impossible.

He is not only fair but frank, and illustrates from his own action the results which follow.

His firm want to build new houses near their engineering works. They are not able to do this because it would present to their engineering tradesmen who are working for forty-seven hours a week for 57s., the spectacle of bricklayers receiving 72s. 6d. for forty-four hours' work, and what would be almost more exasperating, the bricklayer's labourer carrying mortar and receiving 55s. 6d. for a forty-four hour week, or a rate very little less than that paid to the skilled engineer. The houses therefore remain unbuilt, and presumably will do so until the bricklayer is induced to work longer and to accept less. There is the situation as Lord Weir sees it. Some sections of industry worse off than they were in 1914, others considerably better off, a situation which in his opinion has the effect of unduly penalizing the low-paid, of checking confidence and enterprise, and directly aggravating unemployment.

Well, what is to be done about it? How are we to get what Lord Weir describes as "a redressed line of relativity in remuneration"? Is it to be by peaceful or coercive measures? Lord Weir himself put these alternatives. He asks, "Must the trader and manufacturer assail the new railway combination and demand that they make *their proportionate contribution* towards the reduction of the cost of coal, iron, steel, ships, and engines? Is it not rather the part of these authorities to recognize, and that speedily, *their responsibility in regard to the nation's productions and no longer to maintain a relatively high wage rate and costly working conditions in regard to hours?* Surely for other authorities and industries where *the adequate contribution* has not been made it is for each to face this issue without loss of time. The cost of production, cost of living, and re-employment itself demands a more uniform national effort in regard to this painful but essential process of readjustment."

What does all this exactly mean? It is a little cryptic. Is it just a euphemistic way of saying to the railway directors, the building trade employers, the local authorities, "We mine-owners and shipbuilders and engineering employers have had it out with our men and brought them to a recognition of what our industries can afford, and you must take your courage in your hands and have it out with your men too. We have got cost down in our industries by getting wages down, you must help us to get other cost in our industry down by getting the wages down in yours."

If that is what it means, and it may well be, there is little more to be said. If such a call is responded to, and there are many indications that it will be, we shall, I suppose, see the other half of the industrial struggle with probably the same results, finding at the end of it railway employees, the building trades operatives, employees of local authorities retired to a line where they will not be too much in advance of, if at all, their fellows in the mining, engineering, shipbuilding, iron and steel, and agricultural industries. That means a working class which has, indeed, lost the war, sullen, discontented, waiting for its chance.

If it means more than that, if it is an appeal not to the employers, but to the employed in these more fortunate industries, if it is asking them to sacrifice some of the advantages their protected position has given them, in order that there may be a trade revival with consequent increment in remuneration to their less fortunate fellows, then some interesting questions are raised.

I do not think that Lord Weir is wrong in his diagnosis of the situation. I do not think that he would be wrong in making such an appeal, but I also do not think he should be surprised, if that be his appeal, at being asked what proposals, if any, he has to make in the direction of giving security and stability to the workers.

Lord Weir, in his concluding paragraph, speaks of looking forward to some stabilization of wages. He has already said that an industrial country such as ours cannot permanently guarantee to any section of its population its specific standard of living. How does he reconcile the dogmatism of the latter statement with the speculation of the former? After all, his proposal means to the railway men, the building operative, the municipal employee, that they will be less able to make for themselves the necessary provision for the future. Has he any proposals by which collective provision can and will be made for them? Might they not say to Lord Weir, "after all, the conditions in our industry at the present time enable us to exact high wages, at other times the conditions in your industry enable you to exact high prices. Would you under such conditions abandon your advantages? If not, with what assurance do you ask us to abandon ours?"

It may be quite true that labour associations should recognize to-day that they are not entitled to maintain any longer relatively high wage rates and costly working conditions in regard to hours, but I cannot help thinking that such appeals, as I suppose Lord Weir to be making, would be weighted with more authority if they also reminded trade associations that they, too, ought no longer to maintain relatively high prices.

The day has passed for one-sided admonition. If there is to be what Lord Weir calls "proportionate contribution towards reduction in the cost of coal, iron, steel, ships, and engines," there must be some evidence that they are coming equally from both of the factors engaged in industry. If I saw Lord Weir coming forward with an appeal to trade combinations not to maintain high prices, I should feel a little more hopeful of the result of his appeal to the great labour combinations which must be affected by the reduction he desires not to maintain high wages.

Reductions in wages and increases in hours it may be needs must come, but a Government that would press forward a really adequate scheme of unemployment insurance, together with a vigorous attack upon trusts and rings, would do more to induce the working classes of this country to accept wage reductions with reasonable content than can be done in any other way.

If Lord Weir is really to help us, he must tell us a little more fully what is in his mind, to whom he is appealing for these "proportionate contributions," what he means by "stabilization of wages" in the future. If there is to be a peaceable contribution by labour, and not a "levy" on it, it will require more than a phrase to work the disarming miracle.

HARRY BARNES.

## Houses First!

In a very able article in "The Daily News" last week, Mr. Henry R. Aldridge (Secretary of the National Housing and Town Planning Council) gave the only answer that can be given to the rent de-control proposals, namely, "Houses first!" Very graphically he likened the present shortage of houses to a famine, observing "if we had a food famine . . . no Government would be permitted to take the view that the right line to adopt . . . would be that of allowing those who had food to sell it to whom they pleased and charge what prices they liked"—a deadly parallel! The policy of reaction must be abandoned and in its place there must be a sound, constructive housing programme. Prices have fallen to what may be regarded as a normal post-war level, so nothing is to be gained by delay. Now is the time to build.

## The City Churches: A Suggestion

What is to be done with the City churches? That they must be preserved all right-minded people are agreed; but it seems to be necessary to justify their preservation apart from the claims of art and antiquity. With any scheme that involves their being put to secular uses we have no sympathy; the mind instinctively revolts at the thought of turning them into libraries, museums, or halls of city companies, as variously suggested. There are many other ways of justifying their continued existence—ways that would do no violence to their sacred associations. Here is our suggestion: Let the livings of the City churches, with of course, their attendant expenses, be transferred to new churches in the suburbs, the relationship between the two sets of buildings being that of mother and daughter. The City churches (in the charge of caretakers) should remain open, as at present, for prayer and meditation, and other appropriate purposes, such as midday organ recitals (which are always well attended), the rendering of choral music, and for any special services that it might be desired to hold from time to time. By these means it should be possible to derive an income quite sufficient for the maintenance and upkeep of the fabrics. The churches would thus remain as a symbol of spiritual things amid strictly temporal surroundings, affording solace to the "weary and heavy laden," as well as inspiration to the devotees of architecture.

## Model Clauses for Town Planning

As we go to press we are in receipt of a book of model clauses for use in the preparation of town-planning schemes, issued by the Ministry of Health (H.M. Stationery Office, price 1s. net). These clauses have been prepared in six parts, as follows: I, General; II, Streets; III, Buildings and Building Lines; IV, Reservation of Lands; V, General Convenience and Amenity; VI, Miscellaneous. We have no space this week in which to give them the careful consideration that they demand, and propose to publish a special article upon them in a later issue.

## The Not Negligible Nail

American business men are frequently attacked for their over-keenness in commercial matters, but in one respect they set an example that might well be emulated by British manufacturers. That is, their desire to make their product, whatever it may be, the most efficient of its kind. The news that there is a cottage more than 400 years old in the village of Cheam, in Surrey, reached America, and immediately American business men began to seek information about it. A St. Louis firm wrote asking what kind of material the cottage was built of, while a firm of nail makers in Illinois asked for samples of the nails used for the roof. There is a charming naïveté about the idea that the cottage had defied the elements for 400 years without undergoing any physical deterioration and consequent renewal of parts; but this does not matter. What does matter is that American manufacturers are keen to make their own productions as durable as possible, and they care not what trouble or expense they go to in the effort.

# The Architectural Setting of "Robin Hood"

THE architectural settings of films, especially those of an historical character, are commonly so badly done that to anybody with a knowledge of architecture they are positively depressing.

It is one of the inexplicable anomalies of the film industry that while producers are willing to expend thousands of pounds on the salaries of "star" performers, they are unwilling to spend a few hundreds to get correctly designed architectural settings for their plays.

The immediate purpose of this article, however, is not to castigate producers for their known sins, but to compliment one of them upon a present success. "Robin Hood," which is now being shown at the London Pavilion, has one of the most remarkable architectural settings that, so far as we are aware, has ever been created in a producer's studio.

Let it be said at once that archæologically the whole production is full of anachronisms. Never was there such a castle as this. The great hall of the British castle at its highest development never had such a scale as this one in which Douglas Fairbanks performs his amazing feats of agility. Never was there a staircase winding around a great pier as we have it in that wonderful Gordon Craig-like interior. And what is a Tudor arch doing in a castle of the twelfth century? A page of this Journal could be easily occupied in unworthy criticisms of this sort.

The answer to all such criticisms as these is that when history becomes intractable for film purposes some amount of liberty has to be taken with it.

The producer of "Robin Hood" is to be complimented on having handled his history reasonably. His main object, we take it, was to get into the film something of the romantic atmosphere of the Plantagenet period, with special regard for the big massed effects of pomp and pageantry. Obviously too strict an adherence to literal fact would have handicapped him unduly. Hopeless the attempt to get anything of an effect within the restricted confines of a Norman keep. And what pleasure would there be in seeing Fairbanks disappear round the bend of a narrow internal turret stair? But to see him spring ever so lightly up that external stairway around the giant pier is a real thrill. This stairway is a stroke of genius. The designer (or research director, as he is called), Mr. Robert Fairbanks has out-Normanded the Normans. If William the Conqueror could come to life again he would probably have some hard things to say of Gundulf, or some other architectural assistant, for not thinking of it!

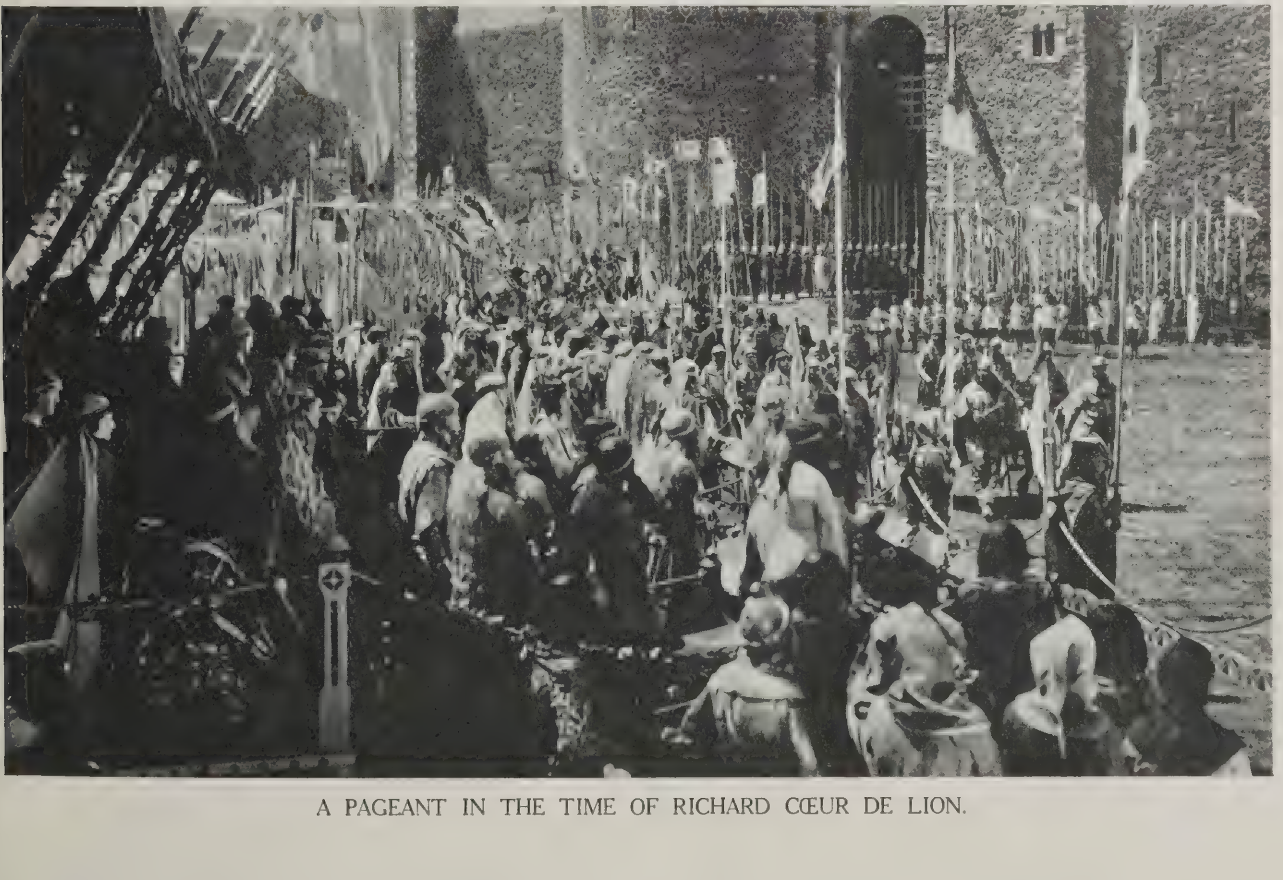
The scale of this interior is astonishingly fine. With its enormous piers soaring away into upper darkness, its strong vertical masses, its wide spaces peopled with spectral figures, its smouldering flambeaux, deep shadows and dim lights, the whole scene is one of extraordinary impressiveness. In its general effect, indeed, it resembles a great Norman cathedral more than a castle. One's only regret is that the scenes are switched off so quickly. One would like to linger upon them for the pleasure of their sheer beauty, apart from the action of the play.

One or two touches are especially pleasing to those who like archæological verisimilitude. For example, when, in the second part of the film, Fairbanks storms the castle alone and goes up to the battlements on the chains of the drawbridge, a picture is shown of the sturdy henchmen within hauling it up by means of a windlass. The thing is an amusing sham, of course, for the drawbridge is operated by a 25 h.p. electric drum hoist!

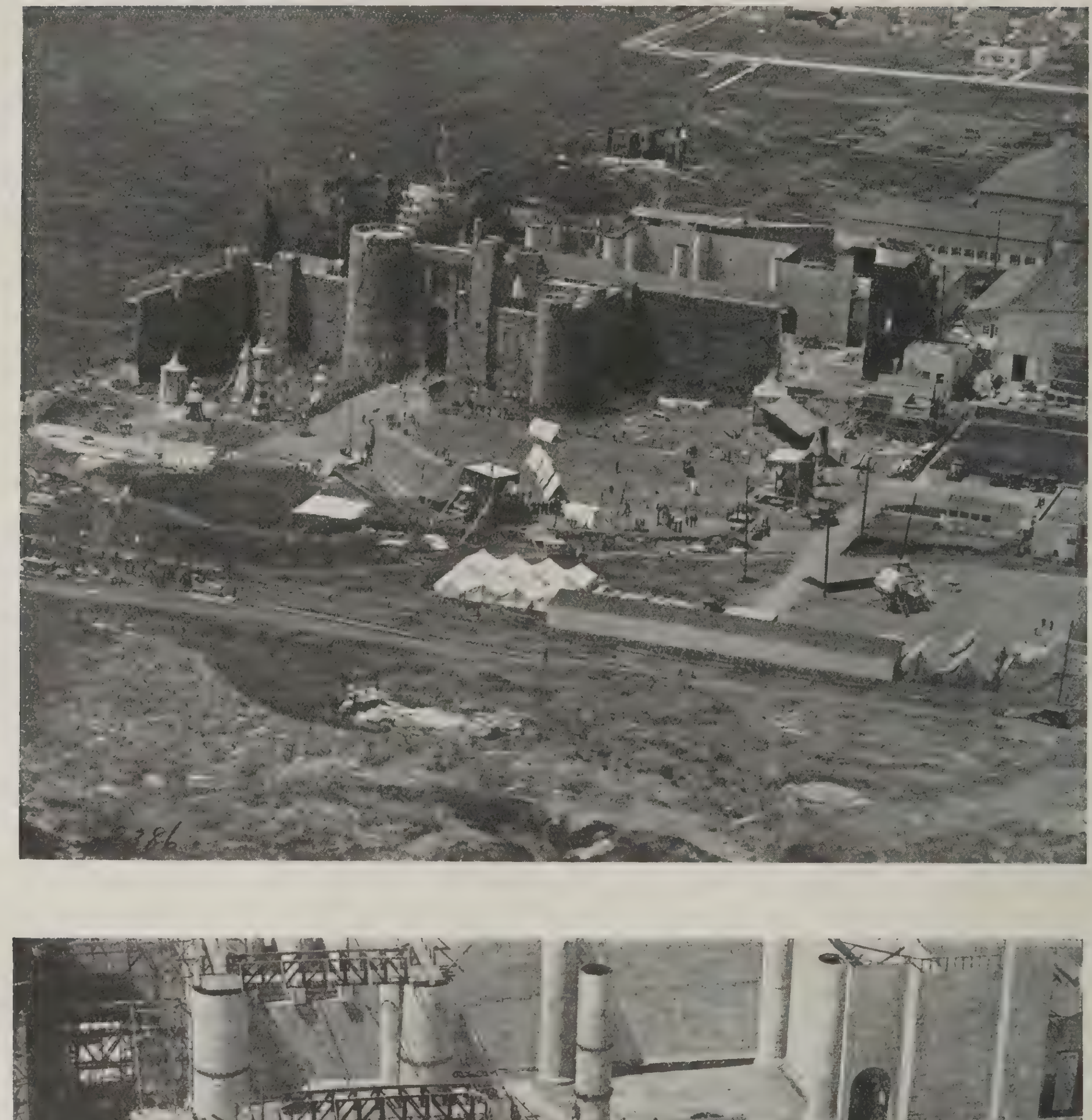
For those who like facts and figures the following particulars are of interest. The castle covers an area of 2½ acres, and 400 workmen were employed for twelve weeks in building the sets. The materials used were 252 tons of plaster, 15,000 sacks of cement, 178,000 ft. of wallboard, and 25,000 ft. of fibre. The castle is semi-permanent, and is intended for use in other films.

This remarkable film is an object-lesson to British producers. It shows at least two things: (1) That competent architectural guidance in the design of settings is essential, and (2) that it pays to erect semi-permanent sets. In other words, if British producers are to compete with the Americans, they must enlist the aid of the architect and the builder.

G. J. H.



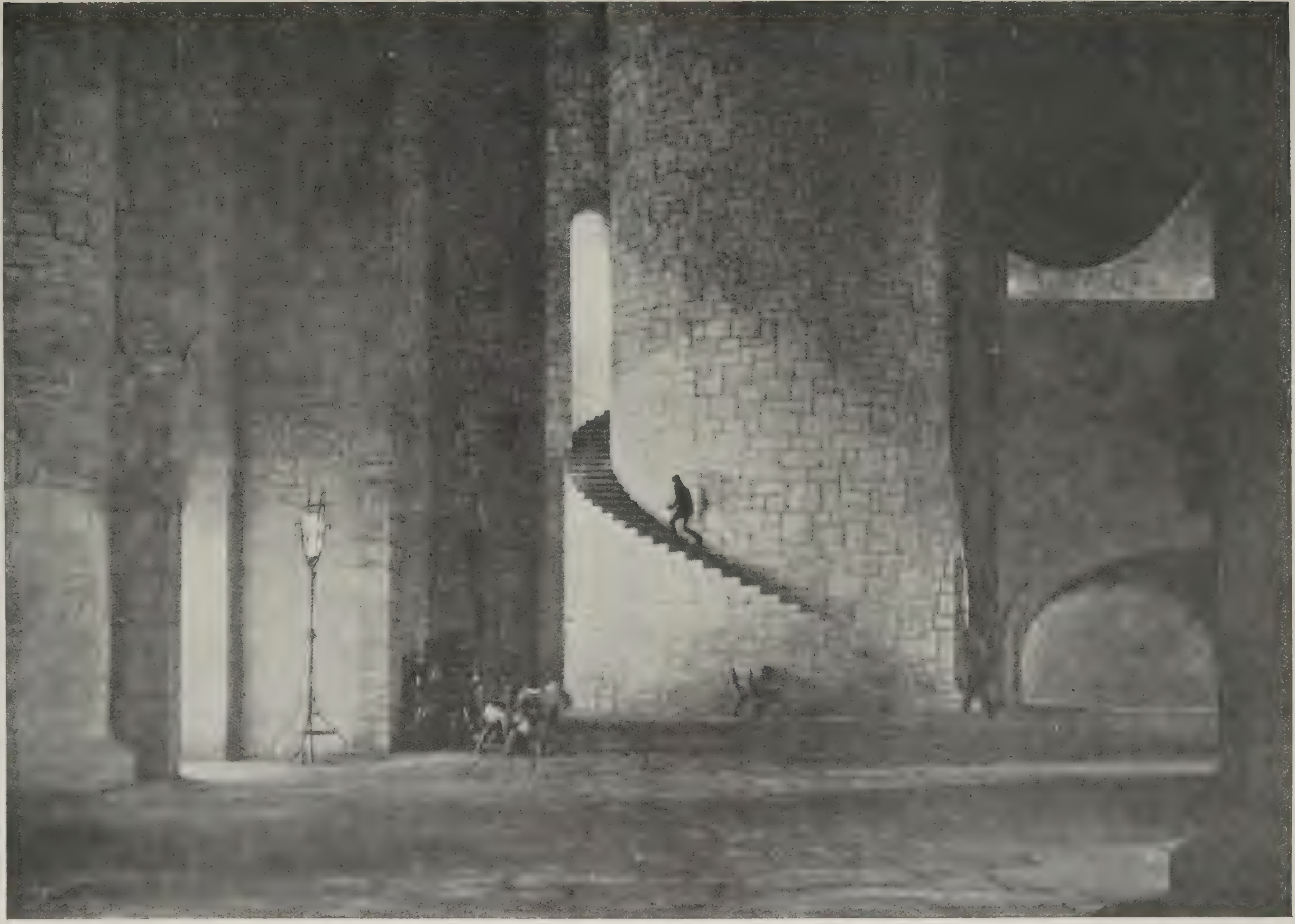
A PAGEANT IN THE TIME OF RICHARD CŒUR DE LION.



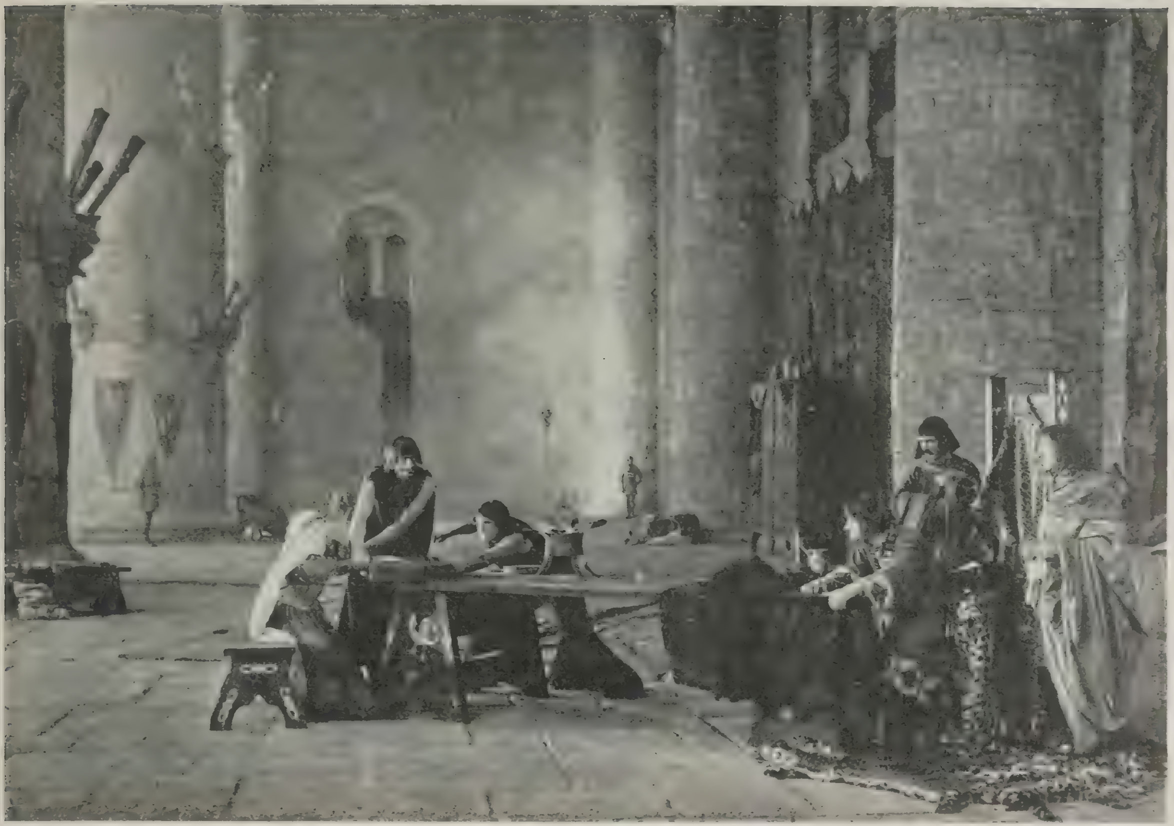
TWO AEROPLANE VIEWS OF THE CASTLE.

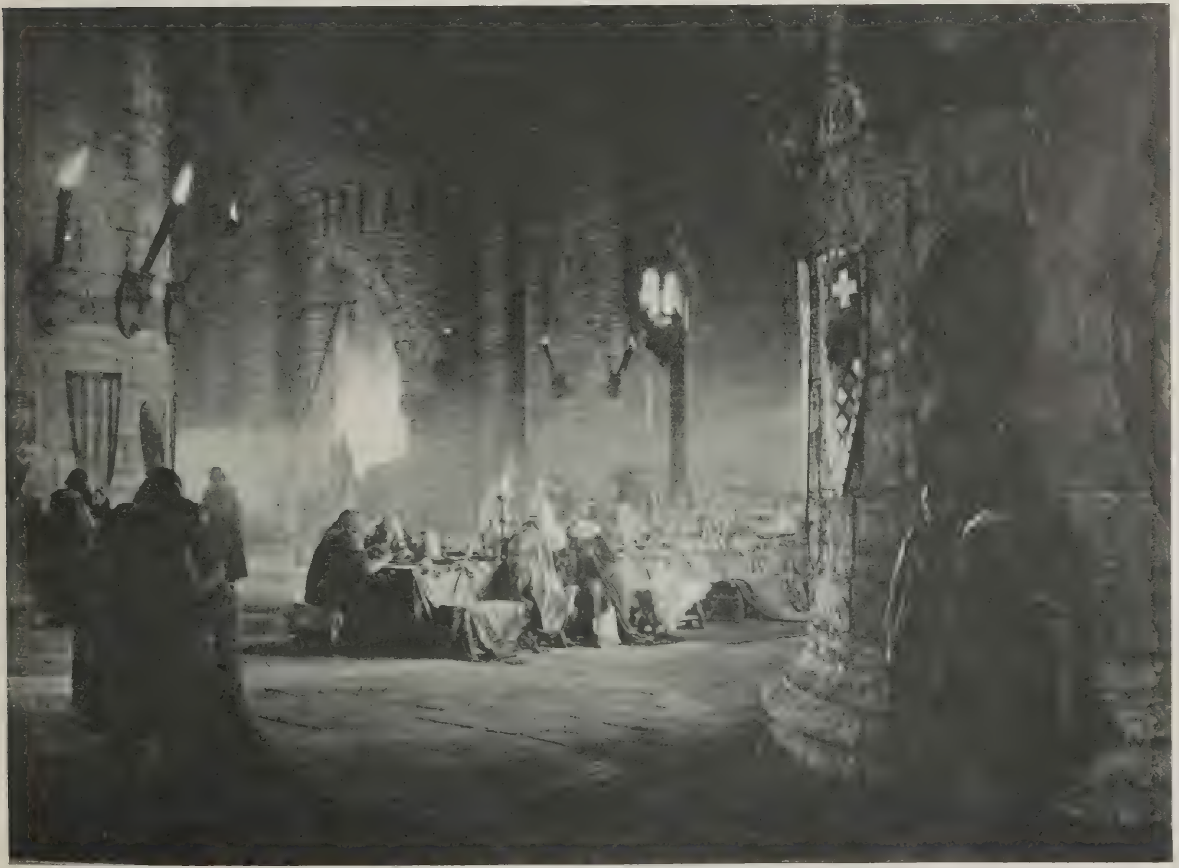
THE ARCHITECTURAL SETTING OF "ROBIN HOOD.'

# Architectural Designs. 19.—The Architectural Setting of "Robin Hood": A View in the Castle



The total cost of the production of the "Robin Hood" film was about a quarter of a million pounds—which will be well understood from the tremendous scale upon which everything is designed. Against these massive walls men look like flies; and a single stone is bigger than the figure ascending the steps.





TWO INTERIORS OF THE CASTLE.

THE ARCHITECTURAL SETTING OF "ROBIN HOOD."

# London's Unhealthy Areas

## By G. TOPHAM FORREST, F.R.I.B.A., Architect to the L.C.C.

*(Concluded from last week.)*

THE London County Council has been fully alive to the need of fresh air and sunlight, and in every case the buildings are kept as far apart as practicable. Unfortunately, their example has not always been followed by others.

High buildings have been objected to because of the number of stairs which have to be negotiated by the inhabitants before they can reach their rooms or get from them to the street. This objection has been particularly emphasized as restricting the healthy development of the younger children owing to the fact that they cannot obtain sufficient open-air exercise because of the difficulty of seeing them up and down the stairs. This we cannot but agree is a valid objection.

In the Council's dwellings an attempt has been made to overcome this objection.

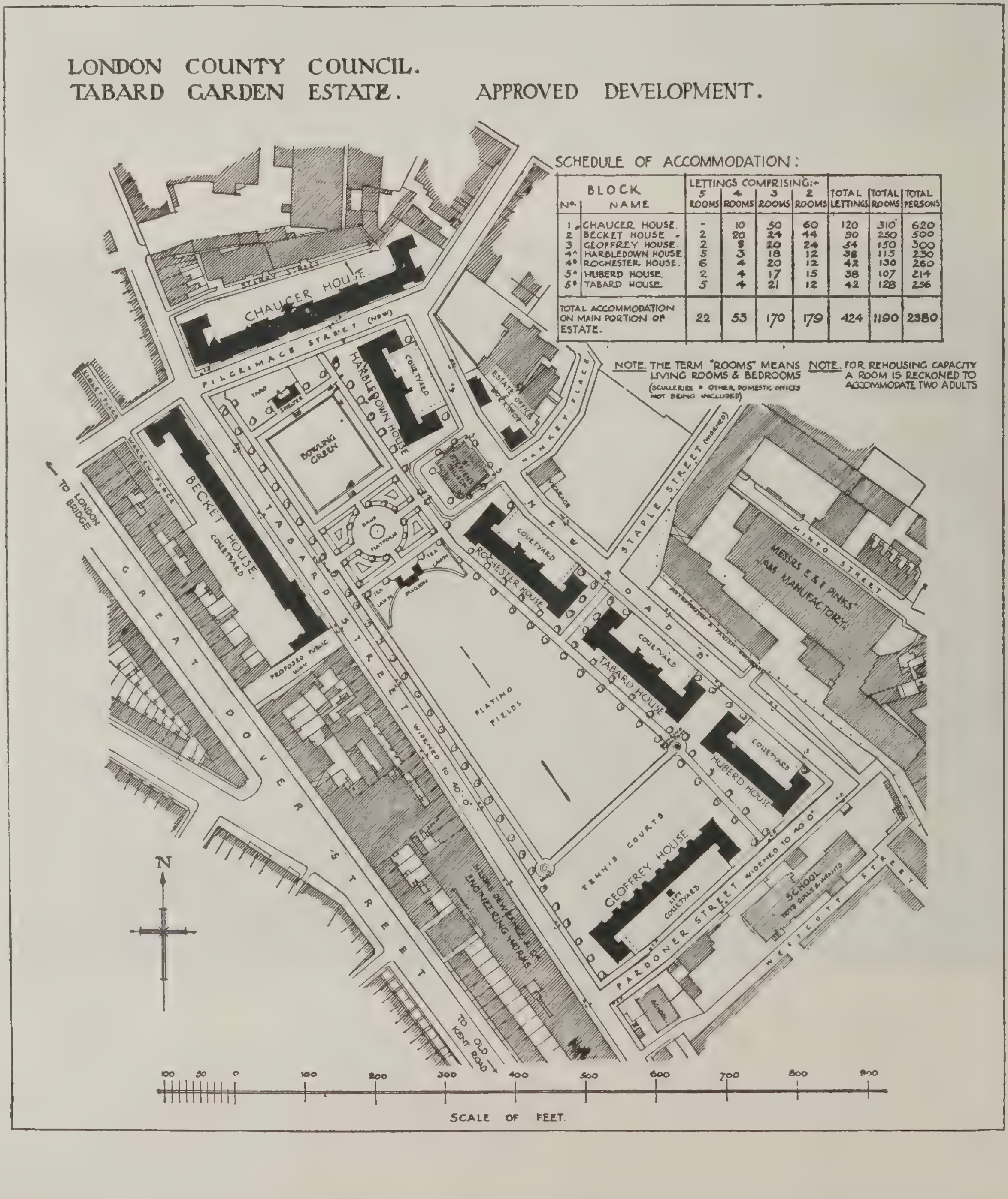
Outside the entrances of the flats on the upper floors there is an external balcony communicating with the ground level by one or more common staircases. These balconies enable the smaller children on the upper floors to be put out in the open air whilst remaining under the supervision of the mother.

There is, I believe, a considerable amount of prejudice to the use of external balconies mainly on the grounds that: they obscure the light of the rooms below; they destroy the privacy of the rooms whose windows abut on them.

These are, of course, in certain types of plan, quite reasonable objections.

An economic advantage of the external balcony means of approach is that it will serve for an unlimited number of separate lettings, whether of two rooms or more. Were it not for the balconies the lettings would have to be approached by a series of common staircases which could not generally, without wasteful planning, be made to serve for more than two lettings on a floor. Common staircases are one of the most expensive parts of a building and, moreover, are costly as regards management, because they must of necessity be lighted at night. Again, the ground space they occupy is sufficient for an additional bedroom on each floor. An equivalent amount of balcony is considerably cheaper, is less costly as regards management charges, and leaves all the valuable frontage available for rooms.

The objection to dwellings of more



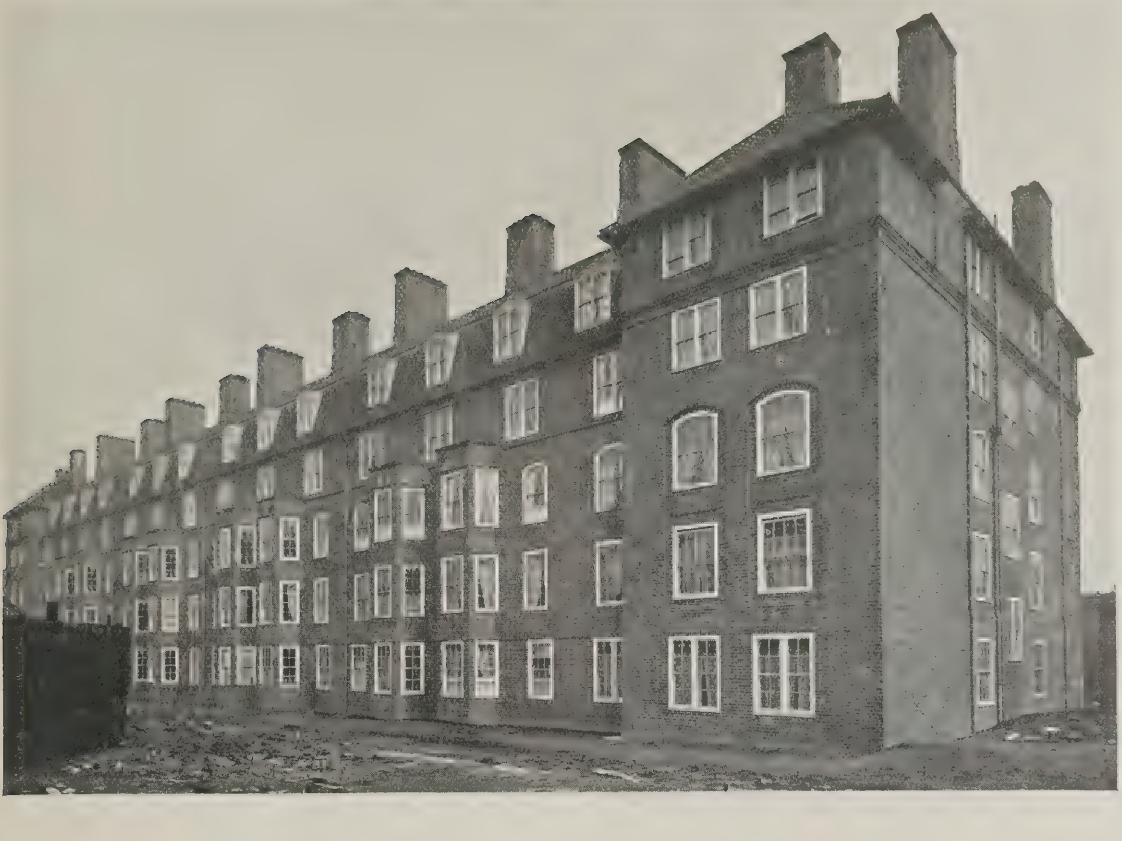
LONDON COUNTY COUNCIL.
TABARD GARDEN ESTATE. APPROVED DEVELOPMENT.

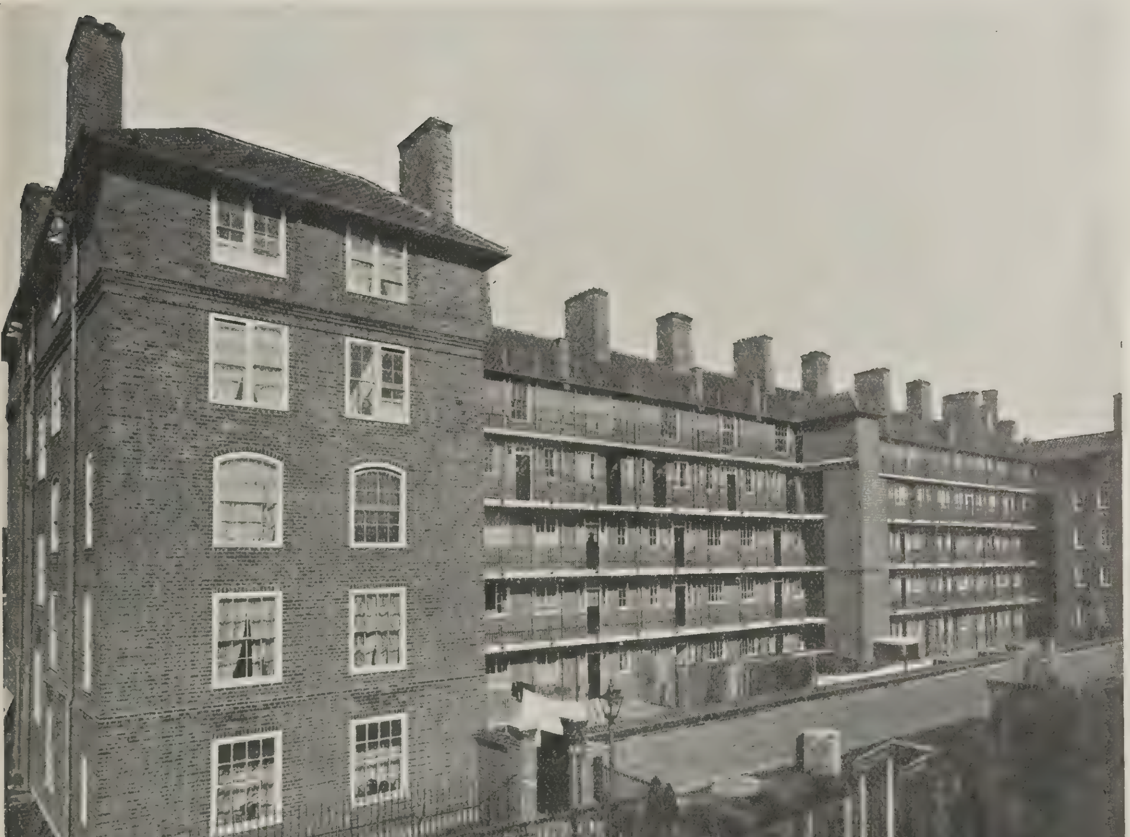
SCHEDULE OF ACCOMMODATION:

| BLOCK Nº | BLOCK NAME | LETTINGS COMPRISING:— 5 ROOMS | 4 ROOMS | 3 ROOMS | 2 ROOMS | TOTAL LETTINGS | TOTAL ROOMS | TOTAL PERSONS |
|---|---|---|---|---|---|---|---|---|
| 1 | CHAUCER HOUSE. | - | 10 | 50 | 60 | 120 | 310 | 620 |
| 2 | BECKET HOUSE. | 2 | 20 | 24 | 44 | 90 | 250 | 500 |
| 3 | GEOFFREY HOUSE. | 2 | 8 | 20 | 24 | 54 | 150 | 300 |
| 4ᴬ | HARBLEDOWN HOUSE. | 5 | 3 | 18 | 12 | 38 | 115 | 230 |
| 4ᴮ | ROCHESTER HOUSE. | 6 | 4 | 20 | 12 | 42 | 130 | 260 |
| 5ᴬ | HUBERD HOUSE. | 2 | 4 | 17 | 15 | 38 | 107 | 214 |
| 5ᴮ | TABARD HOUSE. | 5 | 4 | 21 | 12 | 42 | 128 | 256 |
| TOTAL ACCOMMODATION ON MAIN PORTION OF ESTATE. | | 22 | 53 | 170 | 179 | 424 | 1190 | 2380 |

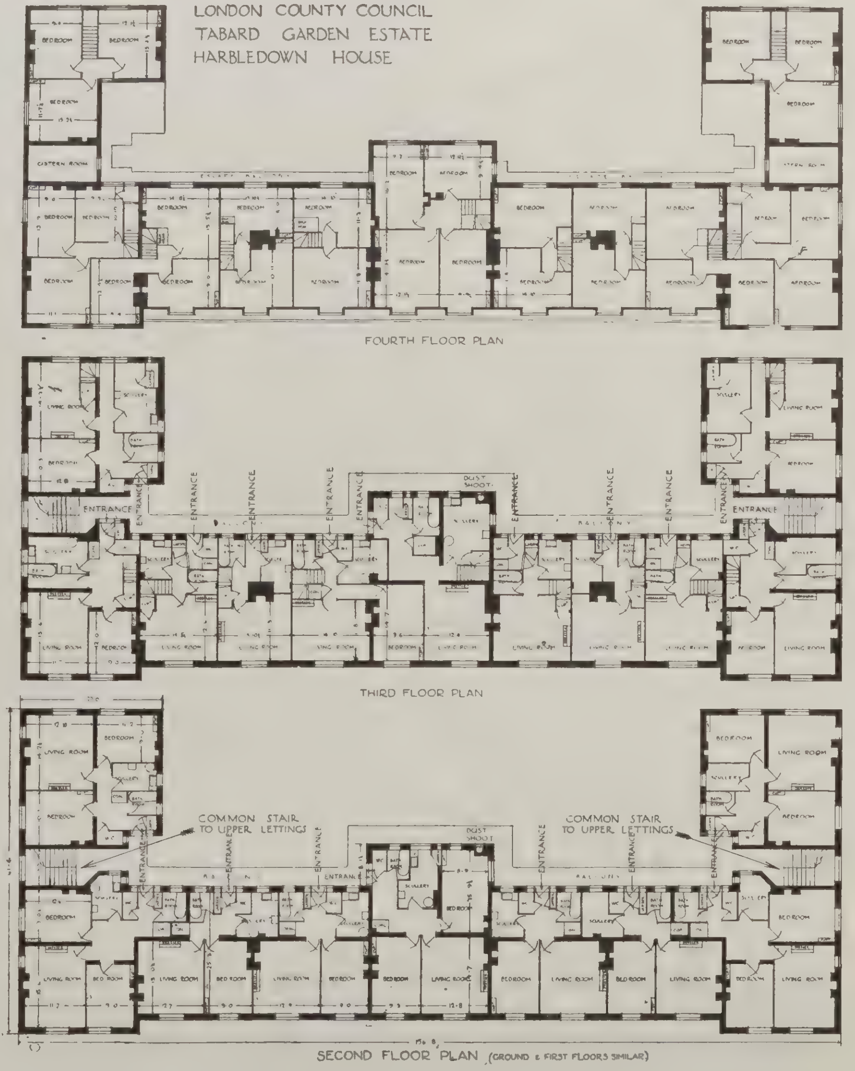
NOTE. THE TERM "ROOMS" MEANS LIVING ROOMS & BEDROOMS (SCULLERIES & OTHER DOMESTIC OFFICES NOT BEING INCLUDED)

NOTE. FOR REHOUSING CAPACITY A ROOM IS RECKONED TO ACCOMMODATE TWO ADULTS





TWO VIEWS OF GEOFFREY HOUSE, TABARD GARDEN ESTATE.
G. TOPHAM FORREST, F.R.I.B.A., ARCHITECT TO THE LONDON COUNTY COUNCIL.

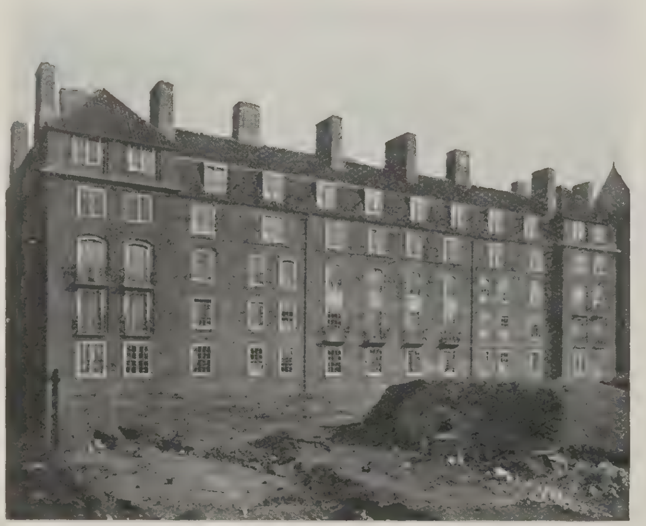


LONDON COUNTY COUNCIL
TABARD GARDEN ESTATE
HARBLEDOWN HOUSE

FOURTH FLOOR PLAN

THIRD FLOOR PLAN

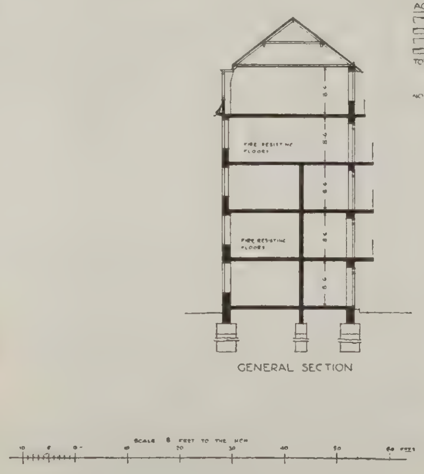
SECOND FLOOR PLAN (GROUND & FIRST FLOORS SIMILAR)



A GENERAL VIEW.

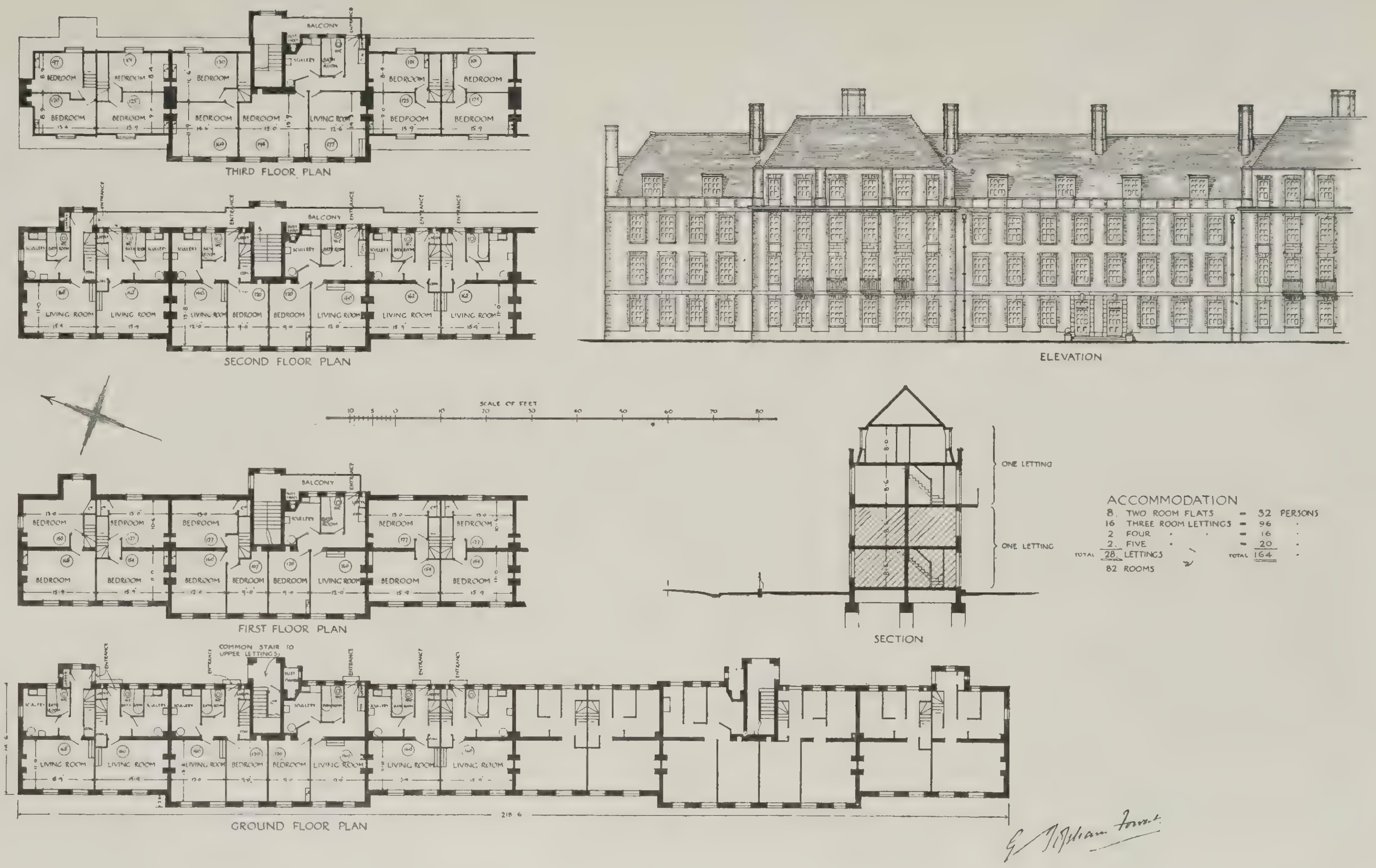
ACCOMMODATION –
▭ 5 FIVE ROOM TENEMENTS = 50 PERSONS
▭ 3 FOUR = 24 "
▭ 18 THREE = 108 "
▭ 12 TWO = 48 "
TOTAL 38 TOTAL 230 "
115 ROOMS

NOTE – FIGURED DIMENSIONS ARE SUBJECT TO SURVEY OF SITE.

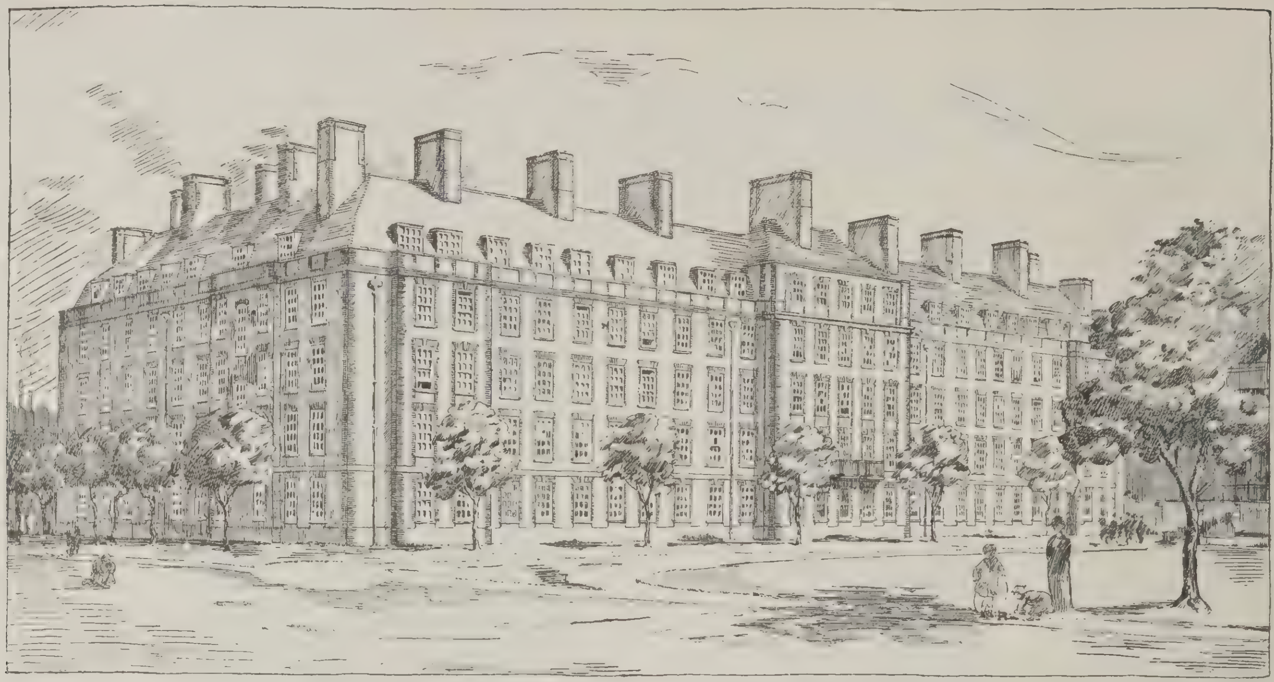


GENERAL SECTION

HARBLEDOWN HOUSE, TABARD GARDEN ESTATE.
G. TOPHAM FORREST, F.R.I.B.A., ARCHITECT TO THE LONDON COUNTY COUNCIL



FOUR-STORY DWELLINGS COMPRISING TWO-STORY LETTINGS. G. TOPHAM FORREST, F.R.I.B.A., ARCHITECT TO THE LONDON COUNTY COUNCIL.



BULLEN HOUSE, BRADY STREET AREA.

than three stories on account of the great number of stairs to be climbed has also been mitigated in a second way, viz., by combining the two uppermost floors into a series of two-floor lettings each having its entrance at the third floor level, the topmost floor being devoted to bedrooms reached by internal cottage staircases.

Although the building has a housing capacity of five stories, it is, so far as the difficulty of high staircases is concerned, virtually one of four stories only.

There is also an economic advantage to be noted here. Whereas in the old type of block dwelling it was found by experience that the rents obtainable for flats on the fourth floor—that is the top floor—were less than those on the third floor; in the new type of building the rentals obtained for the top lettings are all third-floor rentals, while the cost of construction entailed by the light cottage staircases is no greater than the external balcony on the fourth floor which now becomes unnecessary.

An outstanding feature of this type of plan is the manner in which the various kinds of apartments are disposed. As a general rule, the habitable rooms—that is, the living-rooms and bedrooms—are in series on one side of the building, while on the other side are the domestic offices and entries, and also the balconies.

This arrangement readily lends itself to the selection of the most agreeable outlook for the habitable rooms.

For example, if the best outlook should happen to be on to the street, then the building would be turned so that its habitable room side faced the street. If, on the other hand, the more agreeable outlook were over a garden or other open space to the rear of the site, the building would be reversed so that its habitable room side faced towards it, the offices, balconies, and courtyard being towards the street.

In Geoffrey House (Tabard Street area), completed last year, the habitable rooms face north-west, that is, with their outlook over the recreation space of 5 acres which is to be provided. The bay windows were designed in order to catch the afternoon sunlight.

Every case must, of course, be decided on its merits, but, generally speaking, it is, I think, better to go for the good outlook. Even if the living-rooms face north the balcony will be on the sunny side of the building, and the tenants can still get a fair amount of sunshine.

The balcony type of building can be used advantageously in London, which on the whole enjoys a mild climate, but I would question its suitability for districts liable to prolonged periods of snow and frost.

The objections to the types of plans in which the flats are directly entered from the landings of common staircases (such as stuffiness and noisiness) do not, of course, obtain—or at all events do not obtain to anything like the same degree—in buildings containing suites of roomy flats, with considerable entrance halls and with subsidiary entrances to the kitchen quarters, as they do in the case of very small flats for the working classes in five-story buildings.

In this respect, and in many others, the conditions regulating the planning are manifestly widely diverse, an arrangement in one case which is quite suitable and gives satisfactory results may in another be entirely unsuitable and unsatisfactory.

I incline to the opinion that a fundamental source of certain unsatisfactory features common to the earlier types of dwellings for the working classes, to be seen in London and elsewhere, lies in their being adaptations of pre-existent types of plan, designed for buildings of an altogether different character. That is to say, the unsatisfactory types are the result of an attempt to solve the architectural problem by "boiling down" a pre-existing type of building, rather than by producing an entirely new type for the specific purpose. But as I conceive it, it is only by this latter process that any entirely satisfactory solution of the exceedingly difficult problem presented by the small working-class dwelling is ever likely to be arrived at.

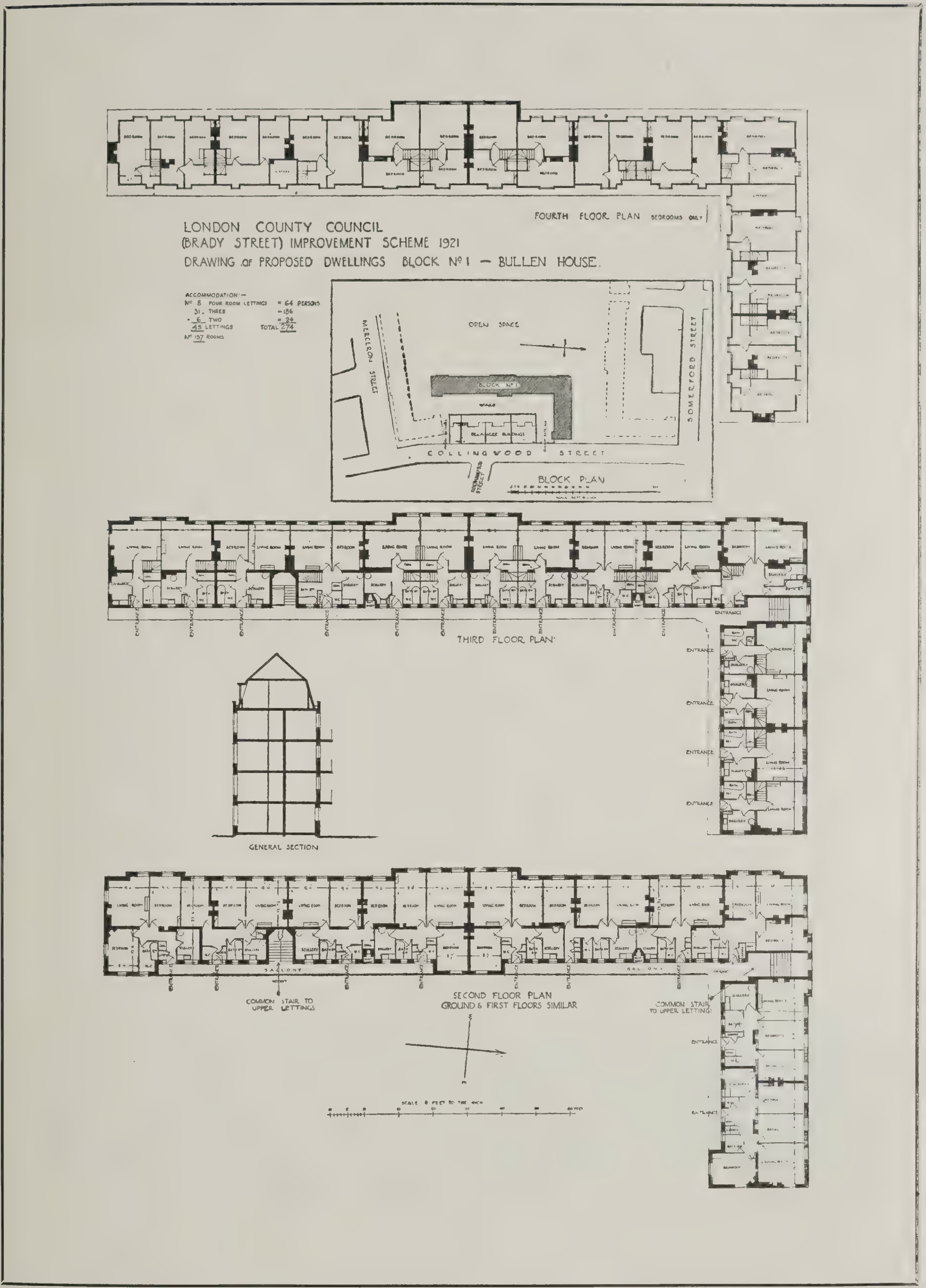
The minimum sizes of the habitable rooms in the Council's dwellings are as follows :—

| | | |
|---|---|---|
| Living-room | 160 | superficial feet |
| First bedroom | 120 | „ „ |
| Other bedrooms | 100 | „ „ |

As a result the width of the living-rooms is about 12 ft., the first bedroom 9 ft. I should like to see these sizes, especially for the first bedroom, increased. For rehousing calculations each of these rooms is regarded as affording accommodation for two persons, the basis for each being a minimum air space of 400 cu. ft. Generally, bedrooms smaller than 100 super ft. are not provided in the Council's dwellings for central districts. In Geoffrey House an experimental lift was provided, and for that reason the balcony extends without interruption from end to end of the building. The high brick wall between the courtyard and the street is not required for the sake of privacy only, but because in certain districts it was found that something more than an open railing was necessary to prevent the mysterious disappearance of the domestic washing.

In Harbledown House the balcony extends right across the building to accommodate a lift which, however, will not for the present be provided. In this building the living-rooms face south-west, and there is, therefore, no need for bay windows. The same type of building is being employed with modifications on what is known as the Brady Street area (to be known when reconstructed as the Collingwood Estate). In order to provide for a recreation space on this area, provision had to be made for housing a number of people elsewhere, and a building has been provided on a small site about three-quarters of a mile to the north of the area, in what is known as Goldsmith's Row, Shoreditch. The building is known as Whiston House.

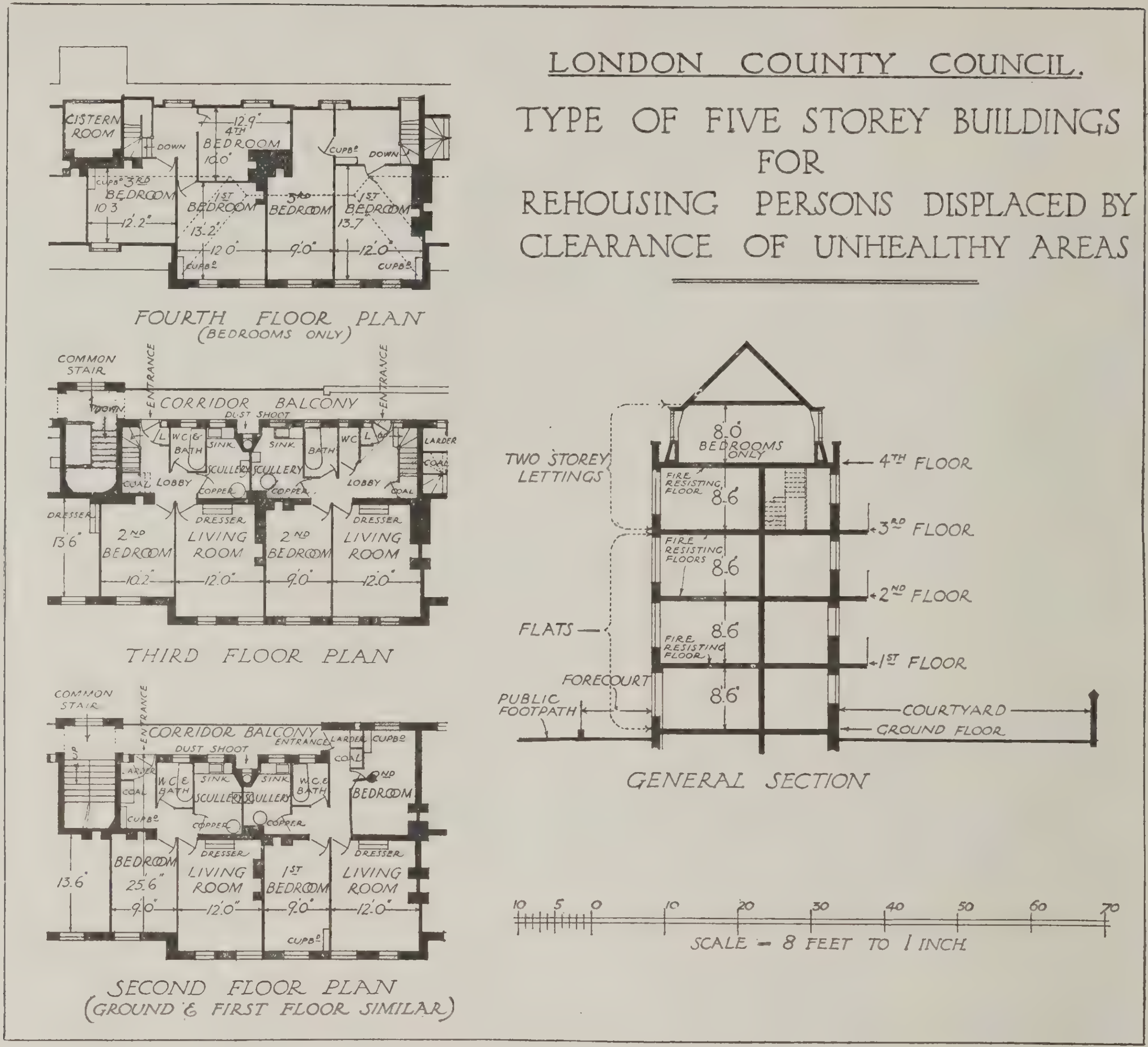
Owing to the peculiar shape of the site and the need for accommodating as many people on it as possible a special type of plan had to be devised. One staircase is made to serve both wings. Buildings of



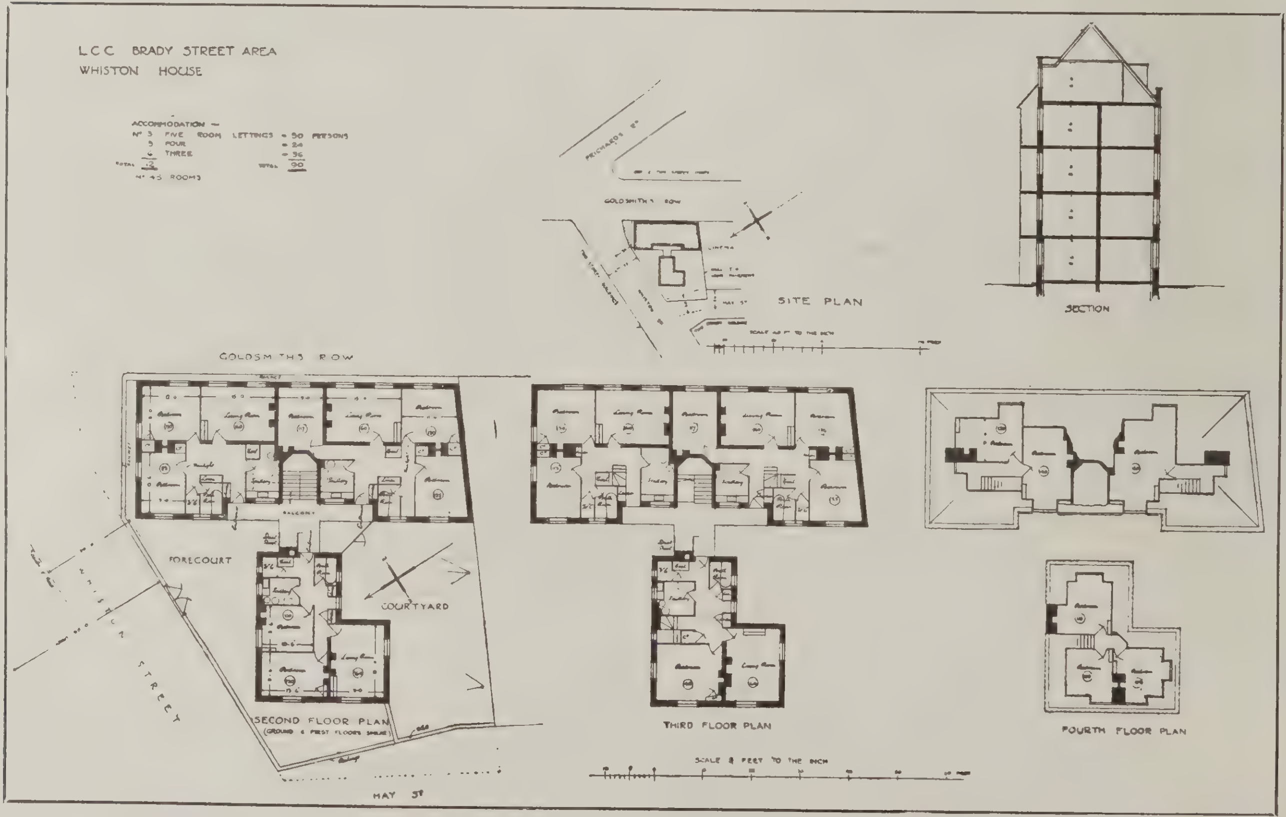
BULLEN HOUSE, BRADY STREET AREA.

G. TOPHAM FORREST, F.R.I.B.A., ARCHITECT TO THE LONDON COUNTY COUNCIL

D



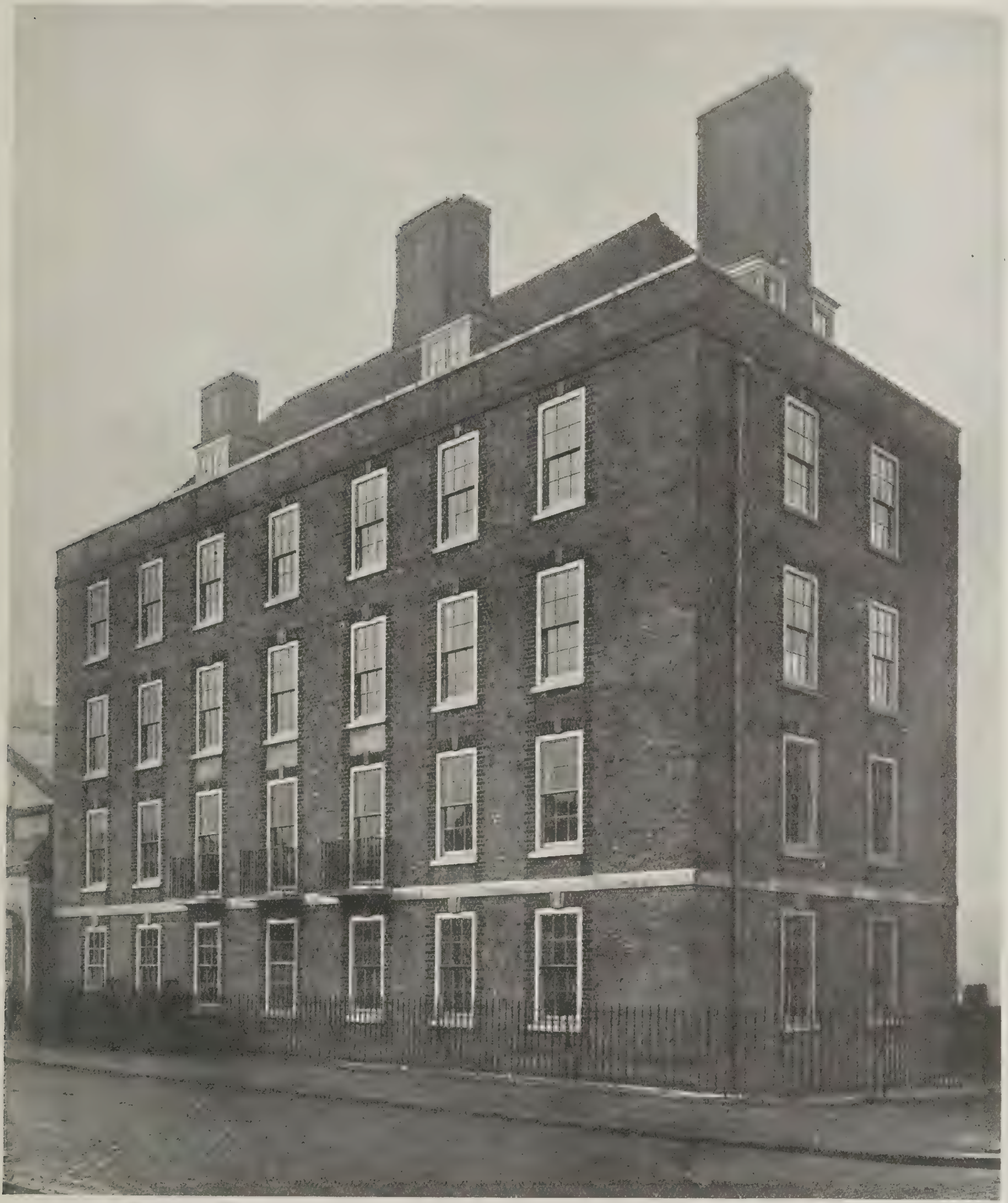
A TYPE OF FIVE-STORY DWELLINGS.



WHISTON HOUSE, BRADY STREET AREA. G. TOPHAM FORREST, F.R.I.B.A., ARCHITECT.

# Current Architecture. 167.—Whiston House, Goldsmith's Row, Shoreditch

G. TOPHAM FORREST, F.R.I.B.A., Architect to the London County Council



This building has been erected on a small site about three-quarters of a mile to the north of the Brady Street area. Owing to the peculiar shape of the site and the need for accommodating as many people on it as possible, a special type of plan (illustrated on the opposite page) had to be devised.

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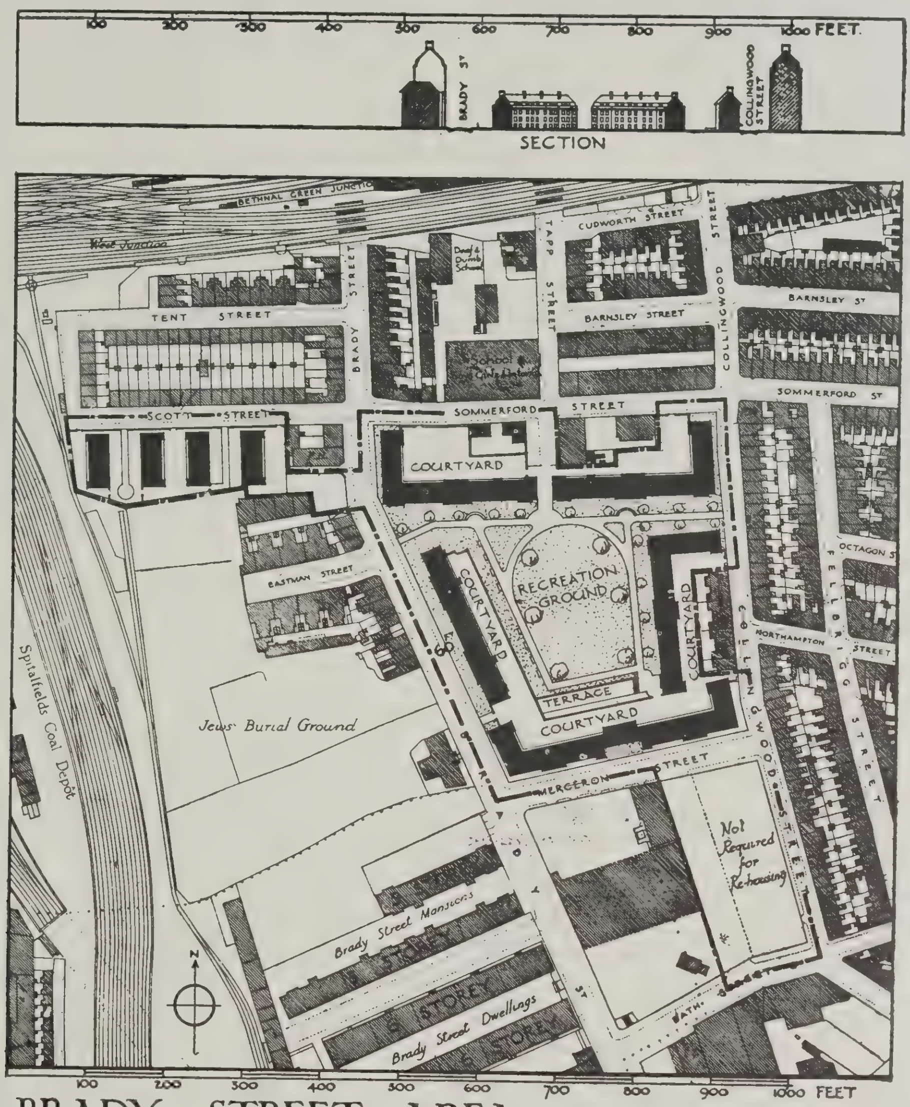
a greater height than five stories are not recommended for London. In addition to the physical disadvantages the cost of building the upper stories is much greater, whilst the rents receivable are actually less than for the lower stories. The employment of a five-story type of building generally enables us to rehouse all the displaced inhabitants, and in my opinion this is the type which should be employed at the moment. I say "at the moment" because when the present housing shortage diminishes it will then, I hope, be possible to employ a type of dwelling which, while meeting utilitarian needs, secures more pleasant conditions for the inhabitants as well as for the community.

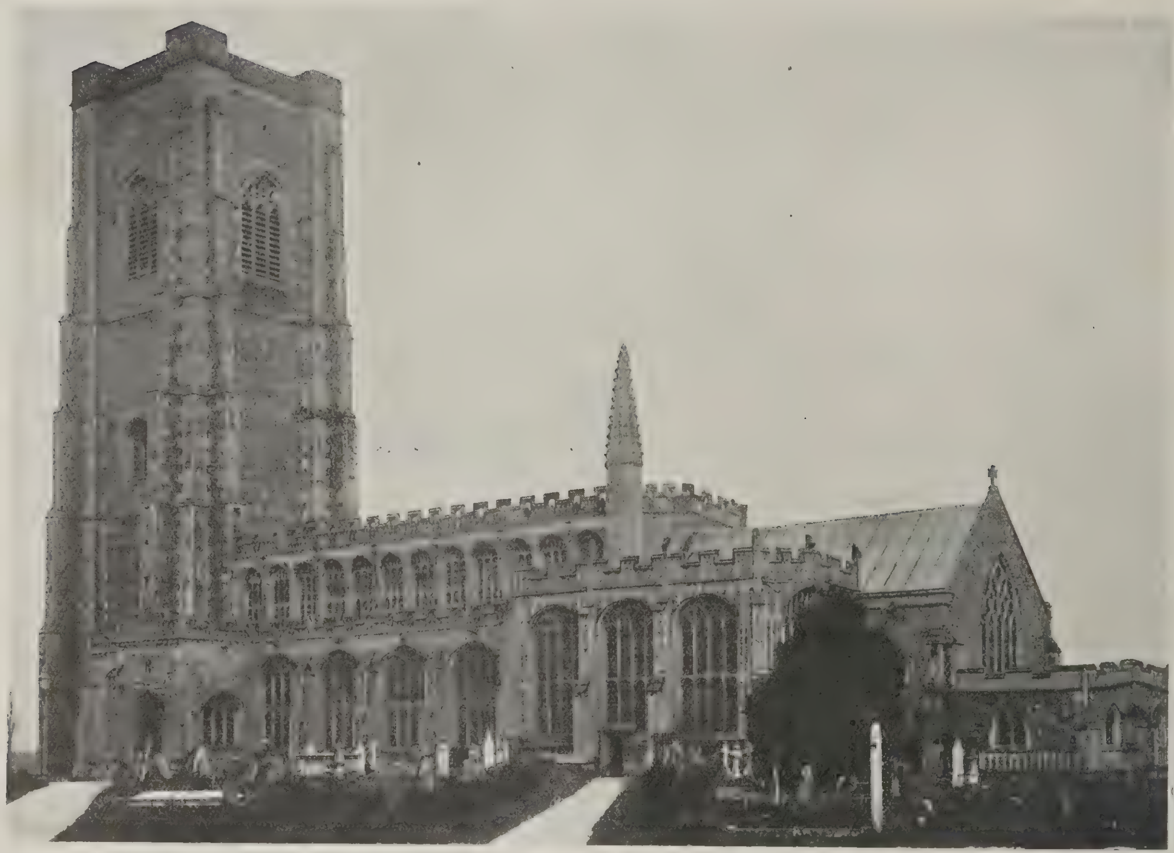
This type of building, as far as I know, has never before been produced. The two lower stories, the ground and first floors, are combined in a series of two-floor lettings; the lower floor being utilized for living-rooms and domestic offices, the upper floor for bedrooms. The two upper floors, that is, the second and third, are similarly combined. In effect the arrangement consists of two ordinary cottages set one above the other. The greater part of the top story, which is occupied by bedrooms alone, is contained within the roof. All of this story could, however, be included in the roof with the result that we should have a building of three stories with attics above—a very usual height for domestic buildings in London. As regards the internal arrangements. Placing the bedrooms over the living-rooms instead of alongside them as in flats, has the effect of doubling the number of lettings with their entrances at the ground-floor level. Another advantage is the fact that most of the bedrooms are now on the upper floor, thus securing them from being overlooked by people in the street, and removing them to some extent from the noise and dirt of the traffic. As regards the upper lettings, access is at the second-floor level by an external balcony connected to the ground level by a common stair. The same economic and physical advantages here accrue as in the case of the upper lettings of the five-story blocks already described.

It has often been strongly advocated that cottages should be provided in the central areas as being the popular form of accommodation. But, as we have already seen, this is an impossibility. Here, however, is a practical method of providing the inhabitants with a near approach to cottage conditions, and is the type of building which I would recommend. I am also hopeful that the employment of this type of building will allow of a cheaper form of construction than would be the case in buildings of a greater height.

The effect on rehousing in the Brady Street area by the employment of buildings of this type would be that the open space could be retained and over 1,200 people could be rehoused as against 1,600 in five-story buildings. This reduction in the number it would be possible to rehouse at present prohibits the use of the four-story type of building, except possibly in special cases.



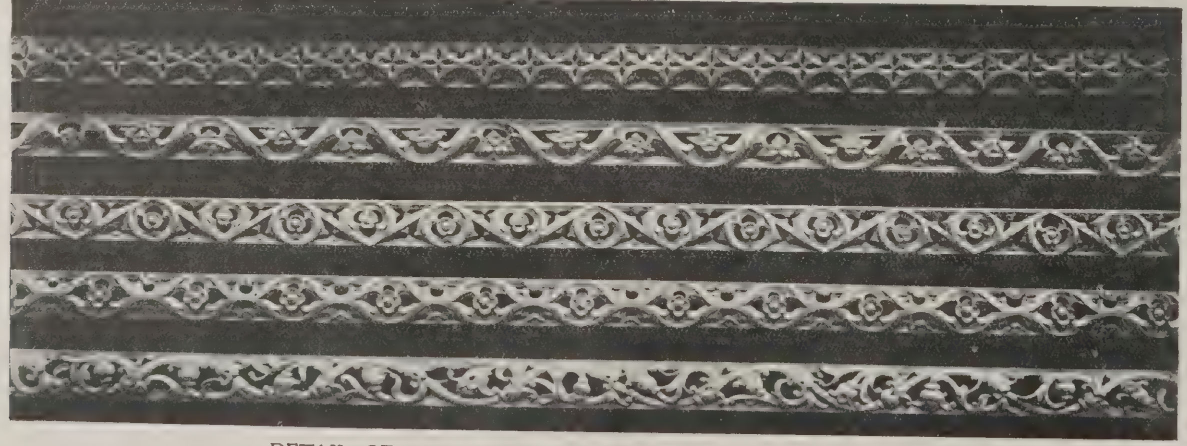
BRADY STREET AREA. BETHNAL GREEN
4 - STOREY BLOCK DWELLING DEVELOPMENT.
MAXIMUM HOUSING ACCOMMODATION 1222 PERSONS: LOSS OF ACCOMMODATION AS COMPARED WITH A 5 - STOREY BLOCK DWELLING SCHEME WOULD BE 404 PERSONS:
IF RECREATION GROUND WERE OMITTED & 2 ADDITIONAL BLOCKS PROVIDED, LOSS WOULD BE REDUCED TO 86 PERSONS.



LAVENHAM CHURCH.

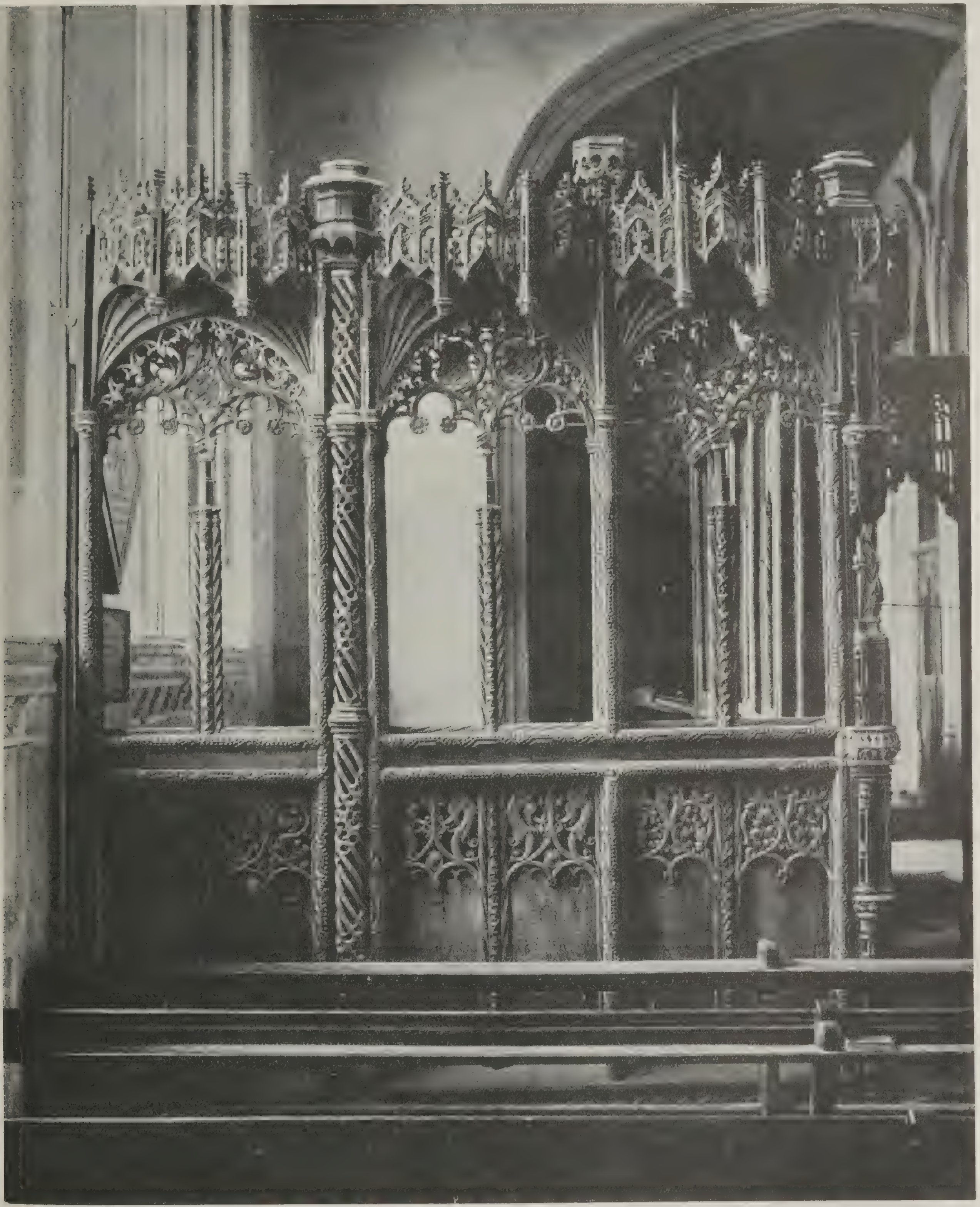
# Lavenham Church, Suffolk : The Parclose

THE following particulars of the Church of St. Peter and St. Paul, Lavenham, Suffolk, are taken from Mr. T. Hugh Bryant's "County Churches: Suffolk." Lavenham Church is one of the finest Perpendicular churches in England, erected between 1480 and 1530 by John de Vere, Earl of Oxford, and a family of clothiers of Lavenham named Spring, whose arms appear both inside and outside the fabric, also the de Vere mullet. It is, including the tower, nearly 200 ft. long and 68 ft. wide, and consists of chancel, with N. and S. chapels, nave of six bays, lofty clerestory, south porch, and a magnificent west tower, 141 ft. high (the finest in Suffolk), though still unfinished, containing a splendid peal of eight bells (the tenor weighs 23 cwt., and is considered one of the best in the country, and certainly the finest ever cast by "Colchester Graye"). There are some remains of decorated work in the chancel, the sedilia being of that period, also the five-light east window. The chapels were erected about 1530—the north by Simon Branch and Elizabeth his wife, and the south by Thomas Spring the younger. The latter has a fine roof, the cornice composed of foliage and shields of arms, and the principals spring from stone shafts, on which are small figures. Each chapel is separated from the church by good traceried oak screens. The nave, 96 ft. long, of perfect proportions, is of six bays; the pier capitals are adorned with Tudor flowers, and the spandrels of the arches filled with good panelling; a good cornice and band of panelling runs above. The clerestory has two three-lights in each bay, divided by delicate stone shafts, from which, and from the main shafts, the principals of the roof spring. The tower arch is of elegant proportions; the interior of the tower is panelled, and the staircase has a hand-rail cut out of the masonry. There is a fine modern reredos, with figures of apostles. There are remains of old painted glass in the east window of the south chapel, and under a window is a richly ornamented string. The decorated rood screen has four bays on each side of the entrance, but is not so elaborate as the parclose. There is a rood staircase at the north-west corner of the Spring chapel. Over the porch is a series of six shields representing the alliances of the de Vere family; it has an elaborate stone-groined ceiling; in the spandrels of the arch are boars—the supporters of the de Vere shield—the door ornamented with the linen pattern. The rich carving in the Oxford, or de Vere, Chapel resembles the canopy work in Henry VIII's chapel. The chapel seems to have been the private pew of the Oxford family. The church was restored in 1867.



DETAIL OF MOULDING AT BOTTOM OF THE PARCLOSE.

# Architectural Details. 42.—The Parclose, Lavenham Church.



The Decorated work of this screen must rank as one of the best examples of craftsmanship of the period. There is here nothing hurried, yet is there nothing that has been overworked at.

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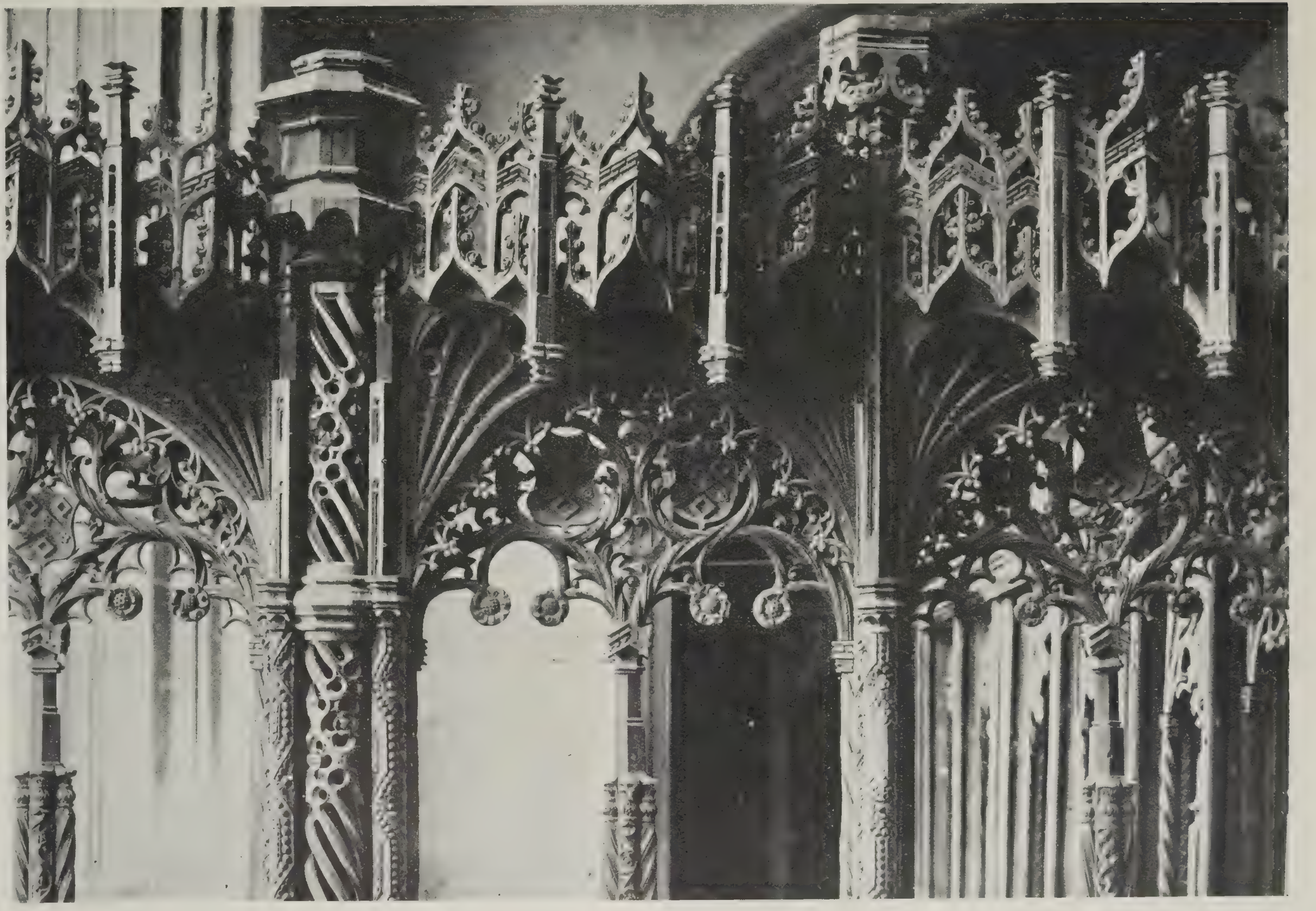
# Architectural Details. 43.—The Parclose, Lavenham Church



This detail of the beautiful tabernacle work reveals with what care and accuracy the craftsman of the Decorated period worked. Yet there is no loss of freedom. This is the work which placed English craftsmen side by side with the finest workers of the Continent.

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# Hightown War Memorial

## TRENWITH WILLS, A.R.I.B.A., Architect

THIS memorial has been designed to suit its present and future surroundings. Hightown is a growing village of small residential property some ten miles from Liverpool. The site of the memorial is at the centre of cross-roads, about four hundred yards from the sea, and is the future main centre of the village. At present the only important buildings at this point are a church hall and a bank, both of brick and stone.

No matter what development takes place the monument will always be seen in silhouette against the western sky over the sea. The sculpture and main outline of the memorial therefore have been kept as compact and restful as possible, and the colour considered in relation to the surrounding yellow sand-dunes.

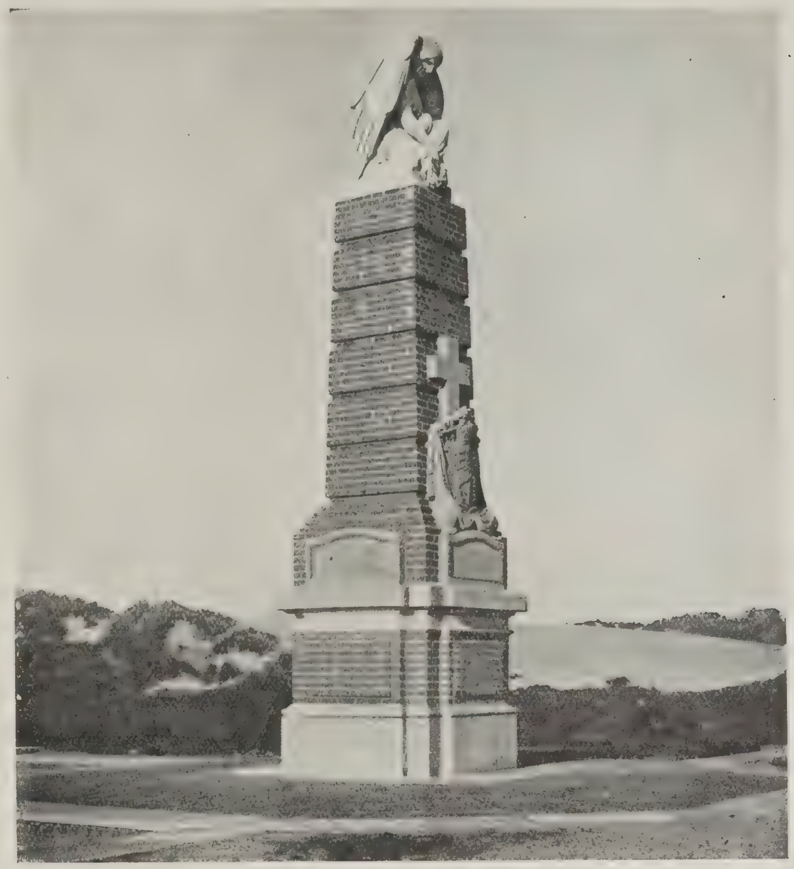
The memorial stands on a raised mound about 30 ft. in diameter, and is 20 ft. high to the top of the figure. It is constructed with small orange-red hand-made bricks ($6 \times 1\frac{3}{4} \times 3$ in.), with wide unpointed lime mortar joints (five courses to the foot), and the sculpture and dressings are in Bath stone. Immediately surrounding the memorial is a brick-paved platform enclosed by bands of stone, and approached from four sides by wide flights of steps (of brick and stone) through a grass bank.

The symbolic idea of the composition is that the fallen, represented by the military trophy, pass through their Cross to the welcome and sheltering spirit of a Life Eternal, who stoops to receive and crown them. There are four panels. One bears the inscription, "Their Name Liveth for Evermore," and the remaining three will be inscribed with the names of the fallen.

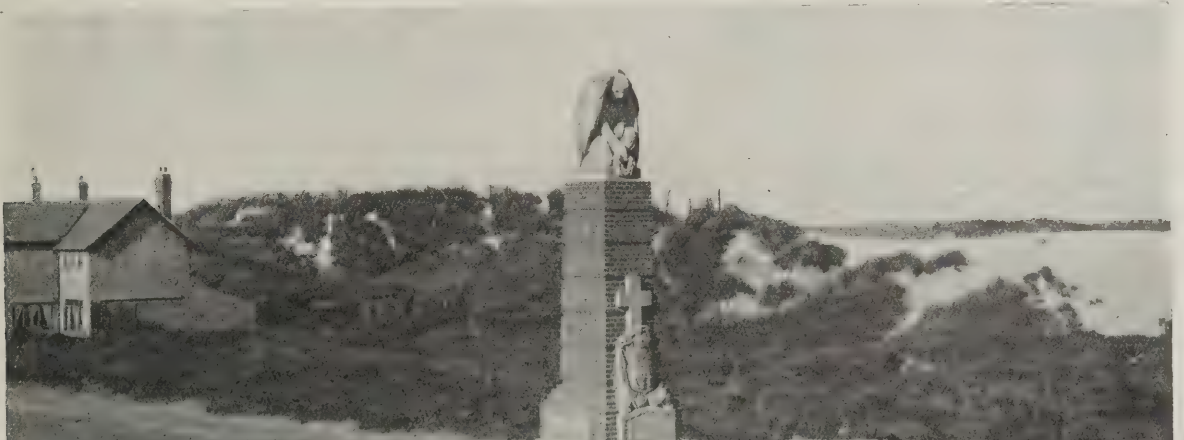
The sculpture was executed and the memorial erected by Mr. H. Tyson Smith, of Liverpool.

It is probably due to this co-operation of sculptor and craftsman that the monument gives an appearance of complete unity.

Mr. Smith has also executed memorials in other parts of the country.



A NEAR VIEW OF THE COLUMN.



LOOKING TOWARDS THE SEA.

# The Wren Bicentenary

## The Celebrations in England

PREPARATIONS are complete for the celebration in this country and in America of the bicentenary of the death of Sir Christopher Wren. In this country the chief celebrations, arranged by a Grand Committee formed by the R.I.B.A., with the assistance of other bodies, include a commemoration service at St. Paul's Cathedral, a banquet, an exhibition of drawings and photos of Wren's work, together with books, letters, and other relics, a fancy-dress ball and carnival, visits to Wren's principal buildings, and the publication of a memorial volume. Here is the complete programme :—

### Commemoration Service

Monday, February 26, Commemoration Service in St. Paul's Cathedral.—The members of the Grand Committee, led by Mr. Paul Waterhouse, President of the R.I.B.A., and accompanied by the Lord Mayor and Sheriffs of the City of London, will assemble in St. Paul's Churchyard at 2.20 p.m., and proceed into the Cathedral. In the course of the service an address will be delivered by the Very Rev. W. R. Inge, D.D., Dean of St. Paul's. The Anthem to be sung will be "O Clap your Hands," by Greene, who was Organist of St. Paul's, 1718–1755. The members of the Grand Committee, accompanied by the Lord Mayor and Sheriffs, will then proceed to the Crypt, where the President of the Royal Institute will lay a wreath upon the tomb of Sir Christopher Wren. The service will be open to the general public.

4 p.m.—The Lord Mayor will entertain the members of the Grand Committee at tea at the Mansion House.

### Banquet

7 for 7.30 p.m.—The Royal Institute will give a "Christopher Wren Commemoration Banquet" at the Hotel Victoria, Northumberland Avenue. The members of the Grand Committee and a large number of other distinguished guests have been invited to be present. In place of the usual after-dinner speeches, commemorative addresses, dealing with the life and work of Wren, will be delivered by the President (Mr. Paul Waterhouse), Sir Reginald Blomfield, R.A., and Mr. Mervyn Macartney, F.S.A., Surveyor of St. Paul's Cathedral.

### Exhibitions

February 26 to March 3.—An exhibition of drawings and photographs, illustrating Wren's work, and of books, letters, and other relics, will be held in the Galleries of the Royal Institute. It will be open from 10 a.m. to 6 p.m., Saturday 10 a.m. to 1 p.m.

A small exhibition, arranged by the Public Record Office, will be open to the public between 2 p.m. and 4 p.m. (except Saturdays and Sundays) in the Museum of the Public Record Office, Chancery Lane, W.C.2. Autograph letters of Wren, original drawings and other contemporary documents will be on view.

### Visits to Buildings

February 19 to March 3.—A programme of visits to Wren's principal buildings, under the general direction of Mr. Percy Lovell, B.A., A.R.I.B.A., hon. secretary of the London Society, has been arranged by the Selborne Society. These will include specially guided visits to St. Paul's Cathedral, the City Churches, Chelsea Hospital, Hampton Court Palace, Kensington Palace, Greenwich Hospital, and the Universities of Oxford and Cambridge. Full particulars of these visits, which are open to the general public, and the necessary tickets can be obtained on application to Mr. Percival J. Ashton, 72 High Street, Bromley, Kent. (Early application should be made.) At Cambridge the main Wren buildings to be seen are the Library of Trinity College, the Chapel of Pembroke, and Emmanuel College. At 4.15 p.m. the Master and Fellows of Pembroke College will entertain the party to tea. There will be an organ recital of contemporary music in Pembroke College Chapel at 5.15 p.m., for which a limited number of tickets are available for Members and Licentiates of the R.I.B.A.

The Art Standing Committee have arranged a visit to the City Churches on Saturday, February 24, beginning at 2.30 p.m. Mr. Arthur Keen, Hon. Secretary, R.I.B.A., has kindly consented to conduct the visit. The following churches will be visited: 2.30. St. Stephen's, Walbrook; 2.55. St. Mary Abchurch; 3.20. St. Mary's, Aldermanbury; 3.45. St. Margaret Lothbury; 4.10. St. Lawrence Jewry; 4.35. St. Mary-le-Bow. Members and Licentiates desiring to take part should apply to the Secretary, R.I.B.A., as soon as possible.

### Memorial Volume

By arrangement with the Grand Committee, Messrs. Hodder and Stoughton will publish a memorial volume, dealing with various aspects of Sir Christopher Wren's life and work, under the general editorship of Mr. Rudolf Dircks, Librarian of the R.I.B.A. The volume will contain facsimile reproductions of original letters and drawings of Sir Christopher Wren, numerous reproductions of engravings, and original drawings by various artists, as well as a number of coloured plates by well-known artists (including Sir G. Kneller's portrait), and contributions by S. D. Adshead, F.R.I.B.A., Professor of Town Planning, London University; Rev. S. A. Alexander, Canon and Treasurer, St. Paul's Cathedral; Sir William Bayliss, F.R.S., D.Sc., LL.D.; Somers Clarke, late Surveyor to the Fabric of St. Paul's Cathedral; J. Alfred Gotch, F.R.I.B.A., F.S.A.; A. R. Hinks, F.R.S., Gresham Lecturer in Astronomy; Arthur Keen, F.R.I.B.A.; Mervyn E. Macartney, B.A., F.R.I.B.A., F.S.A., Surveyor to the Fabric of St. Paul's Cathedral; Ellis H. Minns, Litt.D.; A. Beresford Pite, M.A. (Hon. Cantab.), F.R.I.B.A., Professor of Architecture, Royal College of Art, South Kensington; A. E. Richardson, F.R.I.B.A Professor of Architecture, London University; Sir William Schooling, K.B.E.; Arthur Stratton, F.R.I.B.A., F.S.A., Reader in Architecture, London University; Laurence Turner, Past Master, Art Workers' Guild; W. Henry Ward, M.A., F.R.I.B.A., F.S.A.; Edward Warren, F.R.I.B.A., F.S.A.; Maurice Webb, D.S.O.; with introduction by Sir Aston Webb, K.C.V.O., C.B., P.R.A., F.R.I.B.A. It will be published on February 26 at the price of £5 5s. and upwards, and all the profits from its sale will be handed over to the St. Paul's Cathedral Preservation Fund.

### Fancy-Dress Ball

March 9.—The Architectural Students of London will hold a fancy-dress ball and carnival in the Galleries of the R.I.B.A. from 9.30 p.m. to 5.30 a.m. The profits will be devoted to the St. Paul's Cathedral Preservation Fund. Tickets, including refreshments, 15s. each, to be obtained from: Mr. F. R. Yerbury (Organizing Secretary), The Architectural Association, 34–35 Bedford Square, W.C.; Mr. J. O. B. Hitch, Architectural School, Royal Academy; Mr. K. Cheesman, Royal College of Art, South Kensington; Miss A. M. Hargroves, School of Architecture, University College, Gower Street, W.C.

### Wren Lecture

On March 1 at 5.30 p.m. Mr. A. E. Richardson, Professor of Architecture, will deliver a public lecture, with lantern illustrations, on "The Public Buildings of Sir Christopher Wren" at University College. Tickets may be obtained on application, enclosing stamped addressed envelope, to the Secretary, University College, London (Gower Street, W.C.1).

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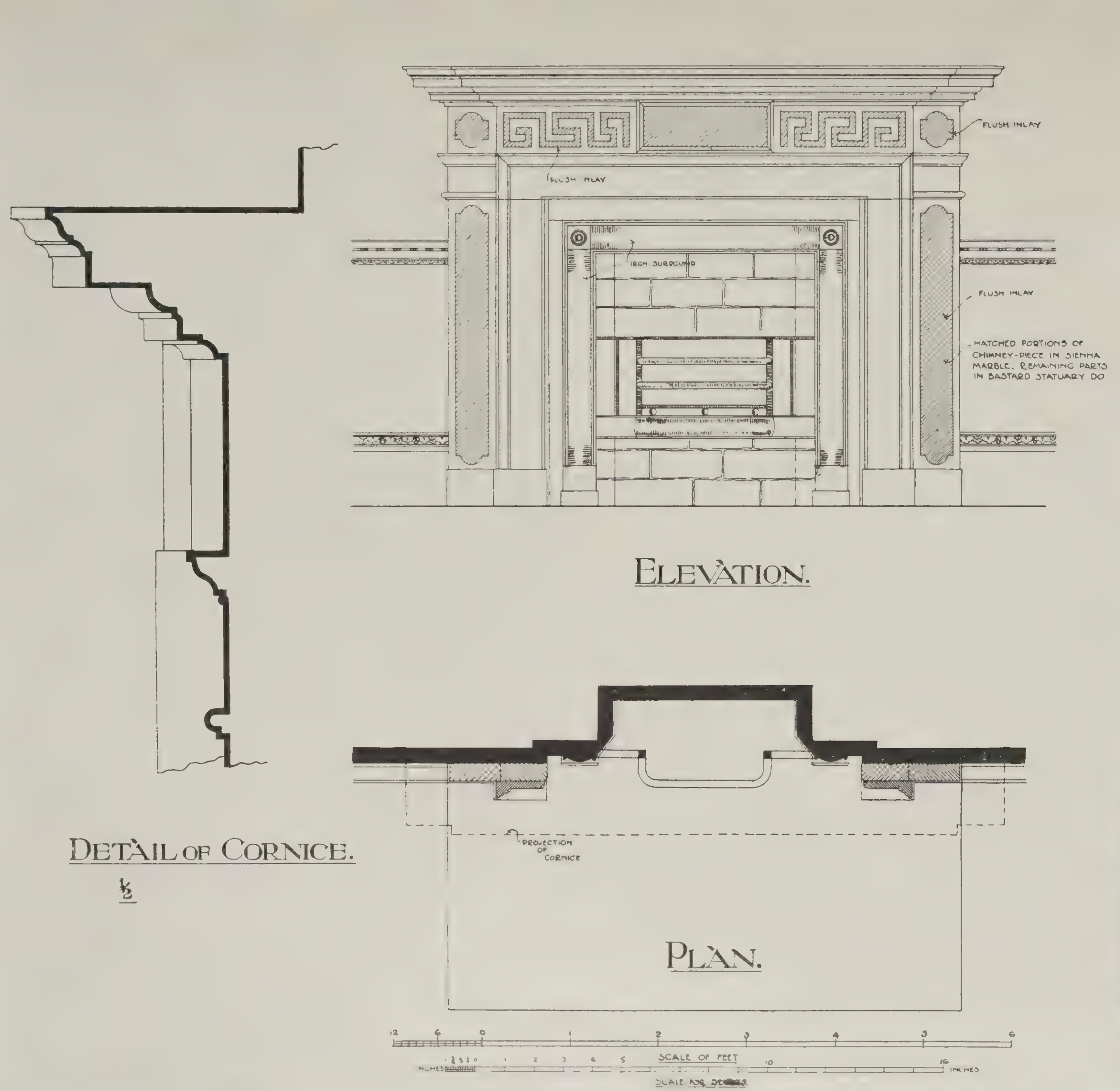
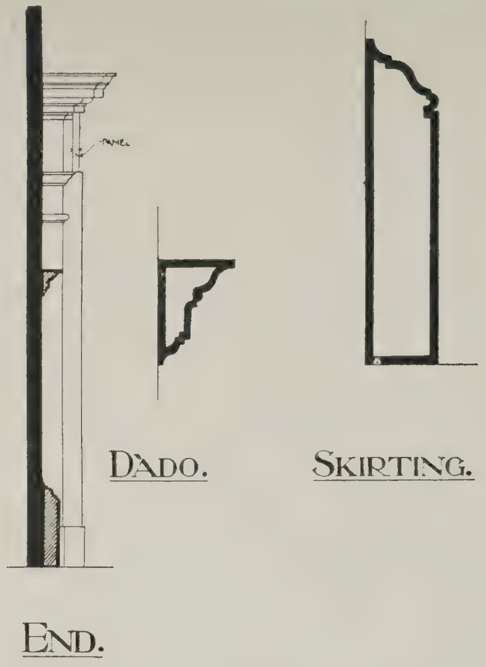
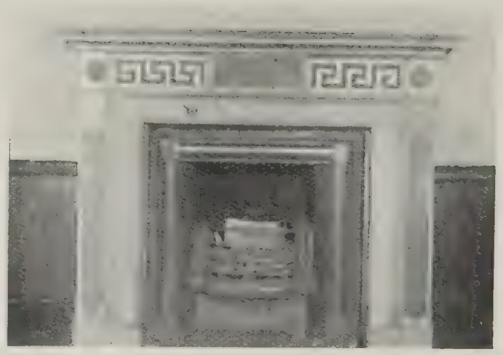
Next week a special issue of the JOURNAL will be published containing, in addition to a complete survey of the bicentenary celebrations, a number of special articles on the life and work of Wren, as follows: "Sir Christopher Wren, 1632–1723," by Frederick R. Hiorns, F.R.I.B.A.; "The City Churches," by E. Beresford Chancellor; "The Public Buildings," by Walter H. Godfrey, F.S.A.; "Wren as a Town Planner," by Professor Patrick Abercrombie, M.A., A.R.I.B.A.; "Wren's Influence on Modern Architecture," by Stanley C. Ramsey, F.R.I.B.A. The issue, which will be profusely illustrated with views of Wren's principal buildings, will form an authoritative summary and estimate of his life and work. The distinguished writers who are co-operating in the production of this issue do full justice to Wren's extraordinary genius—inventive, astronomical, mathematical, scholastic, architectural; to the last in particular, for it is as an architect that Wren is known to fame and will continue to be known throughout the ages.

# Measured Drawings. 23.—Fireplace from St. George's Hall, York

Measured and Drawn by R. W. Phillips.







St. George's Hall, York, was designed in 1740 by John Carr, of that city. Originally it was a large town house. The interior is very rich in detail; the ceilings, overdoors, fireplaces and staircase, being the most outstanding features. Only two of the largest fireplaces now remain, one of which is illustrated above. Prior to recent alterations, two others of similar dimensions were situated on the first floor, but these have now disappeared. In the fireplace illustrated, the Greek fret ornament and the jamb inlays are in yellow Sienna marble, set flush with the surrounding work.

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# Magazines of the Month[*]

## A Literary and Pictorial Digest

THE ARCHITECTURAL REVIEW for Febuary opens with Decorations by Art tudents for the London County Hall.

"The project for decorating a corner f the new County Hall was first discussed between Mr. Ralph Knott and Ir. Charles Sims. Mr. Sims suggested hat students from the four chief London ainting schools—the Royal Academy, he Slade, the Westminster School, and he Royal College of Art—should prepare esigns with a view to carrying them out n situ. The project met with the ready ympathy of Professor Tonks and Mr. Valter Bayes. The site to be decorated, he subjects for the designs, and the naterial in which these should be carried ut were fully discussed; agreement was uickly reached. A modest corridor was hosen, the cartoons were to represent cenes from the public parks and gardens nder the jurisdiction of the London County Council. Each school was to nake itself responsible for four lunettes, wo of which were to be painted in risaille. Cartoons were prepared by Ir. H. J. Lee and Mr. J. C. Clark, of the Royal Academy School; by Mr. R. C. Guthrie and Mr. Burn, of the Slade School; by Mr. Norman Howard and Ir. H. W. Hawkins, of the Westminster School; by Mr. W. Liley, Miss Braden, nd Mr. R. V. Pitchforth, of the Royal College of Art."

The plan for the execution of the esigns on the actual walls has been nodified, and the paintings will be xecuted on canvas, to be fitted into the unettes.

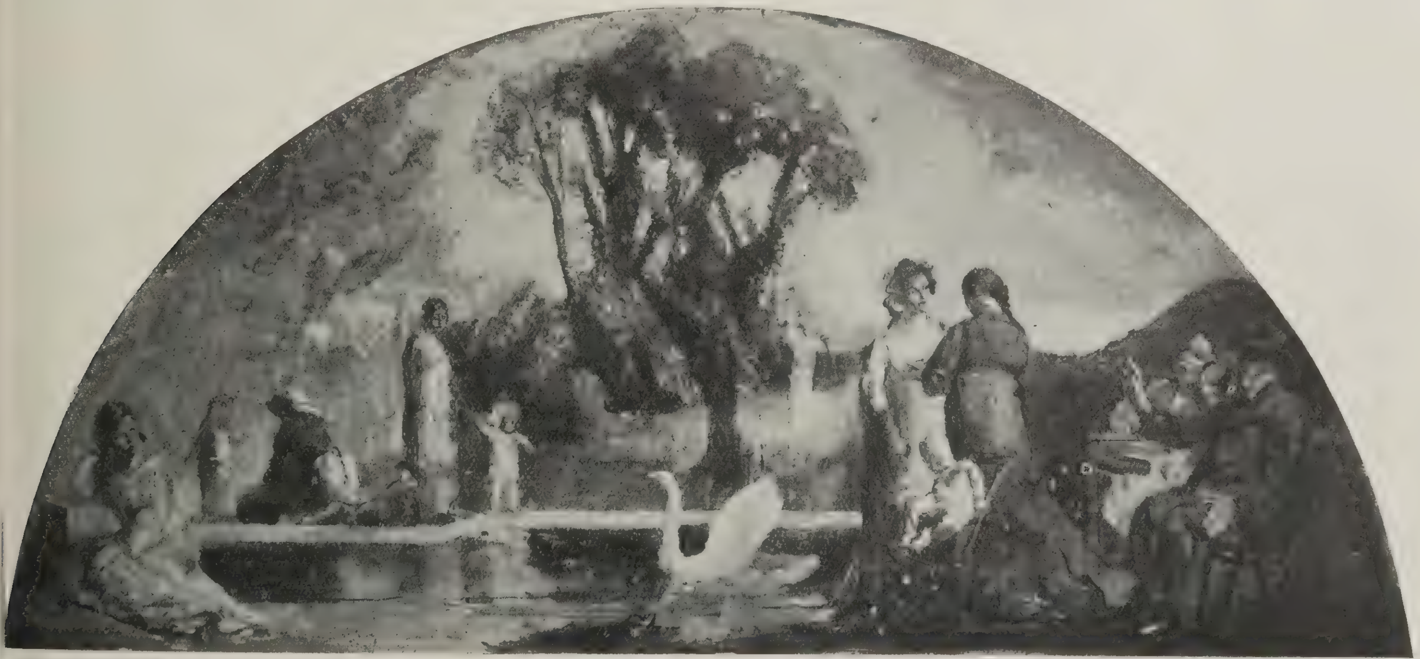
Professor Rothenstein, of the Royal College of Art, South Kensington, who ontributes the article, adds: "As the County Hall contains countless corridors, further experiments may, it is hoped, be encouraged; while it should be possible to obtain the means, in the council chambers, for the commissioning of more important decorations by painters of established reputation."

Several illustrations of the paintings are reproduced.

THE LONDON MERCURY notes the nearing completion of the Bush Building in Aldwych, "the first important building in London to exhibit the characteristics of the latest and best American commercial architecture." "Certain details," says THE MERCURY, "may be adversely criticized. It is difficult to understand, for instance, how so good an architect can have allowed himself, for whatever object, to break the surface of his last wall by a shadowy pediment several floors down which sticks out of the wall like a fossil out of a cliff. But the great merits of the building are already obvious. The Kingsway front, with its great archway, promises to be very fine; true, it may kill its surroundings, but some of those would be better dead. The masses of the building are finely proportioned, and its upper stories are an excellent example of that gradual recession by stages which is now a standard feature in New York sky-scrapers." Mr. A. R. Powys, in his monthly section on "Architecture," writes upon "The Making of an Architect," his mind being turned to the subject by "the perusal of Mr. F. R. Yerbury's interesting little book *The Architectural Students' Handbook.*"

THE ARCHITECTURAL RECORD (New York) for January contains an article by Professor A. D. F. Hamlin upon "The State Architect and His Works." "The office of State architect for the State of New York," writes Professor A. D. F. Hamlin, "was first created by the legislature in 1909 as a part of the 'Act Relating to Public Buildings' of that year. This Act fixed no duration for the tenure of the office, and the official designated was commissioned 'to hold office during the pleasure of the Governor.' The first appointee was Mr. Franklin B. Ware, of New York City. He held the office for three years, discharging its duties with integrity amid increasing difficulties, due to the pressure and interference of the politicians and the loose way in which the Act was drawn. Upon his retirement, in 1912, Mr. H. W. Hoefer was appointed by Governor Sulzer to succeed him, but the scandals attending his administration resulted in his resignation in February, 1913, after which the office was left vacant for three months. In May of that year Governor Sulzer appointed Mr. Lewis F. Pilcher, of the firm of Pilcher and Tachau, of New York City, to the vacant office, which he has continued to hold ever since."

Without going into tedious details, the functions of the Department of Architecture (as the office of the State architect is technically designated) may be stated briefly to be the preparation of plans, specifications, and contracts for all buildings erected, altered, or enlarged at State expense, and the superintendence of their erection. An exception is made for buildings assigned by special laws to other architects, and for alterations or additions to State institutions when made by the institutions themselves or executed by inmate labour; but the department exercises general supervision over such work. The State architect is given the largest powers and widest discretion in the conduct of the office and the appointment of his assistants and subordinates, and is by the law fully protected against interference by officials of other departments or by municipal or other corporate bodies. In short, the depart-



A LONDON PARK.
From a Painting by Rodney Burn. The Slade School.
(*From "The Architectural Review."*)

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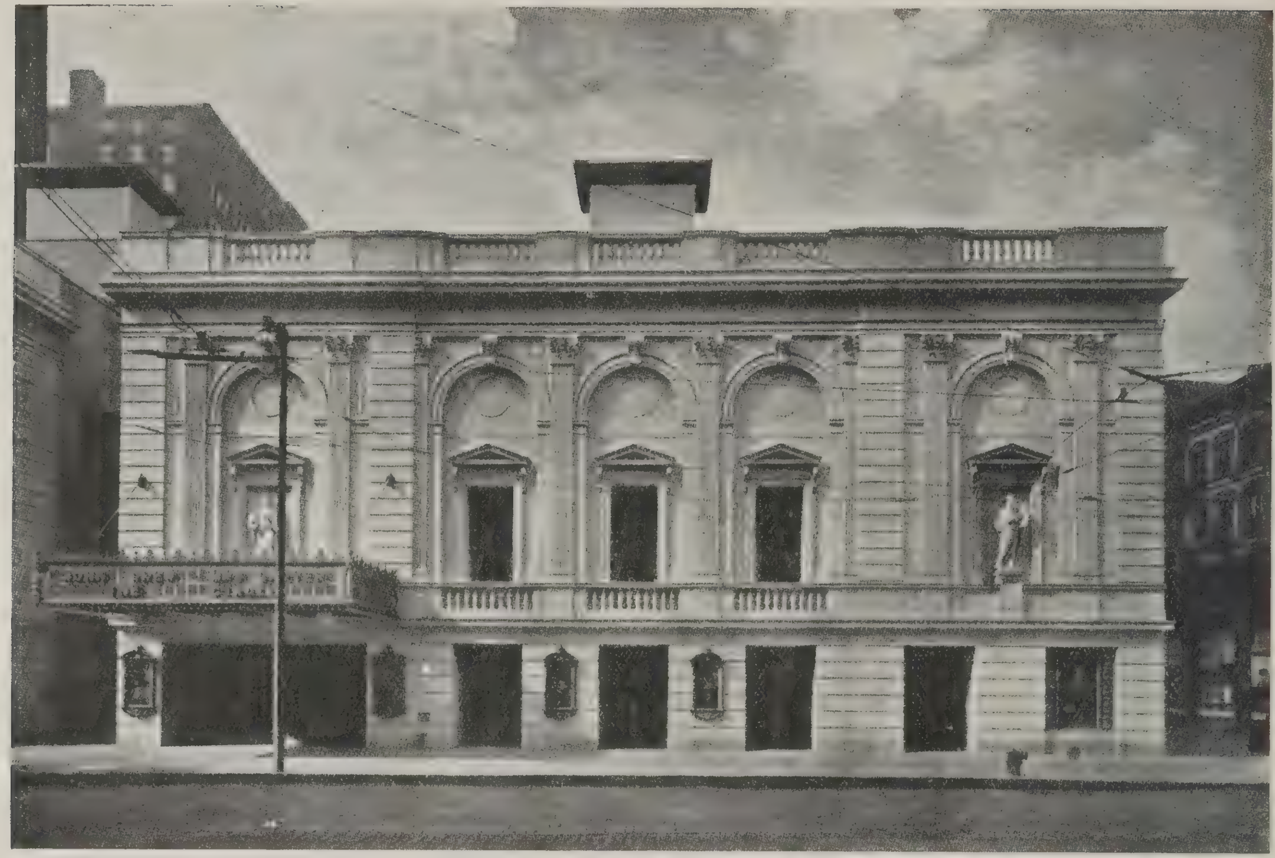
[*] All the above magazines and many others may be een in the Reading Room at 29 Tothill Street Westinster, S.W.1.



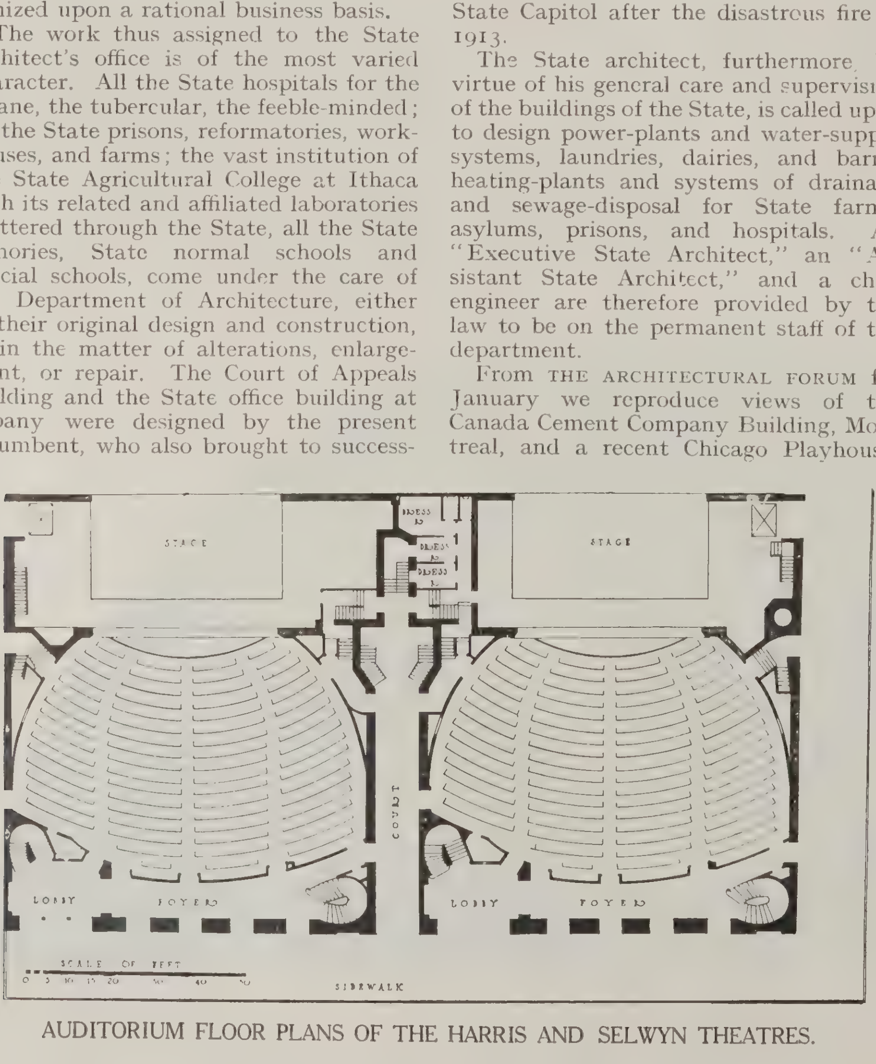
SELWYN THEATRE, CHICAGO. C. HOWARD CRANE AND KENNETH FRANZHEIM, ARCHITECTS.

ment is taken out of politics and organized upon a rational business basis.

The work thus assigned to the State architect's office is of the most varied character. All the State hospitals for the insane, the tubercular, the feeble-minded; all the State prisons, reformatories, workhouses, and farms; the vast institution of the State Agricultural College at Ithaca with its related and affiliated laboratories scattered through the State, all the State armories, State normal schools and special schools, come under the care of the Department of Architecture, either in their original design and construction, or in the matter of alterations, enlargement, or repair. The Court of Appeals building and the State office building at Albany were designed by the present incumbent, who also brought to successful completion the restoration of the State Capitol after the disastrous fire of 1913.

The State architect, furthermore, by virtue of his general care and supervision of the buildings of the State, is called upon to design power-plants and water-supply systems, laundries, dairies, and barns, heating-plants and systems of drainage and sewage-disposal for State farms, asylums, prisons, and hospitals. An "Executive State Architect," an "Assistant State Architect," and a chief engineer are therefore provided by the law to be on the permanent staff of the department.

From THE ARCHITECTURAL FORUM for January we reproduce views of the Canada Cement Company Building, Montreal, and a recent Chicago Playhouse, the Selwyn Theatre, a sister building to another, the Harris Theatre.



AUDITORIUM FLOOR PLANS OF THE HARRIS AND SELWYN THEATRES.

(*From "The Architectural Forum.*")

Only occasionally does an opportunity come to a modern architect of designing adjoining buildings in a manner which makes for harmony and symmetry, each structure possessing its own individuality and character while contributing its share to the well-ordered dignity of the group, large or small, of which it is a part. An opportunity of this kind, productive of excellent results, and full of suggestions as to what might be achieved upon a somewhat more ample scale, was recently presented in Chicago in the building of the Selwyn and Harris Theatres by the same architects.

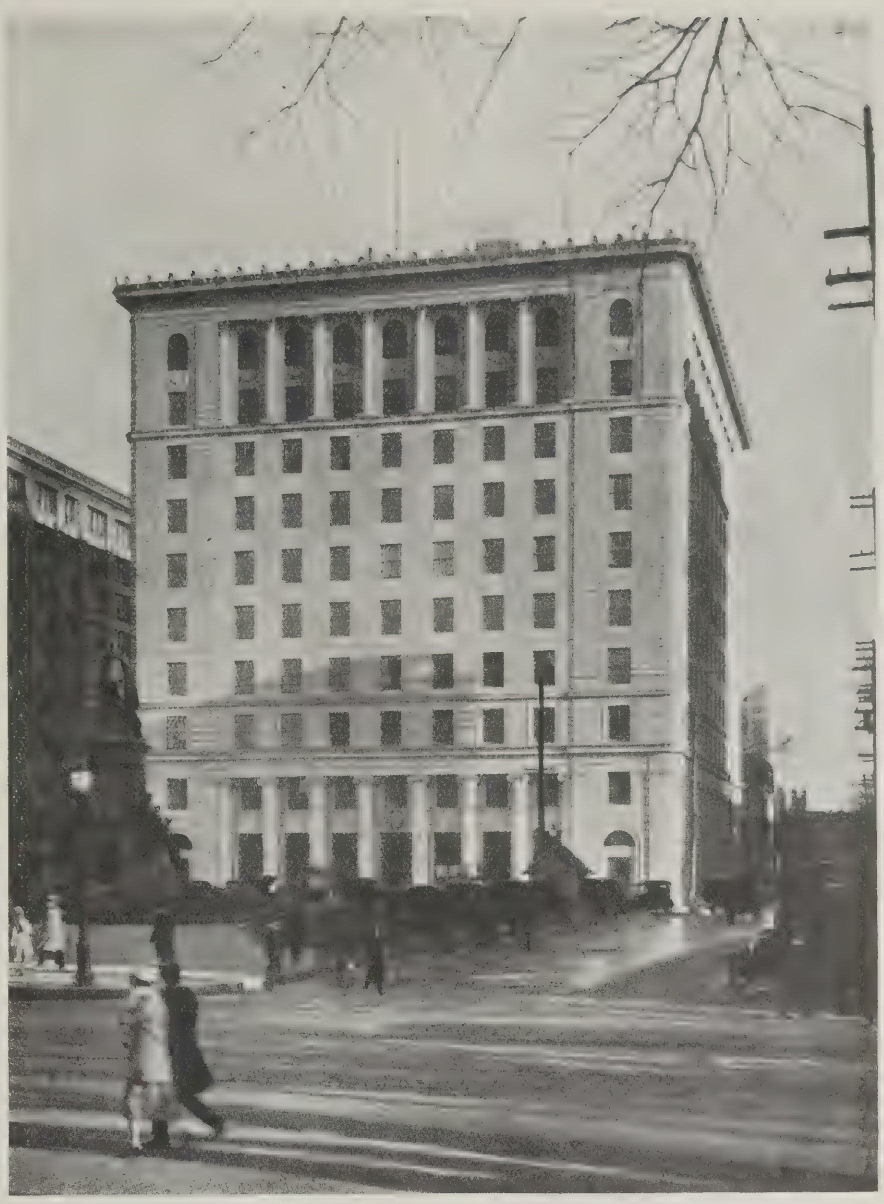
The fact that the two structures were to be occupied exclusively as theatres and not as office or loft buildings, in which theatres were to be masked or concealed, added considerably to the interest of the problem and aided in securing the beauty of the completed result. The twin structures are by no means identical in appearance or even in exterior arrangement, but their heights and chief characteristics are in complete accord, and the eye of the observer notes with satisfaction the long horizontal lines of their lower or basement storeys and the parapets before the windows, the round Roman arches, and the pilasters of their upper façades, and finally the strong, vigorous lines of the parapets which are placed above the cornices. The material of the exteriors is light toned terra-cotta with colour suggested in the trim of the windows, the canopies over the main entrances, and the bulletin boards used at various places.

The fact that each building is exclusively devoted to an individual theatre has had its due effect upon the plan, for since no provision must be made for shops, with the approaches to the theatre made f secondary importance, the entire front f each building has been given up to roviding adequate entrances which lead irectly into the theatre auditorium roper. The lobby, containing the ticket ffices, may be open the greater part of he time, the other doors, leading from he auditorium to the sidewalk, being pened only when an audience is leaving he theatre.

The interior of the Selwyn Theatre ight be described as being a sumptuous hough refined development of the styles f the English Renaissance, exhibiting ertain characteristics of what would be egarded as Georgian architecture and ecoration, while in certain other details uggesting uses which are more closely ssociated with the reign of Queen Anne. he walls from the carpeted floor to the offered ceiling are panelled with the nest English walnut, especially selected ecause of its rich grain and texture, and or the mellow softness which this wood ossesses. The walls are divided into rge panels entirely devoid of carving xcepting above the proscenium arch, round the boxes and in certain other laces where carving in high relief after he manner made popular by Grinling ibbons emphasizes the rich severity of he panelled walls. In contrast with the oft brown of the walls the ceiling of the heatre is elaborately coffered and polyhromed in antique green, cream, and old, the colouring being toned to produce he effect generally conferred by age. ighting fitments, whether hung from he ceiling or used as wall lights in the oxes and at other points in the auditorium, are of cut crystal and gilt, proucing a sumptuous appearance.

The dignified ten-story structure built y the Canada Cement Company is a triking instance of what may be done ith a comparatively tall building, for it mbodies designing and planning of a high rder. It is also of special interest ecause cement in a wide variety of uses as been employed in every practical ay in a building, the owners of which ere naturally interested in displaying he advantages of their product. The ffort is entirely reasonable. No attempt as been made to use cement products here other materials would be more uitable or less costly. The structure is einforced concrete, and the exterior acing is of cast cement.

The building occupies what is perhaps ne of the most desirable locations in ontreal, an entire block front facing hillips Square, in the centre of which tands the statue of King Edward VII. treets upon each side of the building fford permanent natural light upon hree sides.



CANADA CEMENT COMPANY BUILDING, MONTREAL.
BAROTT AND BLACKADER, ARCHITECTS.
(*From " The Architectural Forum.*")

THE PHOTOGRAPHIC JOURNAL for Febru-ry reports a speech delivered by Mr. C. ewis Hind, the art critic, before the oyal Photographic Society, in which r. Hind said : " I went last week to an xhibition at the R.I.B.A.—a very intersting show, containing representations f the chief buildings put up during the ast five years. Yet when I went away said to myself that there was no articular building standing out in my ind. What did stand out in my mind as the photography of certain buildings. gain, in each case, the photographs of he buildings that attracted me so much nd which I thought so remarkable, and eturned to again and again, were by the ame man. I knew whom they were by, because he signed his name. I believe in signing. I should like to see the County Council pass a by-law making it necessary for all buildings to be signed, and all sculpture and everything else. This man signed his name, and the two things which took my fancy—and which, oddly enough, I thought more beautiful than the buildings themselves—were the W. G. Grace Memorial at Lord's (eight or ten views) and certain aspects of Knott's County Hall, and the photographer in each case was F. R. Yerbury. These were beautiful photographs, mysterious photographs, and an aspect of the County Hall was presented which I had never felt before."

Mr. G. Bernard Shaw contributes the following letter to the January issue of ARCHITECTURE :—

Sir,—Why don't you send a competent young man round London to suggest improvements in existing ugly public buildings, and to mark the hopeless ones for demolition ? For example, the Houses of Parliament could be made almost presentable by removing the top story ; and a list of the tombs which should be cleared out of Westminster Abbey would be very useful to a Bolshevik leader in the event of a dictatorship of the proletariat being established. That would give a practical turn to much pointless grumbling and sniffing.—Yours, etc., G. BERNARD SHAW.

Mr. Shaw might have roused some architect editors to fury, but the editor of ARCHITECTURE is a tolerant man, and he comments :—

" Mr. George Bernard Shaw, in the course of a letter printed elsewhere in this issue, gives another instance of that abnormal normality which some years ago he discovered to be his most distinguishing trait. What architect, bringing up examples to illustrate his advocacy of a drastic expurgation of our architecture, would begin by pointing to the Houses of Parliament or to the Poets' Corner in the Abbey ? There are æsthetic outrages to which the mind secretes its own antidote of forgetfulness ; and it would come as a shock to many of us to be reminded that of the buildings instanced by Mr. Shaw one is the seat of our national Government and the other the inmost ganglion of our national consciousness. What insidious doom has fallen upon the works of man, that those that by their nature attract should æsthetically repel ? Could anything be more contradictory than that the spot whither all England's eyes are turned in moments of collective sorrow or rejoicing should be the laughing-stock of all persons of sensitive tastes ? The architect who is unfortunate enough to belong to this category has usually succeeded in exorcising such misgivings, and the monuments of which we spoke have become mere names to him. That the ordinary citizen still invests them with a significance commensurate to their function Mr. Shaw's examples are proof enough.

"The architect's mind is much more occupied, and rightly occupied, with the work of his own day; and it may be that questions such as those raised by Mr. Shaw do not properly concern him at all, although the profession to which he belongs requires of him a critical as well as a creative activity. At the present moment, for instance, we are all deeply curious about the result of an architectural experiment on the grandest scale which is now nearing its completion. There seems to be a general feeling abroad, however, that Kingsway is not the achievement that it might have been; there is a sense of wasted opportunity noticeable wherever that thoroughfare is spoken of. And if we are really powerless to make the best of the present, how can we set about and correct the past ? It would seem, after all, that there are things of more immediate concern to the architect than the monuments that have caused the Abbey to be likened to a stonemason's yard."

The February issue of ARCHITECTURE is given over to Wren, among the artists and authors being Frank Brangwyn, J. St. Loe Strachey, John Freeman, Professor Reilly, Sir Lawrence Weaver, and Professor Adshead. An etching of St. Paul's, by Mr. Brangwyn, forms the frontispiece, and Mr. Strachey contributes a notable poem containing the following memorable lines :—

> "Wren struck the ground, and
> straight a spirit rose,
> To write in stone and brick
> his ordered prose."

THE AMERICAN ARCHITECT AND ARCHITECTURAL REVIEW opens with an article on "The Influence of Zoning on New York's Skyline," by Harvey Wiley Corbett. Mr. Corbett says :—

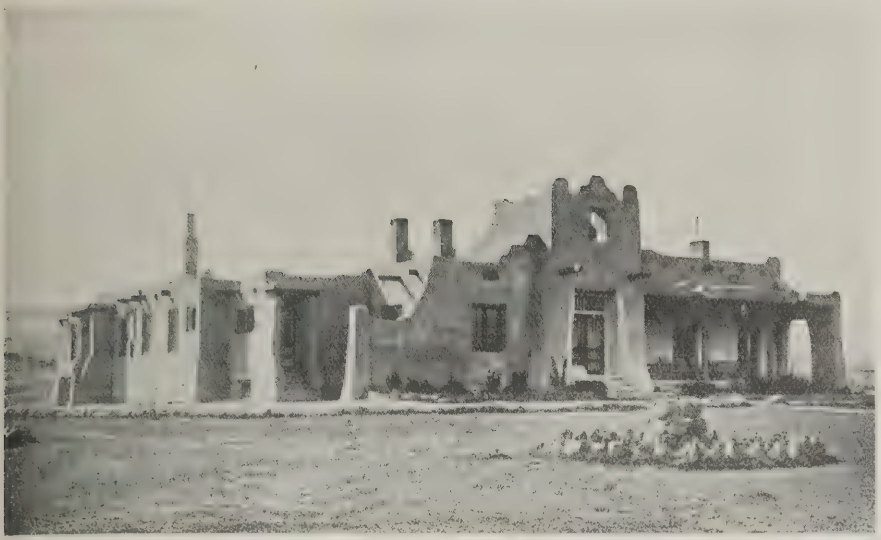
"In an article by David Knickerbocker Boyd, architect, which appeared in THE AMERICAN ARCHITECT, issue of November 18, 1908, Mr. Boyd showed the development of a prophetic vision. He expressed strong protest against the rapidly increasing tendency toward 'canyon streets' in our larger cities, and constructively offered a solution, which has since been accepted an to-day is the essence of the 'set-back building as applied to zoning in thi country. Mr. Boyd proposed to 'ste back' every few stories on the stree front of buildings. He assumed that i the further building of American citie a spirit of rampant commercialism woul prevail, and that no flat, fixed and fina limit of height for all buildings would b generally accepted. Specifically as t certain cities a regulation might b adopted, but a country-wide acceptanc of a fixed height as relating to the cities conditions could not be hoped for Prophetically Mr. Boyd proclaimed hi theory of what might be accomplished He advocated the 'set-back' of uppe stories, setting the initial height at on and one-quarter times the width of th street, or a 62½-foot high building on 50-foot street. Just eight years after th publication, or in 1916, Mr. Boyd' prophetic vision became fact. It was the that the building zone resolution in New York City became effective.

"Naturally the passage of a law tha so radically affected building in Nev York was at the outset retarded b special and selfish interests. As woul be also quite natural, many peculia workings of the zoning resolutions resulted, and much controversy occurred

Principale Facade de la Salle de Spectacle de la Ville

THÉATRE D'AMIENS, DEPARTMENT OF THE SOMME. ROUSSEAU, ARCHITECT.

(*From "L'Architecture."*)



THE TRINIDAD COUNTRY CLUB, TRINIDAD, COLORADO.
I. H. RAPP, W. M. RAPP AND A. C. HENDRICKSON, ARCHITECTS.
(*From " The Architectural Record.*")

he larger part of these disputed condi-ions was as to the correct interpretation f the conversion of existing buildings to ther purposes. Sufficient time has now lapsed to provide a zoning law, amended nd changed to fit conditions, that will ecure to New York the best development n its building operations that a prohetic vision could foresee, and it is ossible to make note of just what has een accomplished.

" It was hoped to obtain certain ighly desirable things, viz., to stabilize nd conserve property values, to relieve he increasing congestion in streets and ransit lines, and to stop the further uilding of canyon-like streets where unlight would never enter or at best be een for only a very small portion of the lay.

" Admittedly, the law could not be etroactive. We could not, therefore, ope to change existing conditions in the ongested regions of the city. But the aw affects every new project, as well as very proposed future building developnent. Any law affecting buildings is ecessarily slow in demonstrating its value. It takes a long time (even in New York, where the skyline changes with a rapidity that astounds even the residents of the city itself) so to change and modify the general aspect of a city that the casual observer will begin to notice the change. The modifications in appearance come so gradually that they make little or no impression in themselves. When the law was first proposed, we thought of it as a theory and not a fact, as something that might begin to count in architectural effect in the dim and distant future, but certainly not in the immediate present, and so we dismissed it from our minds and went on about our affairs as usual. In saying this, I am speaking from the viewpoint of the man in the street, not from the point of view of the architect whose plans are directly affected by the law, or the operator who finds the quantity of building he can place in a certain city lot definitely limited, or the resident who happens to want a garage for his car in a zone where such structures are barred. These people all know the law; sometimes they chafe under it, and lose sight of its broader purpose and benefit in the annoyance that they find in its application to their particular case.

" But in a great city like New York, the sum total of those personally affected by the law forms an inconsiderable group as compared with the great mass of people, most of whom do not even know of its existence. And the great mass of people, the man in the street, the casual passer-by, the visitor from out of town—are these people beginning to note the changes, and if so, what is their reaction? They would certainly be able to tell you nothing as to the stabilizing of property values, and I doubt if the law has yet been in operation long enough for even the most expert real estate operator to give a definite opinion on this point. Nor could the people as a whole tell you of any apparent limit being reached in the congestion of the streets or on the transit line. Rather the opposite condition seems to be the case with increasing congestion both on transit lines and in the streets.

" Finally, as to light and air in the streets, there is certainly no more freedom of air or abundance of sunlight than there has been although a careful painstaking observer may possibly be able to demonstrate that in certain newly built sections of the city there is now a little more light than there might otherwise have been, had not the 'set-back' phase of law been in operation.

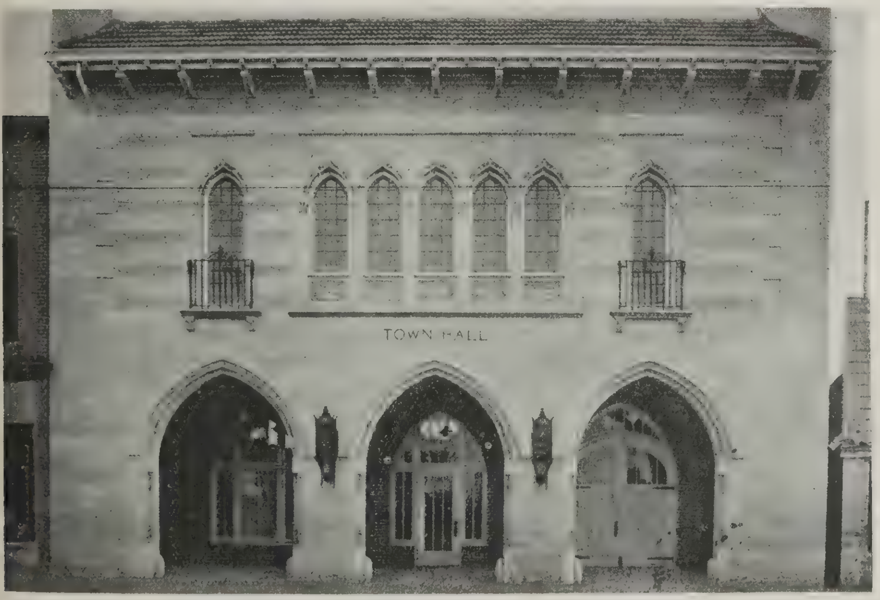
" What, then, are the results of this law, that we can take note of to-day? Has there been anything worth while accomplished, and does the man in the street begin to sense the change that is slowly but surely coming over our city?

" We do not seem as yet to have accomplished the three things for which the law was framed; yet the law is most certainly a success if in fifty years these things are accomplished. But the American of the present is not excited by something that will happen in fifty years. It is difficult enough to get enthusiastic approval of something which is to happen in fifty weeks. He is very much a man of the immediate present.

" Is the zoning law doing anything for him in the *immediate present?* It is, but not all it intended to do. It will undoubtedly achieve in time all these desired things. It has achieved up to this time, or at least is beginning to achieve, something more far reaching in its effect on world architecture and on the world's view of architecture, than anything that was ever accomplished in any single period of history.

" While this world is admittedly a three dimension world (some rare souls seem to penetrate in theory at least to the fourth dimension) most of us live in only two dimensions. We look around about us, we look from side to side, we look down the length of the street, we often have to look out, but we don't look *up!* The new 'set-back' skyline (limited as it is to the building recently erected) still makes us look up. We look up because there is something above and beyond the plain street front to intrigue the eye and fascinate the imagination.

" There can be no question that within a decade practically every city of importance within the United States will have regulated the future development of its buildings along the safest and sanest lines by carefully drawn zoning resolutions."



TOWN HALL, LITTLETON, COLORADO. J. B. BENEDICT, ARCHITECT.
(*From " The Architectural Record.*")

# Correspondence

## Registration

*To the Editors of* THE ARCHITECTS' JOURNAL.

SIRS,—I am afraid I must again correct the writer of your leading article. He states with reference to the Committee that drafted the Bill: "Its next tactical error was to draft and present a Registration Bill without consulting other interested parties." The report in the R.I.B.A. Journal of the 10th inst. gives the following extract from my speech :—

"One of the first things we did was to ask Mr. Sadgrove, representing the Society of Architects, to see us. We had a very friendly afternoon, and we told him what we proposed. That was, I think, in July or August. We discussed the whole thing," etc. "At a later stage we sent round a draft of the Bill to all the Allied Societies. We received replies and suggestions from the Allied Societies; and I think we may say that those suggestions have been embodied in the Bill."

You reported these facts in your JOURNAL of the 7th inst.

The Surveyors' Institution and the Institution of Civil Engineers were exempt from the operations of the Bill.

By the way, it is most amusing to look back into the history of the so-called Unification movement: nearly forty years ago men were as anxious as they are to-day to enter the Institution without passing the compulsory examinations; for in 1886 an "Architectural Federation Committee" opposed a petition for a Royal Charter by the R.I.B.A. concerning the admittance of "only such persons as shall have passed certain examinations," and stated "that in the interests of the architectural profession and of the public alike, it is desirable that all architects in the Kingdom should be united in one body." Needless to say the Unificationists failed in 1886, as they did in 1921.

SIDNEY PERKS.

## "Why not a Publicity Campaign?"

*To the Editors of* THE ARCHITECTS' JOURNAL.

SIRS,—I have read with interest your leading article in your last issue entitled "Why not a Publicity Campaign?"

I would like to inform you that such a scheme is at present being undertaken by manufacturers of paint, colour, varnish, and distempers. A large sum of money has been subscribed mainly by members of the National Federation of Associated Paint, Colour, and Varnish Manufacturers of the United Kingdom, and quarter-page spaces have been taken in most of the leading London and provincial daily papers, and in some periodicals. The campaign starts on February 24, and will run for sixteen weeks.

I do not think that a building publicity campaign would be feasible, as there are so many conflicting interests, but separate campaigns run by the various trades allied to the building trade would of necessity improve the trade as a whole.

Such campaigns are already running, or have been tried: as an instance, for bricks, concrete, tiles, etc.

Your article may induce others to embark on a scheme.

R. F. CLARK.

## Architects' Fees for Abandoned Housing Schemes

*To the Editors of* THE ARCHITECTS' JOURNAL.

SIRS,—In the vexed question of arch tects' fees for abandoned housing scheme we find that very few architects appea to be aware of a published statement the Ministry in their official journa "Housing," bearing on this.

In the issue of September 13, 191 page 66, there is a query on the point abandoned schemes. The Ministry reply is as follows: "The fees should b adjusted in accordance with the custom of the profession."

This considerably weakens their contention that when conditions of employment of architects were laid down b memos. 4 and 31 they had not considere or contemplated any abandonment schemes.

We gather that the R.I.B.A. committee were not themselves aware of thi in their negotiation with the Ministry.

The matter may be of assistance t architects still wrestling with this problem.

ORPHOOT AND WHITING.

## Tutankhamen's Tomb

*To the Editors of* THE ARCHITECTS' JOURNAL.

SIRS,—The Bishop of Chelmsford is probably expressing an opinion which is pretty widely held in protesting against the rifling of the tomb of Tutankhamen He asks with what feelings we should regard the possibility that the body o Queen Victoria should be taken from the tomb in the year 5923,

R. K. W.

# Mr. Powys on the Arts and Crafts

THE fourth of the public lectures at the Royal Academy was given by Mr. A. R. Powys, who spoke on the influence of the Arts and Crafts on Architecture.

He wanted, he said, to emphasize the fact that the Arts and Crafts movement provided no short cut to good architecture by which hard work and much thought might be avoided. It meant neither a search for originality nor a conscious casting aside of old forms. It opened to view new possibilities, suitable and sensible, which the artist and the craftsman could render beautiful and fine.

His first thought on the subject was not what was the influence of the Arts and Crafts Society on architecture, but what had been the influence of architecture on the arts and crafts. There had been for many years a group of architects whose work had been ruled by the very principles for which the society stood, and the training of an architect had helped to make many of our first craftsmen and artists. However much an architect might be trained to study the styles and manners of buildings, his mind must inevitably be directed to an examination of the nature of his materials and the way they were put together. It was through the consideration of these two things that the Arts and Crafts movement grew.

In its origin the movement was the expression of a powerful, though inarticulate force, which was not clearly recognized by art workers until William Morris and his contemporaries first consciously realized what unlimited possibilities of fine work lay in the thoughtful use and joining of materials as opposed to designing in style and manners. Men interested in the various arts immediately began to form themselves into groups for the study of these revived principles, but notwithstanding, no society of architects was formed to study and further in that profession the principles that underlay the Arts and Crafts Society. Architects who approached their art from those principles had turned to that society for inspiration and help.

He hoped that the public would help the movement forward by noting the names of the men who were building up an architecture that belonged to it. It was agreed all over the world that in England the finest new work was done, and that to this nation belonged the first craftsmen and the first designers. In number their works were few, but they were seen and appreciated abroad.

The work being done by the Arts and Crafts was important because it was forming a tradition and a school of thought to which two or three hundred years hence men would trace the architecture of their day.

It might be that in the confusion of the present time it was only possible to reach excellence on a small scale. A building might be good and have fine qualities but could hardly be as perfect as a cabinet or a chair. There were too many disturbing elements in its production. At best it was seldom more than the thought of one man, but to be perfect a building should represent a school of thought rather than an individual idea.

How was architecture to become a really great art when the majority of those who ordered buildings demanded that they should be in this style or that manner rather than in the manner which was natural to our own age?

That was where Mr. Ernest Gimson had influenced architecture so profoundly. He had shown what the present-day manner was in furniture, and it required little imagination to understand that the same spirit might be translated into architecture. One of their duties was to counter the idea that only old work was good work, and only old forms beautiful.

# Chelsea Nurses' Home Competition

## Messrs. Greenaway and Newberry's Winning Design

THE awards of the assessor (Mr. H. V. Ashley, F.R.I.B.A.) in the limited competition for the new urses' Home in connection with the elsea Hospital for Women are as llows: First place and £150, Messrs. eenaway and Newberry; second place d £100, Messrs. Field and Dighton arson; third place and £50, Mr. Morley Horder.

Twelve architects were invited to sub- it designs, but only eleven schemes were ceived, one firm, owing to unforeseen cumstances, being unable to send in awings.

The conditions of the competition ere most lucidly drawn up. It was ggested that the building should occupy at part of the site adjacent to and at e south end of the present hospital, us leaving space for a garden and nnis court, and possibly for a nursing me for paying patients.

The building was to be designed as a mplete unit in itself, except that no ovision was to be made for dining- oms or kitchen, these being provided the existing hospital. The main trance was to be in Arthur Street, and permanent covered way from the spital to the nurses' home was asked r, a suggestion being made that it might llow the line of the eastern boundary all for the greater part of its length.

The building was not to be more than three floors above the ground, and single bedrooms were to be provided for seven sisters, 38 nurses, two sick nurses and 20 maids, and bed-sitting rooms for the night sister and cook. Ten of the 38 bedrooms were for night nurses, and these, with the night sister's bed-sitting room, were to be planned so as to be cut off from traffic and noise, both within and without. Sitting rooms of specified sizes were required for sisters, nurses, probationers and maids, and a waiting room, home sister's office, linen rooms, tea kitchen and pantry, silence room, etc., were to be provided, as well as the necessary bathrooms, w.c.'s, lavatories for hair washing, room for nurses' washing and ironing, clothes drying room, etc. Each sister's and nurse's bedroom was to have a lavatory basin for hot and cold water and a wardrobe.

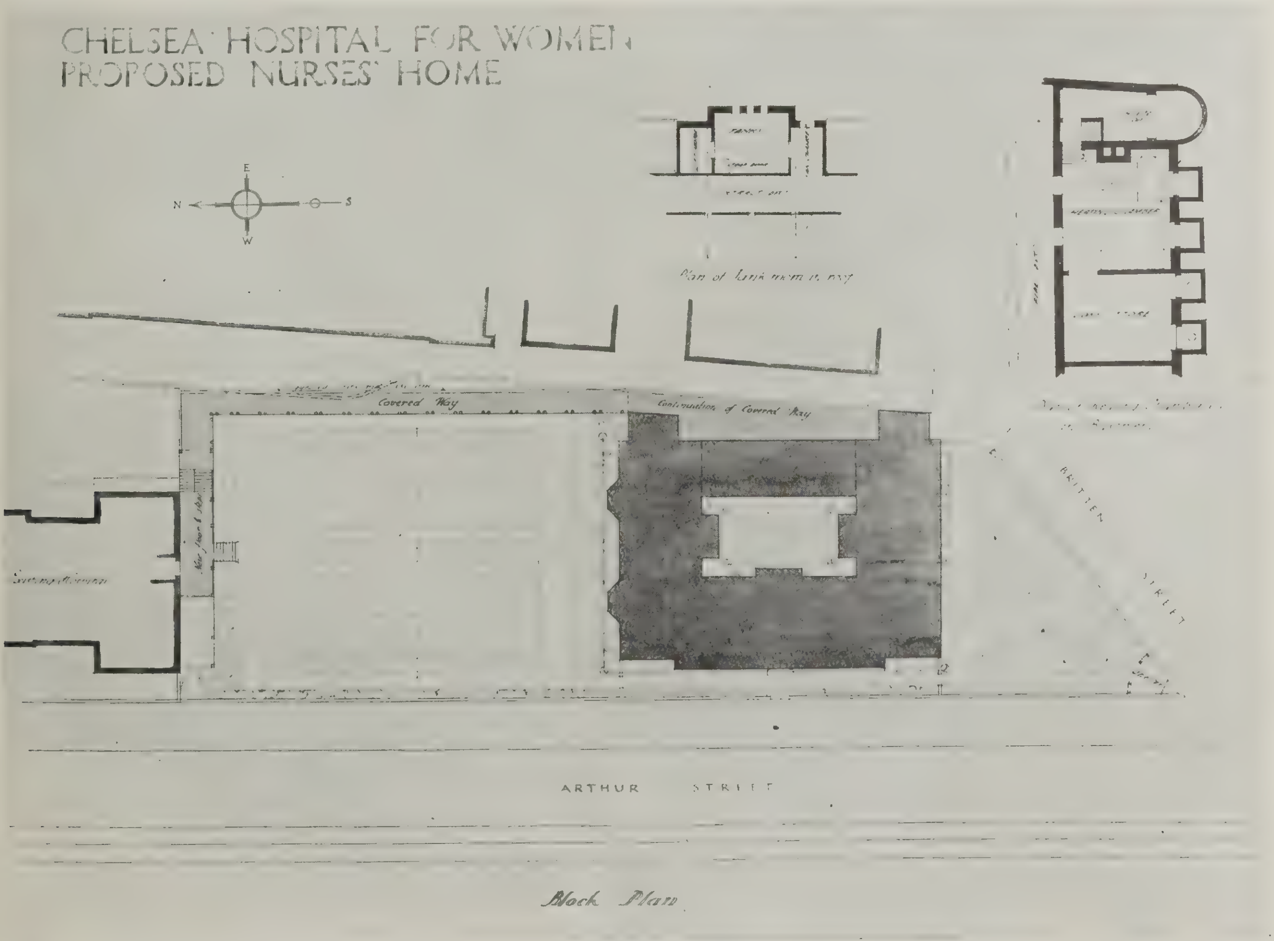
In the extension provision was to be made for 15 additional nurses and for six maids. The general design for the exterior was left to each competitor, but it was suggested that it should not be out of character with the elevations of the existing hospital buildings, though a rather more homely aspect would be desirable.

The accompanying illustrations show that the design of Messrs. Greenaway and Newberry is planned as a hollow square placed at the south end of the site. A covered way along the eastern boundary connects it with the hospital. The main entrance is in the centre of the west (Arthur Street) front, and the nurses' and maids' entrances from the hospital are at the southern end of the covered way. Staircases near each of the three entrances lead to the upper floors.

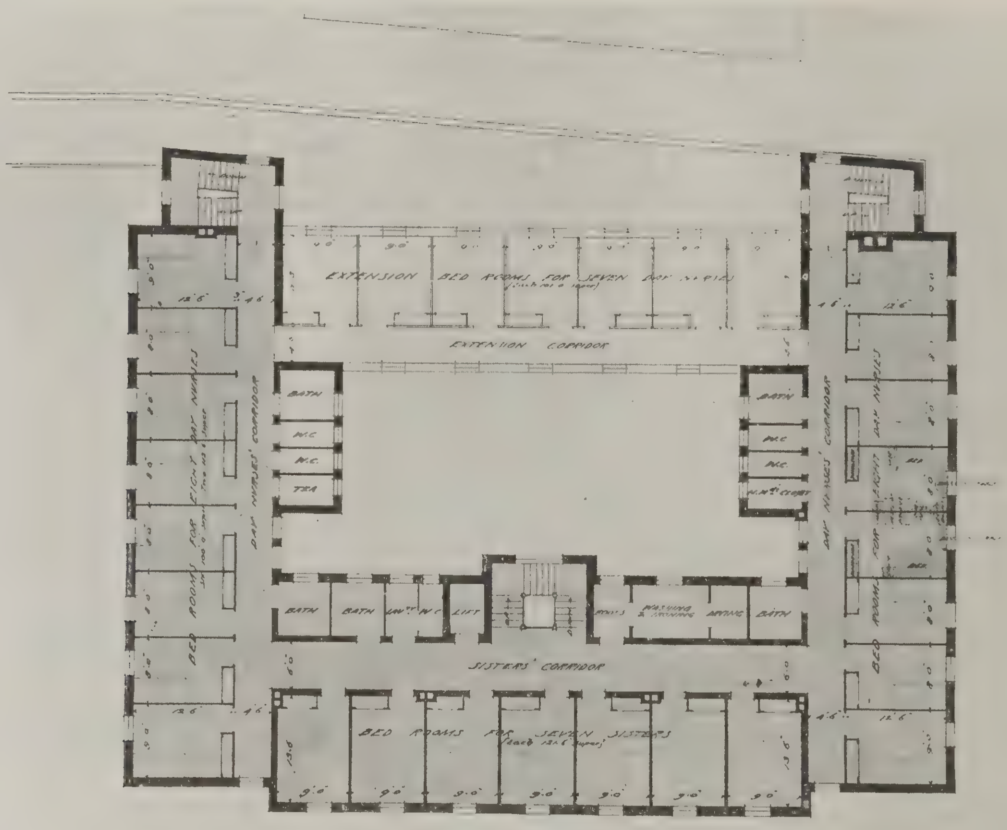
The accommodation is provided on the ground and three upper floors. The nurses' and probationers' sitting-rooms on the ground floor face towards the hospital garden. The sisters' sitting-room, silence room, waiting room and home sister's office are towards Arthur Street, and the sick rooms, tea kitchen, maids' sitting-room and linen rooms face south. A lift near the main staircase communicates with all floors.

On the first floor are seven sisters' bedrooms towards Arthur Street and sixteen bedrooms for nurses (eight on the hospital side and eight on the south). The extension, which will ultimately connect the eastern ends of the side wings, will provide accommodation for seven more nurses on this floor, the space under these rooms on the ground floor being utilized as a lecture or entertainments room.

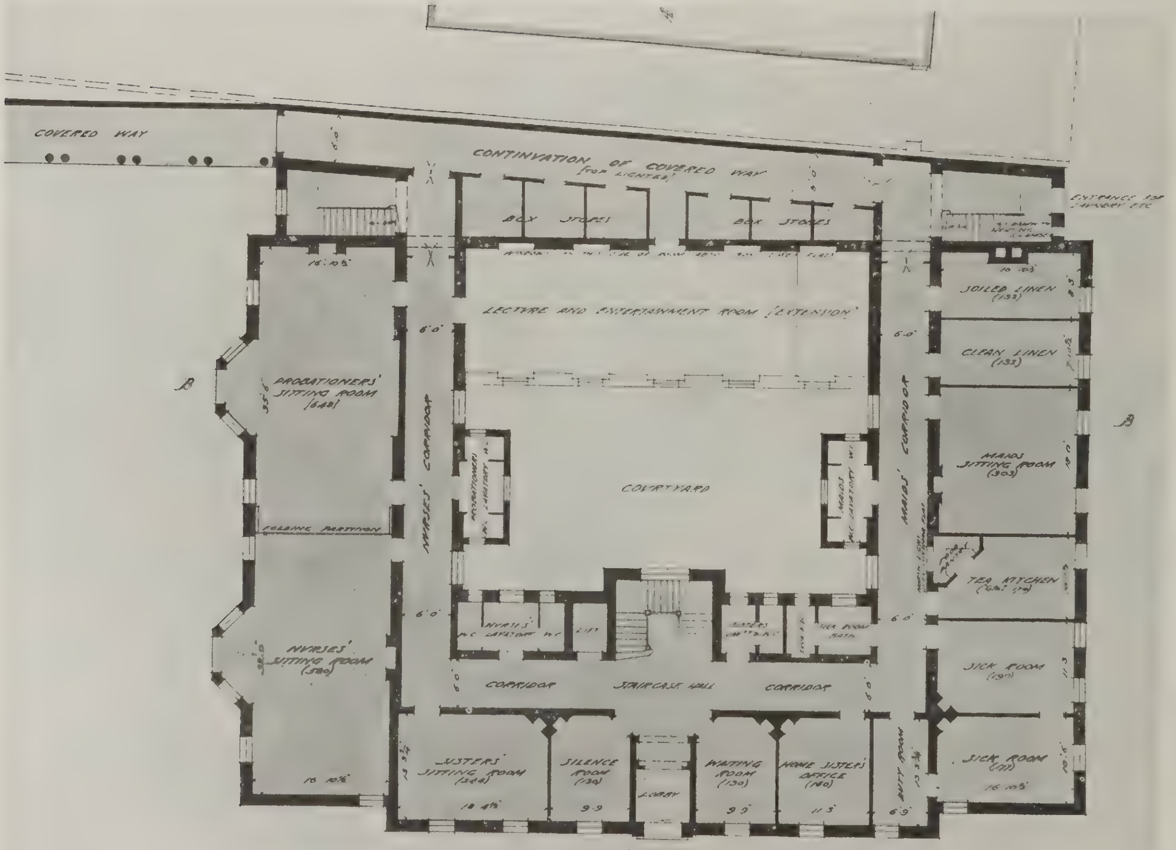
The second and third floors are similar in design to the first-floor plan.



THE GENERAL LAY-OUT.

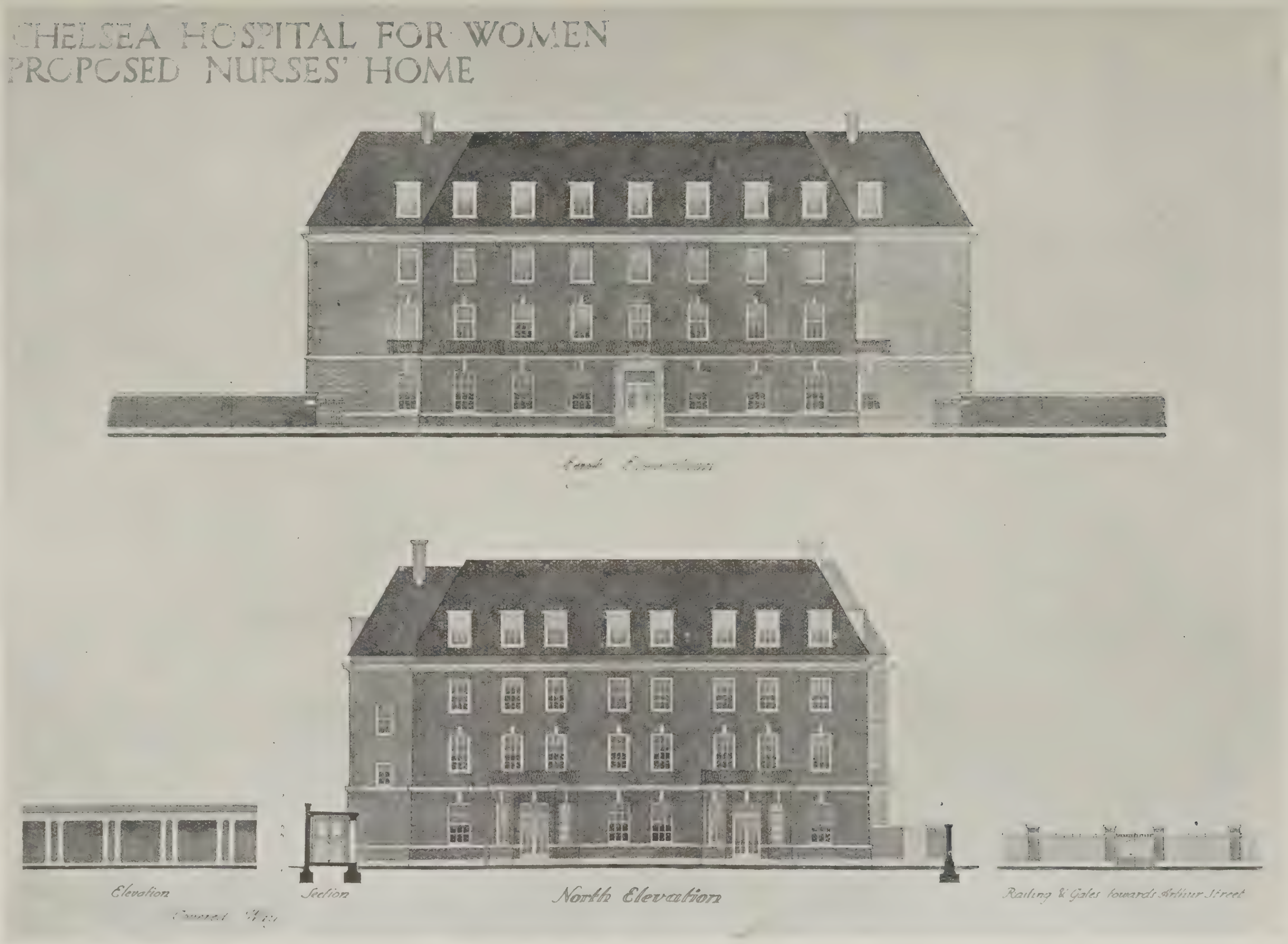


*First Floor Plan*



*Ground Plan*

CHELSEA HOSPITAL FOR WOMEN, NURSES' HOME COMPETITION: THE WINNING DESIGN.
GREENAWAY AND NEWBERRY, AA.R.I.B.A., ARCHITECTS.


CHELSEA HOSPITAL FOR WOMEN
PROPOSED NURSES' HOME
Elevation
Section
North Elevation
Railing & Gates towards Arthur Street

CHELSEA HOSPITAL FOR WOMEN, NURSES' HOME COMPETITION: THE WINNING DESIGN.
GREENAWAY AND NEWBERRY, AA.R.I.B.A., ARCHITECTS.

The external treatment is intended to carry on the eighteenth century traditions of Chelsea, and effect is aimed at in the symmetry and proportions of the building. Elaboration of detail is confined to the central doorway on the Arthur Street front and the balcony, with its deep shadow and cast iron railing over.

The building is intended to be faced with red hand-made, sand-faced bricks, the ground story being treated in a rusticated manner. The use of stone is confined to string courses at the ground- and first-floor levels, keystones over the first-floor windows, a cornice at the third-floor level, and the principal entrance. A steeply pitched roof, covered with Roman tiles, rises some 18 inches above the main cornice, and contains the third floor accommodation. The roof towards the central court has a much flatter pitch and, as it will never be visible from the exterior, will be covered with slates.

Mr. Ashley, the assessor, said in his report to the Chairman of the Council, that he was impressed with the number of difficult points which had to be met to comply with the requirements laid down in the conditions. If the plan was right, the elevation might be bad or the cost impossible, and, again, a good external treatment might accompany indifferent internal arrangements.

With regard to the design placed first, the authors had devised a very successful building, both in plan and elevation. The departments were placed in satisfactory positions and the external treatment was of a quiet and restrained character and very suitable for the purpose it had to serve. The authors had suitably developed the site, and their method of extension was quite the best of any of the designs received.

The report continues: In detail, the planning is simple, direct and homely, not wasteful, and the rooms and corridors are well lighted and ventilated. On the third floor the night nurses' rooms, with their bath and lavatory accommodation, are conveniently isolated, and in a quiet position on the northern side of the building, together with the extension for night nurses very suitably arranged. On the same floor and suitably cut off are situated the cook's room and ten maids' rooms, the latter repeated in the same position on the second floor, making the required twenty bedrooms. Here, again, the extension for these maids' rooms is excellently managed. The authors suggest lavatory basins in these bedrooms also, in view of the proximity of the plumbing on the lower floors. The remaining part of the second floor is taken up by twelve nurses' bedrooms and one spare room, with the necessary bath and lavatory accommodation. On the first floor and on the west front provision is made for the seven sisters' bedrooms, and in the north and south wings for 16 nurses' bedrooms, which with the 12 bedrooms over, make up the necessary 28 nurses' bedrooms. In addition, the extension for 11 day nurses is skilfully contrived.

The bathing and lavatory accommodation throughout is well disposed, and has windows lighting into the large courtyard. The detail planning of this accommodation is capable of considerable improvement.

On the ground floor the nurses' and sisters' sitting-rooms are planned in suitable positions, but I would suggest that a large west window would be advantageous in the former room. The silence room is not too well placed, and the position of the door into it should be altered. The remaining portion of the ground floor is taken up with the sick rooms, etc., and tea kitchen and maids sitting-room. Here it is that, I think the authors have gone astray.

I do not question the suitability of placing the sick rooms on this floor I think it is good; but I am of the opinion that the planning of this accommodation can be much improved. I should add that on this floor suitable lavatory accommodation has been provided over and above that which was asked for.

As regards cost, I am satisfied that the buildings could be carried out for the sums indicated in the conditions.

# Enquiries Answered

*The Prevention of Rust.*

R. V. writes: "Can you give me any information as to the Bowers-Barff process for the prevention of rust on cast-iron drainpipes? Is the same process suitable for boilers?"

—This process is of modern introduction, and consists of the coating of the carefully cleaned iron with a hard covering of black magnetic oxide—which is immune from atmospheric attack. As the iron to be protected must be treated in a closed chamber at a high temperature, there is naturally a limit to the size of the articles which can be dealt with; but as the writer has no practical and personal experience with the process he trusts that this will elicit a more detailed reply from someone who is an expert in the process. F. S. I.

*The Death Watch Beetle.*

F. R. writes: "I was much interested in the account of the activities of the death watch beetle given in the course of the paper on 'The Restoration of Westminster Hall Roof,' read before the Institution of Civil Engineers by Sir Frank Baines. Could you give me the following information: (1) What colour are the eggs of the death watch beetle? (2) What time elapses between the laying of the eggs and the development of the larvæ? (3) How often does the beetle's sex call occur? (4) What is the best time to hear the sex call?"

—(1) The colour of the eggs is white; (2) About four weeks; (3) The sex call is rhythmical tapping by the beetle on the wood, and presumably will occur as often as there is a reply; (4) May is the month in which pairing generally takes place, and it is then that the tapping is to be heard. It goes on both day and night, and can be heard in quiet rooms where the beetles are present and are left undisturbed. Your correspondent should refer to a pamphlet on "Furniture Beetles: Their Life History," by Dr. Charles J. Gahan, of the Natural History Museum, South Kensington, obtainable from the trustees of the museum at the price of 6d. This pamphlet gives illustrations of the beetles in the various stages of their growth, together with a magnified view of some of the eggs. H.

*Bearing Value of Soils.*

E. C. P. A. writes: "Can you give me a table showing the bearing value of the different soils? Generally speaking, existing tables on this subject vary very greatly, and I should like a table resembling, in the detailing of the various soils, that given in Mitchell's 'Brickwork and Masonry' (second edition, page 6) based principally upon results proved in actual practice, and giving a reasonably definite safe unit of strength, and not, as is sometimes given, approximately."

—The safe load upon soils depends upon various considerations, and it is difficult to lay down a hard-and-fast rule. As I have before stated, the practical difficulty in all foundations is to identify the material exposed by digging with one of those given in the tables; the soils are not labelled, and personal judgment must be used to classify what is found. The depth of the underside of the foundation below the surface will materially affect the safe load in the majority of cases, and hence Rankine's formula of

$$W = wd\left(\frac{1 + \sin\theta}{1 - \sin\theta}\right)^2$$

where W = maximum load in lb. per sq. ft., $w$=weight of cub. ft. of soil in lb., $d$=depth of foundation in ft., $\theta$=angle of repose of soil. The depth should not be less than 2 ft. 6 in. on gravel and 5 ft. on clay, but it is customary to consider certain soils as capable of sustaining certain loads irrespective of the depth from the surface, as in the following table which I have adopted in practice:—

*Safe Loads on Various Soils.**

| | Tons per sq. ft. |
|---|---|
| Compact bed rock, granite .. | 30 |
| Compact bed rock, limestone .. | 25 |
| Compact bed rock, sandstone .. | 18 |
| Solid chalk .. .. .. .. | 3–4 |
| Good solid gravel .. .. .. | 5 |
| Good solid gravel overlying chalk | 7 |
| Good solid gravel overlying clay .. | 3 |
| Compact dry sand in natural beds | 2–4 |
| Gravel and sand with possible water percolation .. .. | 1½ |
| Clay in thick beds, moderately dry | 2 |
| but London clay in deep foundations may be loaded to .. | 5 |
| Moist clay and sand prevented from spreading .. .. .. | 1½ |
| Loam and soft clay .. .. | ¾–1 |
| Compact earth, vegetable soil removed .. .. .. .. | 1½–2 |
| Made ground .. .. .. | ½–1 |
| Light alluvial soil .. .. .. | ½ |
| Bog, marsh, silt, peat, etc. .. | ¼ |

HENRY ADAMS.

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* *Foundations for Machinery*, by Henry Adams, Tech. Pub. Co. 3s. net.

# Reinforced Concrete Calculations for Beginners. VIII

## By Professor HENRY ADAMS, M.Inst.C.E.

*(Continued from February 7, page 277.)*

NOW we have to consider the main beams. These are given as 12 in. by 26 in. and 25 ft. span, and they e loaded from the cross beams. They nnot be taken as tee beams because e floor slab is already taken into calculation in both directions. The last bendg moment we found on the cross beam be 428,851 lb. ins., and therefore as $\frac{Wl}{10} = 428{,}851$, W will equal $\frac{428{,}851 \times 10}{16 \times 12}$ 22,336 lb. at points 6·25 ft. apart, as own in Fig. 19. These will give actual ending moments on the main beams, as own by the dotted lines on the left in ig. 20, and adding the parts together at overlap, the final bending moment iagram will be as shown by the full line.

here will also be an addition to the ending moment due to the weight of the eam itself, $W = 12 \times 26 \times 25 - 7{,}800$ lb., $= 25 \times 12 = 300$, then

$$\frac{Wl}{8} = \frac{7{,}800 \times 300}{8} = 292{,}500 \text{ lb. in.}$$

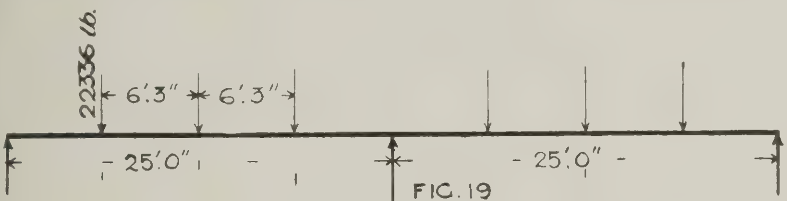


FIG. 19

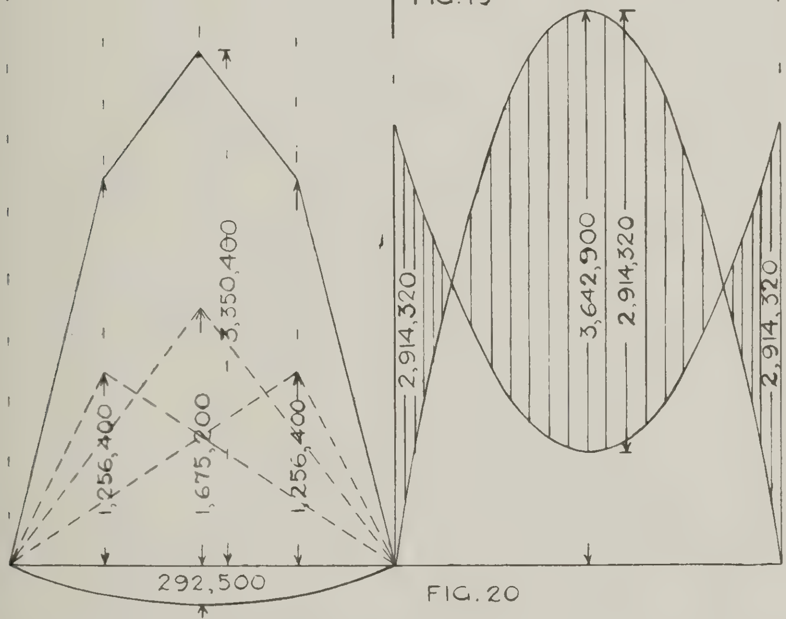


FIG. 20

his is shown by the parabola below, the aximum total depth being equal to 350,400 + 292,500 = 3,642,900 lb. in. his is, however, only what may be called e fundamental diagram which has to reduced by the negative bending moent to give the final value. By L.C.C. les the $\frac{Wl}{8}$ of supported beams becomes $l$ for continuous beams: therefore the aximum bending moment as found will reduced by

$$\frac{10-8}{10} = \frac{1}{5}, \text{ or } 3{,}642{,}900 \times \frac{4}{5} = 2{,}914{,}320,$$

d the same amount will be taken from the negative bending moment, giving the final diagram as on the right-hand side of Fig. 20. Taking the approximate rule of $B = 120\,bd^2$ for continuous beams with ·675 per cent. reinforcement we shall have roughly

$$bd^2 = \frac{B}{120} = \frac{2{,}914{,}320}{120} = 24{,}286,$$

say width 12 in., then

$$\text{depth} = \sqrt{\frac{24{,}286}{12}} = \sqrt{2{,}024} = 45.$$

Clearly there is something wrong here. Possibly the beam has double reinforcement; we must therefore consider this latter condition. The compressive reinforcement would be near the surface of the slab, so that the depth of the slab should be added to the depth of the beam in the calculations of depth. For double reinforcement, which is not so economical as single reinforcement, but enables a shallower beam to be used, the approximate size can be obtained from $230\,bd^2 = B$. In this case $B = 2{,}914{,}320$, and if we take

$$b = 12,\ d = \sqrt{\frac{2{,}914{,}320}{230 \times 12}} = 32 \text{ in.}$$

effective depth required. The slab is 4 in., therefore 32 — 4 = 28 in. projection of beam below slab instead of 26, which will produce the bending moment thus: $W = 12 \times 28 \times 25 = 8{,}400$ lb., $l = 25 \times 12 = 300$ in.

$$\frac{Wl}{8} = \frac{8{,}400 \times 300}{8} = 315{,}000 \text{ lb. in.}$$

Maximum B.M. = 3,350,400 + 315,000 = 3,665,400 lb. in.

Reduced $\frac{1}{5}$, then

$$B = \frac{4 \times 3{,}665{,}400}{5} = 2{,}932{,}320 \text{ lb. in.}$$

The tensile reinforcement may be taken as $2\frac{1}{2}$ per cent. of the total projecting section, thus $\frac{12 \times 28 \times 2\frac{1}{2}}{100} = 8{\cdot}4$, say $8 - 1\frac{1}{8}$ in. rods and the compressive reinforcement the same as the tensile.

In addition to the symbols already given, let

$x$ = distance from the top of the beam to the centre of gravity of the top reinforcement.

A = area of compressive reinforcement in square inches.

$c_s$ = compressive working stress on steel in compressive reinforcement.

Then

$$n = \frac{m}{b}(A + A_t)\left[\sqrt{1 + \frac{2b\,(x.A + d.A_t)}{m\,(A + A_t)^2}} - 1\right] \ldots\ldots (1)$$

$$c = \frac{n.B}{\frac{1}{3}n^3 b + m\left\{A\,(n-x)^2 + A_t\,(d-n)^2\right\}} \ldots\ldots (2)$$

$$t = c.m.\frac{d-n}{n} \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (3)$$

$$c_s = c.m.\frac{n-x}{n} \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (4)$$

Then

$x = 2\frac{1}{4}$ in.

$d = 29\frac{3}{4}$ in.

$$n = \frac{15}{12} \times 16 \times \left[\sqrt{1 + \frac{24\,(2{\cdot}25 \times 8 + 29{\cdot}75 \times 8)}{15 \times 16 \times 16}} - 1\right]$$

$$= 20\left[\sqrt{1 + \frac{24 \times 32 \times 8}{15 \times 16 \times 16}} - 1\right]$$

$$= 20\,(\sqrt{1 + 1{\cdot}6} - 1) = 20 \times {\cdot}6125 = 12{\cdot}25;$$

$$c = \frac{12{\cdot}25 \times 2{,}932{,}320}{\frac{1}{3} \times 12{\cdot}25^3 \times 12 + 15 \ldots\ldots \{8\,(12{\cdot}25 - 2{\cdot}25)^2 + 8\,(29{\cdot}75 - 12{\cdot}25)^2\}}$$

$$= \frac{12{\cdot}25 \times 2{,}932{,}320}{7{,}360 + 15 \times 8\,(100 + 306{\cdot}25)}$$

$$= \frac{12{\cdot}25 \times 2{,}932{,}320}{7{,}360 + 48{,}750}$$

$$= \frac{12{\cdot}25 \times 2{,}932{,}320}{56{,}110} = 640 \text{ lb. sq. in.;}$$

$$t = 640 \times 15 \times \frac{29{\cdot}75 - 12{\cdot}25}{12{\cdot}25} = 13{,}714 \text{ lb. sq. in.;}$$

$$c_s = 640 \times 15 \times \frac{12{\cdot}25 - 2{\cdot}25}{12{\cdot}25} = 7{,}837 \text{ lb. sq. in}$$

We gave some useful notes as to the effect of modifying the various proportions of singly-reinforced beams; similar notes follow for doubly-reinforced beams. Given a doubly-reinforced beam of certain dimensions and amount of reinforcement, then

(*a*) Increasing depth lowers N.A. and reduces all stresses.

(*b*) Reducing breadth lowers N.A., reduces tensile stress, but increases compressive stress.

(*c*) Increasing compressive reinforcement raises N.A., reduces compression on concrete and on steel, slightly increases tensile stress.

(*d*) Increasing whole reinforcement lowers neutral axis, and reduces all stresses.

*(To be continued.)*

# The Personnel of the Building Industry

MR. J. LEASK MANSON, B.Sc., in delivering an address on "The Question of Personnel in the Building Industry" to the Manchester Branch of the Institute of Builders, said that in the building world one of the most satisfying features of recent times had been the improvements brought about in the ability, qualifications, and status of the architectural profession. These improvements had been due mainly to a steady and consistent devotion to the importance of education and training, and to the insistence upon the necessity for qualifications of a satisfactory order. In spite of this great improvement, however, the general condition of the industry was such as to produce a feeling of dissatisfaction and a lack of confidence, and it seemed wise to try and discover what was wrong. It must surely be recognized that the progress mentioned above did not go far enough, and that—taking the architectural profession and the building industry together—the development had been one-sided. The training of the builder and of the building craftsman had been very much neglected. Obviously it was not sufficient to organize for improvements in the work of effective planning and artistic design; something more was vitally necessary.

Following mainly upon improvements in the manufacture of mild steel and Portland cement, very considerable changes had taken place both in the work executed and in the organization of the trades constituting the industry. In recent years there had been an enormous increase in the use of patented and protected materials. The manufacture and use of these materials was still largely in the hands of people who were more or less outside the organization of the industry. These people had advanced strong claims to be classed as specialists, and were, in fact, largely so treated by architects and others. The relationship which generally existed between the architect and the specialist was something of comparatively recent growth in the industry, and one might well ask why was not the builder similarly treated and classed as a specialist? His work was in no sense less responsible and arduous than that of many other specialists. The answer to that question might well contain the key to the whole situation.

The developments outlined had in fact seriously weakened the position of the builder; increasingly he was becoming the employer of but a few of the building trades, though still frequently occupying the responsible position of main contractor. In spite of the increasing dimensions and importance of the work of the sub-contractor, the main contractor might still be legally responsible for the satisfactory execution of work by sub-contractors. Various tendencies had combined to lessen the builder's capacity and power to deal with these new responsibilities, and cases were mentioned which went to show that, owing to a variety of reasons over which the builder had insufficient control, he might be compelled to replace unsatisfactory work at very great financial loss to his firm. Such a state of affairs had been brought about partly through causes which could hardly have been foreseen, but the neglect of training and of other methods for improving personnel had undoubtedly contributed seriously to this state of affairs.

Further, it would seem to be clear that the present position tended to encourage the multiplication of specialists and to increase the difficulties of the architect. He might conceivably have to deal with an increasing number of independent firms and specialists, and would only be able to depend to a decreasing extent upon the builder as a co-ordinating force. It was not unreasonable to think that the growth of genuine architecture under these conditions would be a very difficult matter, since that close contact with the results of actual construction, so necessary in this connection, would become increasingly difficult. Similarly, a united attack on those problems common to all sections of the industry would also be impossible.

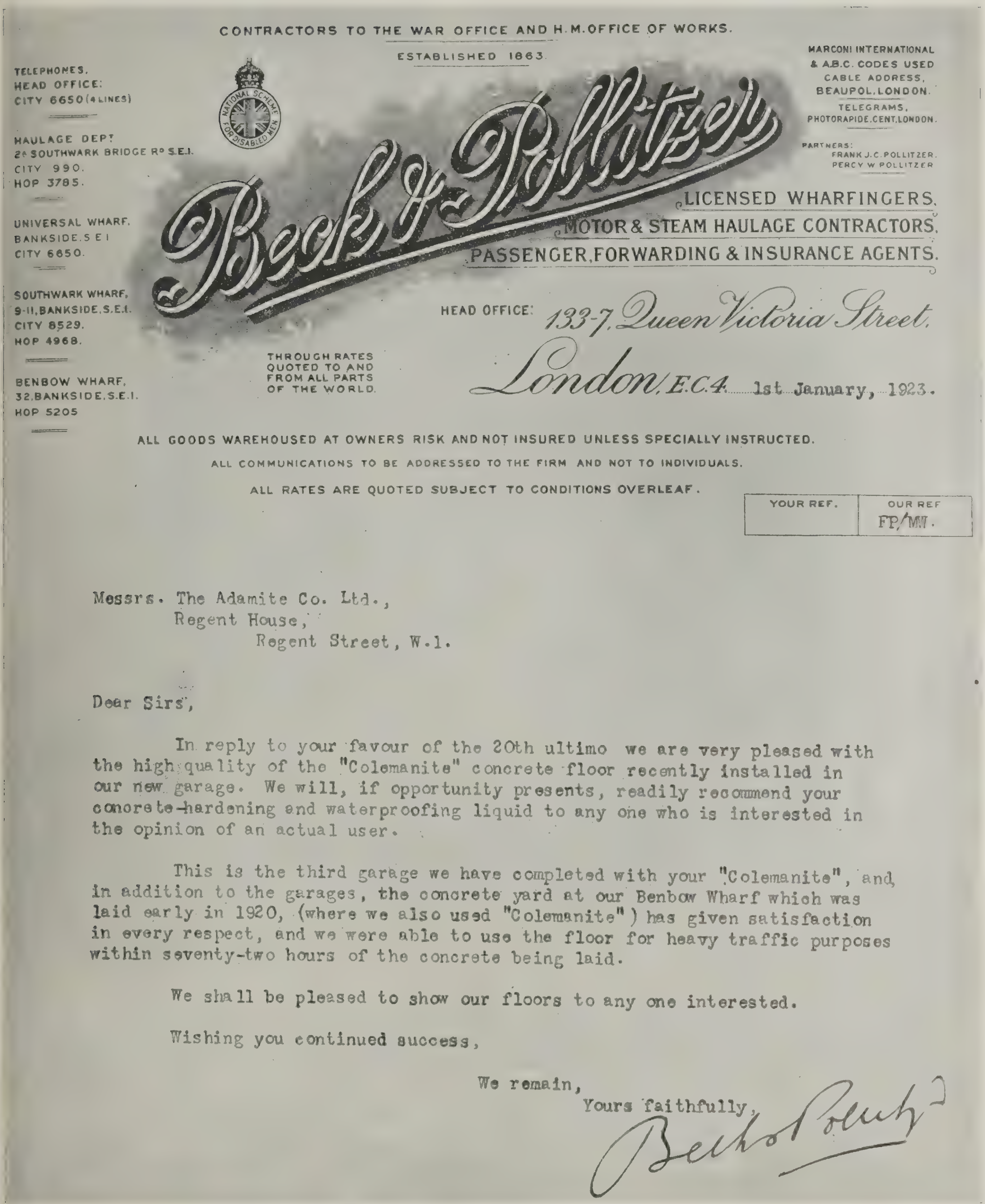
They would all be aware of the fact that, in common with other industries, the building industry had recently shown that it had become conscious of its own organic unity. As with all new ideas, this one had seen the clash of opinion and had experienced sudden forward urges and equally disturbing retrogressions. The general trend, however, had been a forward one, and whatever opinions might be held about the present state of affairs, recent events had undoubtedly left an indelible impression of an essential unity which would probably influence to a very considerable extent all future efforts towards progress.

An interesting detail was the increasing use of the term, "The Building Industry," which in itself was much more suggestive of unity than the old term "Building Trades"; in addition, it was more accurate, since the building industry now embraced more sections than could be included under the older groups of building trades. Because of this fact it was conceivable that for statistical purposes new classifications would be necessary in the future. In this connection it would no doubt be an advantage if they could preserve to the industry the best features included in the term "Builder," a term which was in some danger of being misused. The term "Builder" should surely stand for that unifying influence which, on the constructional side, coordinates the work of all the trades and also stands for the sum total of that skill and knowledge which can build up an organization to which the architect can look with confidence for the satisfactory execution of his conceptions. If they could thus emphasize the technical importance of the builder he would be assured an essential place in the organization of the industry which would be unaffected by any changes introduced into the relations between employer and employed. There is an undoubted case for the builder as a specialist in the actual erection of buildings, as distinct from design; the magnitude of his responsibilities and the complexity of some of the problems with which he had to deal would warrant as much attention being given to his selection, education, and training as had been given in the past to the architect.

There could be little doubt that for th successful development of architectur the building industry must become more compact and properly co-ordinate body than at present. As a basis fo design, secondhand knowledge of construction was quite inadequate; ther should be as close and as continuous a contact as possible with the practical an experimental aspects of building problems. The more or less rigid separatio of design and practice in the past ha tended to reduce the emphasis on th necessity for continuous training in trad knowledge and expert craftsmanship. I this connection it might be urged tha some initiative should be allowed t contractors and to the trades, particularly in the matter of working detail so that the full advantage of improve workshop methods might be immediatel available to the industry as a whole The psychological effect of such a measur of freedom would be very consider able, and would go far to restore tha pride in craft development the declin of which they had all deplored in recen years.

A further effect of the lack of contac between the various sections of the industry was seen in the apparent desire t avoid the responsibility for dealing wit problems in the preparation and use materials in the industry. It was striking comment on the position affairs in this connection that such wor in research into building problems a had been carried out had been almos entirely done by people outside of th organization of the industry. A mor compact organization of the industry i the sense indicated above would lead to steadier and surer progress, and woul ensure eventually a much greater efficiency in its services to the communit than was possible at present.

The change mentioned above depende very largely upon improvements bein carried out in the personnel of the industry, improvements not merely in ski and technical knowledge, but also i general outlook. To the present stron professional and trade sense must b added something in the nature of prid in the work of the industry as a whole a feeling which would make for tha co-operation so much to be desired. T gain this end all possible means shoul be utilized. As centres for the collectio sorting, and dissemination of knowledge and also for training in the applicatio of that knowledge, they would probabl turn to the universities and technica colleges of the country. As yet n degree courses had been set up in building, though other and smaller industrie had already taken this useful step. I this connection it might be noted that i it were possible to define the work of th builder and the higher grades of his sta on the lines already suggested, then th initiation and ultimate success of degre courses in building would be assured In addition, such courses would then tak their legitimate place alongside of allie courses in architecture, sanitation, tow planning, etc., so that they might eventually look to the grouping of all thes courses under the title of architectur interpreted in its widest sense.



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# The A.A. Visit to Westminster Hall

N the study of any work the guidance of its author is valuable. Failing Hugh Hirland, who, five hundred years ago, ade this roof, the man best acquainted ith it must be the architect who has r eight years been engaged on its storation. In having, then, the escort Sir Frank Baines, the A.A. party was rtainly fortunate. The roof is, in itself, peculiar interest, being unparalleled size and type. It is the only true ammer beam roof, differing from ex- nples at Staple Inn, Hampton Court, ıd Eltham, in that its principals are ot in single lengths, but are built up, the p length being carried entirely by the iangulated cantilever frame of the ammer beam.

This type was evolved in an attempt to an the whole 69 ft. of the hall, and so spense with the two original rows of ipports. The truss may be regarded as arch built up of three structures; (1) arch in three blocks, two lower prin- pal rafters and the collar beam; (2) ıe great arch rib, and (3) a bracket rangement of wall-post, hammer beam, ammer post, and lower and upper struts. is the arch rib, now showing signs of ippling, but not of failure, which has ved the structure till now. Incident- ly, it would seem that the infilling of assive tracery has contributed materi- ly to the resistance of the whole. In ıe original design there were, according our guide, only two slight errors. The top purlins were too light and have, without exception, failed under wind pressure; further, the upper principals bore not entirely on their purlins, but, in part, directly on the ribs of the hammer posts, which have sheared off under the load.

The whole roof has been undermined by the action of the *Xestobium tessellatum*, the authentic "death watch beetle," from which all mediæval roofs are found to suffer in some degree. As a safeguard for the future, all existing woodwork has been impregnated with an insecticide, composed mainly of ortho-para-dichlorbenzene, with small percentages of white castile soap base and cedar wood oil. If this process could conceivably be repeated every fifty years, the roof would probably be quite immune. As it is, it seems unlikely that it will suffer severe damage for several centuries.

The restoration of the roof is as interesting as the original structure. In any work of restoration there must be an element of insincerity. One cannot recapture that first state in which the actual and apparent means of stability are one, because one cannot re-endow the material with its lost strength. Stability may, then, be achieved only by the addition of other material, which addition, while vitally affecting the construction, must interfere as little as may be with the design, to add to which is not to restore but to reproduce.

In the case of the roof of Westminster Hall, there were two possible methods to be followed: to renew all the timbers which were decayed, or to strengthen as many as possible of the old timbers, in such a manner that they could be retained, strictly in their exact relative positions, for an indefinite period of time. The former alternative was ruled out, as involving the sacrifice of a large proportion of the original timber. The latter was adopted, and it was decided to support the trusses by means of a specially designed steel reinforcement, of approximately 25 tons per truss. Steel having a vastly greater resistance than wood, the additional material could be so relatively small in volume as to be a negligible quantity in the design. As a matter of fact, it is virtually invisible from the floor of the hall. This steelwork takes the whole tension, the timber acting as bracing or stiffener, a function arduous enough to require its whole bulk. A certain amount of new woodwork has, therefore, necessarily been added, but this has been in no way faked to resemble the old. Actually, the original timber trusses have now been repaired in a manner that provides for all the main members to function in the same manner as they did when first designed, though, of course, under reduced stresses. There may be, after all, a certain sincerity in restoration.

I. M. C.

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# The Acoustics of the Auditorium

## By G. A. SUTHERLAND

IN view of its importance to the community this subject has received singularly little attention from phy- cists in this country." This statement as made by Mr. G. A. Sutherland in a cture at University College, London. e said: From time to time a more than dinarily bad case serves to focus public tention on the problem, and at such mes it is customary to state that the uestion is one of pure chance, to which ience has nothing to say. A scientific lution has been found, so nearly com- ete that anything in the nature of acoustic horror such as the London ounty Hall is quite inexcusable. Exten- ve practical use has been made of this lution in America both in predicting coustical quality in advance and in medying existing defects.

To understand and apply the method is necessary to be acquainted with the ature of sound and the main phenomena f sound propagation. Sound is a form energy; it cannot be got rid of by being roken up and scattered, it remains ıdible until it is converted into some ther form of energy. It is produced ther by a single sharp impact or by a ıccession of sharp impacts of a vibrating ody on the air or some other medium, ıd is propagated by a form of wave otion, each wave consisting of a con- ensation of the medium followed by a ırefaction. The ear is affected by such aves when the number of vibrations er second is between 16 and 38,000, but ıe range of sounds used in music is between 40 and 4,000 vibrations per second.

Sounds are musical when the vibrations are periodic or regular, and sounds of different pitches all travel with the same speed, viz., about 1,120 ft. per second in air at 60°F. A sound wave proceeds from a point source in ever-widening spheres until it reaches the boundary of a medium in which its speed is different. Then part of it is reflected back through the first medium and part of it refracted through the second. The laws of reflection and refraction are definite and well known, and both phenomena play their part in the distribution of sound in an auditorium.

With certain shapes of hall it sometimes happens that a reflected set of waves is superposed on a direct set in such a way that condensation falls on condensation and rarefaction on rarefaction. This produces increased intensity. If, however, it happen that the rarefaction of one set fall upon the condensations of another, then the result is silence. This is known as interference, and may easily be demonstrated by experiment. The usual result in practice is some points of silence and some of excessive loudness.

Sound waves will also bend round obstacles, the lower the pitch of the sound the larger the obstacle round which it will bend. The sound of an explosion readily bends round buildings and blows in the windows of houses on the side farther from the place of the explosion. This bending is known as diffraction, and a consequence of it is that if a wall is to scatter the lowest musical sounds instead of reflecting them regularly, it will have to be coffered to a depth of about 3 ft. For speech a depth of 3 in. to 5 in. will be required. A sounding body may force another near it to vibrate in unison with it; if the second have the same natural period it will do so readily and strongly. These forced and sympathetic vibrations play their part in the distribution of sound in an auditorium.

Musical tones derive their quality from the fact that they are composite in character, any one tone being made up of a fundamental note which determines its pitch, and a number of other simple notes known as overtones. The presence of these different notes can easily be shown by experiment, and it can be shown that different overtones, or the same overtones with different relative intensities, produce different qualities.

Vitruvius ("De Architectura," Liber V. Cap. VIII) speaks of *dissonance*, *circumsonance*, *resonance*, and *consonance* in the theatre. The substitution of the words *interference*, *reverberation*, *echo*, and the retention of the word *consonance*, make his analysis applicable to the problem of the modern auditorium.

With a speaker on an open plain the sound wave spreads out roughly as a hemisphere. If a large audience is on the plain the lower part of the wave is soon absorbed and those at the back cannot hear. To raise the speaker and place a wall behind him in order to reflect forward the back part of the wave, and to raise the rear seats produce a great improvement, and the result is, in effect, the Greek theatre. But much of the wave still escapes into the open. Adding walls and a roof prevents this escape, and the further addition of galleries to bring part of the audience nearer the front effects a further improvement, and produces the general form of the modern auditorium.

The necessary and adequate conditions for satisfactory acoustics are sufficient loudness, freedom from distortion, and freedom from the indistinctness that is caused by the overlapping of successive sounds. A solution of the problem will show how to express such considerations numerically, will state definite desirable values for them, and will also enable us to determine in advance the values they will have in any auditorium whose plans are available.

The sound waves proceeding from a speaker addressing an audience reach the boundaries of the room unless they are absorbed on the way. At the walls they are reflected or transmitted or absorbed in proportions which depend on the nature of the walls. Reflections occur at least twenty-seven times a second in a room 40 ft. square, these reflections reinforce the original sound and ensure sufficient loudness, which is the characteristic virtue of the modern auditorium. But if the walls are hard there is little absorption at each impact, and the sound will die out very slowly, producing *reverberation*, which is the commonest defect in modern audience halls.

The Greek theatre, without walls and a roof, did not suffer from reverberation; that was its merit. Its acoustics were good, but not, as is commonly assumed, perfect. With absence of reverberation there was also absence of sufficient loudness, as the use of megaphone mouthpieces and Vitruvius's instructions for the use of resonant vases bear witness.

It is characteristic of the attitude that has been adopted to this whole question that because vases were supposed to have contributed to the good acoustics of the Greek theatre, they are sometimes employed in buildings to-day though the defects in the two cases are due to directly opposite conditions. Small wonder if with so little attempt to appreciate causes results seem to be governed by the merest chance.

## Parliamentary Notes

BY OUR SPECIAL REPRESENTATIVE.

Parliament re-opened on Tuesday, February 13. The King, in his speech from the throne, said that among the measures which would be presented for the consideration of both Houses would be Bills dealing with unemployment insurance benefit, housing, trade boards, and industrial assurance. The departmental committee appointed to consider the operation of the Increase of Rent and Mortgage Interest (Restrictions) Act had now made its final reports, and proposals would be made to carry into effect certain of the committee's recommendations. The financial burdens of the country were heavy, and reductions in public expenditure remained essential to the well-being of the State. The serious state of unemployment caused His Majesty the deepest concern, and must continuously engage the attention of his Ministers.

## Health and Housing

Professor F. E. Wynne, M.B., D.P.H., in reading a paper before the Town Planning Institute, said that the causes of the present condition of overcrowding are not always fully understood. They are naturally sought, and largely found, in war and post-war conditions, but it should not be forgotten that the normal rate of building by private enterprise had declined considerably for some years prior to the war. This decline is generally attributed to the operation of the Finance Act of 1910. That is a question involving political and sociological controversy which I am not competent to discuss, but whatever its causes, this decline in the rate of building in pre-war years is a factor of which we should not lose sight in trying to arrive at what I may call the etiology of our present social disorder.

Then, it is often asked, how is it that the war which swept away so many lives has left us overcrowded as we never were before? The war was followed by influenza, yet these two terrific visitations seemed to bleed the country without even relieving congestion. They left us weakened indeed, but unhealed.

It is difficult for people unused to consider population figures to realize how small a percentage of the total is represented even by our enormous casualties during the period from 1914 to 1919. Many of you will have found the same difficulty that I have in explaining how much more rapid is the process by which the population overtakes housing requirements than is any relief that could be afforded by abnormal depletion of the population. People forget that in considering the question of housing we must think of the population not in terms of individuals but of families.

When one member of a family dies that does not, as a rule, make room for another individual in the house. But when a house goes out of commission, or a house remains unbuilt, there is at once a shortage of accommodation affecting on an average some 4·5 individuals. For years no new houses were built, while existing houses simply died.

Again, after demobilization, and long before the natural increase of population was restored, there was an immediate multiplication of the number of families owing to the inevitable increase in the marriage rate.

Also, if our casualties and deaths from influenza and its sequels are eliminated, there was a marked decline in what we may call the normal death-rate during this period.

Another factor which is generally lost sight of is the total cessation of emigration during and immediately after the war. This is a factor in maintaining the level of population which, I believe, has not even yet been restored.

We are faced accordingly with a population so tightly packed that in urban districts at all events the present rate of building is not sufficient to enable us to evacuate a single insanitary house, even for the period necessary to put it in repair, where repair is possible, and, of course, thousands of houses are occupied in every great city which are hopelessly beyond repair.

Before the war the ideal aimed at i housing and town planning schemes wa the provision of not more than twelv houses per acre. I hope that unde existing economic conditions we shall nc permit that figure to become a fetisl I agree that it is an ideal for which w may ultimately strive, but at present to strict a limitation imposes a financia handicap on any scheme, which ma strangle it at birth. When we have t deal with areas in which people ar huddled together at the rate of ove 200 per acre, it appears to me that scheme that will even halve that degre of congestion will do more good b providing a possible environment for greater number than an attempt t provide the ideal for a smaller numbe Besides, we have to remember the evil that inevitably arise at present fror sub-letting. As we erect houses now people take them who could not possibl pay the rent demanded out of thei earnings. They do this with the certaint of making the rent, and often more tha the rent, by sub-letting one or mor rooms. The slum conditions are immediately reproduced, and twelve houses pe acre may often represent a population o over 100 per acre. It seems to me manifest that more good and less evil woul have been done by the erection of mor houses per acre to house these 100 people provided some method were found whicl would absolutely prevent the practice o sub-letting. In any amendment to th Rent Restriction Act there should b either the power to evict or som really deterrent penalty on sub-lettin without the consent of the local authority.

## The Cost of Building

Statements that the high cost of building in Great Britain is directly traceabl to the State housing policy are refute in the current "Fortnightly Record' issued by the Housing and Town-Plannin Council.

"Those who confidently advance thi theory provide," says the council, "ye another example of the truth containe in the advice 'Beware of finding wha you look for!' The experience of othe countries shows that the theory is no tenable.

"The truth is that the cost of building has been high all over the civilized world, whether the countries have adopted State housing schemes or not.

"In the United States of America, for example, where they have had no State housing scheme, and where complaints as to 'ca' canny' tendencies on the part of workmen are less common than they are in Great Britain, the cost of building has been, proportionately, as high as it has been with us.

"The statistical curve of building cost for the years 1918-1919-1920 was not greater than the curve of cost in the great key industries of the country. As the numbers of the men engaged on building cottages increased prices actually fell, the reason being that the industrial building boom, which was the major factor in putting up building cost, gradually petered out, and men were set free to do cottage work."

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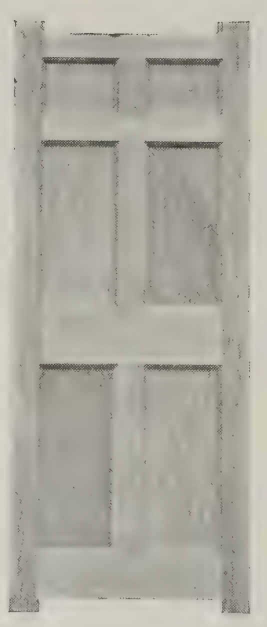

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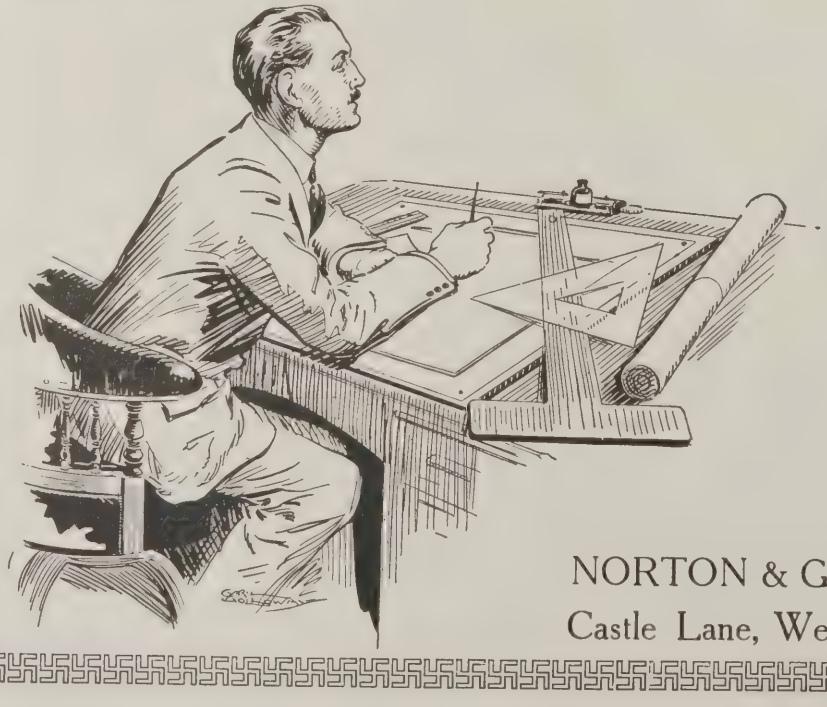

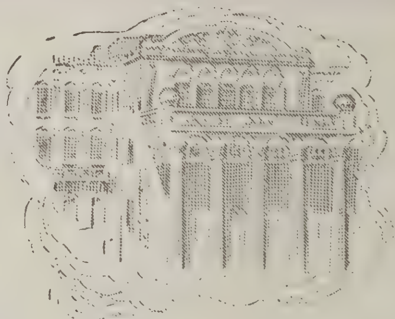

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## Housing Achievements

"Housing Achievements, 1919-22" was e subject of a paper read by Mr. T. wyn Lloyd, F.R.I.B.A., M.T.P.I., be- re the Liverpool Architectural Society. e contended that while the cost of the o,000 working-class houses built in that riod had been colossal, it had saved us infinitely greater price in industrial rest, human hopelessness, and misery. ne cottages built under the Government heme were much superior to the older pe of workmen's dwellings. An aerial ew of an industrial town or suburb built the thirty years before the war would ve given one an impression of drab llness and indefinable chaos in develop- ent. Of gardens, in the real sense, there ere hardly any. At its best the town ttage was dull and uninteresting; at s worst it quickly degenerated into slum nditions. The rural cottage, although aced in much superior surroundings, as probably worse, lacking, as it frequent- did, the elements of sanitation and mfort.

Admirable sites were secured for the overnment schemes, the average price uid for them over the whole country being 90 per acre. The reasonable spirit own by landowners in this matter did em honour. With few exceptions, the y-out of the schemes had been on broad, odern lines, but the ultimate effect ould have been even better if all the tes had been scheduled as town-planning hemes. An outstanding achievement in ter-war housing policy was that there d been imparted to the design and erec- on of cottages for humble folk some such ement of care and forethought as was ually given to the design of more portant buildings. The chief improve- ent in internal planning was the wider ontage. Under the old conditions each ttage was built as narrow as 12 ft. to ft., but frontages of the smallest type ere now not less than 18 ft., while ontages of 25 ft. and more were usual. he provision of light and air to every om and passage was considered essen- al, and each house was provided with bath. "Cheeseparing" in regard to the ish and fitting-up of the houses had too ten been overdone, but the structural rts were usually of sound construction. ith regard to materials, his opinion was at bricks and mortar still held the ld.

The schemes had revealed very con- derable advances in the matter of design d simple architectural character. The erage council house, while not perhaps ming within the category of good design, as never offensive, with its plain brick alling, unbroken eaves, and plain pped roof. In the case of the duller signs the very stringency of the public rse had prevented the worst abuses ornamentation and bad taste which ight otherwise have presented them- lves. Recent schemes carried out by chitects were of a high character and a table advance on the nineteenth cen- ry brick boxes and slate lids. There as a pleasing note of Georgian or early ictorian distinction in the best of the ban schemes. Referring to the decline prices since the Government cried a lt, Mr. Lloyd said we were now almost ithin sight of the cottage which could built to yield a normal return on pital. The £1,000 cottage of August, 1921, was now being built for about £400, and the smaller type for £350. Pure and unadulterated private enterprise, however, was not yet in a position to function, so far as the building of working-class houses for letting was concerned.

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## Byzantine Architecture

Mr. Harold F. Trew, M.S.A., read an interesting paper on "Byzantine Architecture and the Monasteries of Mount Athos" before a meeting of the Gloucestershire Architectural Association. He described the Palace of Diocletian at Spalato in Dalmatia, where appeared, for the first time in the West, that combination of Oriental with Western motifs and tradition which was to result in Byzantine architecture, and referred to the founding of Constantinople in A.D. 330 by Constantine the Great and the influence which the official recognition of Christianity was to have upon future architecture.

The beginnings of Byzantine architecture in the early Christian churches of Syria, Asia Minor, and Egypt were described, and the construction of the dome was traced from these early buildings to the great church of Santa Sophia at Constantinople, that masterpiece of Christian architecture which was begun at the bidding of the Emperor Justinian in A.D. 532. He said that the division of the Roman Empire into two parts, with their capitals at Rome and Byzantium, was still further to affect the development of Byzantine architecture, which henceforth was to be developed almost exclusively in the Eastern Empire, though many beautiful buildings in this style were yet to appear in Italy, and particularly at the seat of the Exarchate at Ravenna, and at St. Mark's, Venice.

The dispute of the iconoclasts was touched upon, leading up to the schism between the Greek Orthodox and Roman Catholic churches.

The Imperial palaces at Constantinople were described, and the coming of the ungainly crusaders into the advanced civilization of the Byzantine Empire, from which the European adventurers carved out for themselves new kingdoms and duchies. He said that the monasteries at Mount Athos, Constantinople, and elsewhere were often founded by the emperors, empresses, and nobility in expiation of their crimes, and these foundations were overwhelmed with gifts of sacred relics, illuminated manuscripts, and jewelled ceremonial plate.

Mount Athos had been a sacred spot from earliest times; the early hermitages became monasteries later on, and these increased in number until the whole peninsula, some twelve miles long by three or four wide, was covered with picturesque and beautiful buildings, which became the repositories of innumerable treasure of Byzantine art. The emperors made Mount Athos an independent republic, and this independence was maintained even under the Turks.

Some of the churches at Salonika and at Mistra in the Peloponnesus were described, and the development of the plan of the Byzantine church traced from the basilican type to the Greek cross. He pointed out that with the fall of Constantinople to the Turks in 1453 Byzantine art and architecture came to an end.

## Birmingham A.A. at Dinner

Sixty members and their friends attended the annual dinner of the Birmingham Architectural Association held under the chairmanship of Mr. Rupert Savage, F.R.I.B.A. Mr. Paul Waterhouse, P.R.I.B.A., was the guest of the evening, and among other guests were the Lord Mayor of Birmingham, the Principal of the University, the chairman of the Public Works Committee, the City Engineer, and the presidents of six of the allied societies.

Mr. Waterhouse expressed his pleasure in again going to Birmingham and at meeting so many of the presidents of other allied societies. He referred to registration, and said that they all thought unification was a good thing in itself and one worth having even if nothing further was achieved, because it was only a reasonable condition precedent to registration, which they were all after. If there was a party in the Institute that thought that the mere production of a draft Bill was in itself an achievement, he thought that party was mistaken. The Institute, he added, was marching forward. It was a big concern—too big, in fact, to be destroyed by a family quarrel. It had accomplished excellent work on behalf of the profession, and it was a pleasure to see men who lived outside London taking such a prominent part in its activities.

The toast to the City of Birmingham was proposed by Mr. H. T. Buckland, F.R.I.B.A. The Lord Mayor, in reply, remarked with regard to housing that they were all in agreement as to the terrible condition which prevailed in Birmingham at the present time. A scheme had been put to him by a builder who had suggested that as the working-classes were unable to pay what would be an economic rent as well as the rates, it would be possible to erect houses at a rental within their means provided they were not required to pay rates. He believed—he might be wrong—that the suggestion would to a large extent provide a solution of the problem. If no houses were built the Corporation could receive no rates, but if the houses were built and no rates were paid the Corporation would not be any the worse off. Might it not be possible for them to forgo the rates for a period of five years, to accept half rates for a further five, and then to levy full rates? Under these conditions houses could be let at an economic rent, and he thought it was a suggestion which deserved the closest consideration.

Councillor S. T. Talbot, proposing the toast of the "Association," alluded to the movement in the City, headed by the Civic Society, which sought to popularize art, and lectures were delivered upon civic responsibilities. All these things showed an awakening of the public consciousness which, if wisely directed, would produce valuable results. Mr. J. A. Crouch, replied to the toast. Mr. Holland W. Hobbiss, A.R.I.B.A., vice-president of the B.A.A., proposed the toast of the Visitors, to which Mr. C. Grant Robertson, M.A., C.V.O., Principal of the Birmingham University, Mr. Swift, president of the Birmingham Building Trade Employers' Association, and Mr. Keay, president of the Leicester Society of Architects responded.

## The Rome Scholarships

The Faculties of Art of the British School at Rome have selected the following candidates to compete in the final competitions for the Rome scholarships of 1923.

*Architecture.*

| NAME. | SCHOOLS. |
|---|---|
| Isabel M. Chambers | Architectural Association. |
| R. A. Cordingley | University of Manchester. |
| E. Maxwell Fry | University of Liverpool. |
| P. J. B. Harland | Architectural Association. |
| F. H. H. Higham | University of Liverpool |
| C. G. C. Hyslop | Architectural Association. |
| G. A. Jellicoe | Architectural Association. |
| Cyril R. Knight | University of Liverpool. |
| Geoffrey L. Owen | University of Liverpool. |
| Edwin Williams | University of Liverpool. |

*Decorative Painting.*

| | |
|---|---|
| Constance E. E. Grant | Royal Academy Schools. |
| Alfred K. Lawrence | Royal College of Art. |
| Doris M. Stacey | Royal Academy Schools. |
| Hugh G. Stutfield | Slade School. |

*Sculpture.*

| | |
|---|---|
| Frank P. Chambers | School of Architecture, University of Cambridge. |
| Ernest Webb | School of Art, Nottingham. |
| David Evans | Royal Academy Schools. |
| A. Seaton White | Slade School. |

*Engraving.*

| | |
|---|---|
| Frank C. Medworth | Westminster School of Art, and Royal College of Art. |
| W. Heber Thompson | Slade School and Royal College of Art. |
| Elizabeth Fyfe | Slade School and Central School of Arts and Crafts. |
| Charles Murray | Glasgow School of Art. |

## Competition News

### *The Bournemouth Pavilion.*

About 140 architects have already applied for the conditions of the Bournemouth Pavilion competition.

### *Proposed Cenotaph : Paragon Square, Hull.*

The president of the Royal Institute of British Architects has nominated Mr. Stanley Hamp, F.R.I.B.A., as assessor in this competition.

### *Lay-out of Park for the Town of Anvers.*

In the above competition all the successful competitors were of French or Swiss nationality. The winning design was submitted by MM. Lorone and Roy, of Paris.

### *Ryde Pavilion Competition.*

The design of Messrs. Thomas Spencer, A.R.I.B.A., and M. R. Martin, A.R.I.B.A., of Putney, has secured first place in the Ryde Pavilion competition. The second premium has been awarded to Messrs. P. J. Newby Vincent and D. West, of Southampton; and the third premium to Mr. Geo. T. Morris, M.C.I., of London.

### *International Competition in Esthonia.*

The governors of the State Technical School in Tallinn (which we know as Reval) have published details of the competition arranged by them for plans for a new school. Owing to the rate of exchange the premiums offered will not attract British architects, though they are stated to be 200,000 Esthonian marks, 150,000, and 100,000 for the first, second, and third, respectively. According to "Esperanto Triumfonta," the international newspaper, which gives details of the requirements, there are to be twenty-one lecture rooms, seating from 150 to twenty-four persons. Particulars of the competition, which closes on April 15, may be obtained from the secretary, "Tallinna Teknikum, Pikk. t 20 Tallinn, Esthonia." Among the assessors (a committee of three architects and three engineers) is Prof. Onni Tarjanne, one of the leaders of contemporary Finnish architecture. This is a tribute from a sister State to the advance which has been made by the Finns in national art and culture.

### *Prestwich Co-operative Society's Premises Competition.*

Members of the Society of Architects are notified that the conditions of this competition are not in accordance with the regulations and are requested not to take part in the competition without first ascertaining from the secretary that the conditions have been approved by the Council.

## List of Competitions Open

| Date of Delivery. | Competition. |
|---|---|
| Feb. 28 | Scheme for the distribution of drinking water for the town of Mantes-sur-Seine. Apply Mairie, Mantes, or at the offices of La Renaissance des Cités, 23 Rue Louis le Grand (11e). Premiums: 4,000, 3,000, and 2,000 francs. |
| March 31 | War Memorial in Crow Nest Park, Dewsbury. Assessor, Professor C. H. Reilly, O.B.E., M.A., F.R.I.B.A. A copy of the conditions together with plans of the site may be obtained on application to Mr. H. Dearden, A.R.I.B.A., Borough Surveyor, Town Hall, Dewsbury, on payment of one shilling. |
| April 15 | Buildings for the Polytechnic Institute, Reval. Premiums 200,000 marks, 150,000 marks, 100,000 marks. Apply Office National du Commerce Exterieur, 22 Avenue Victor Emmanuel III, Paris. (8e) The competition is an International one. |
| June 1 | New Municipal Buildings and Town Hall, Cork. Total cost not to exceed £120,000. Assessor Mr. Lucius O'Callaghan, F.R.I.A.I., A.R.H.A. The successful competitor will be appointed to carry out the work. Second and third premiums £200 and £100 respectively. Apply Mr. William Hegarty, Town Clerk, Cork. The competition is limited to architects living and practising in Ireland. |
| June 30 | Bridge over Nygaardsstrommen in Bergen. Apply Department of Overseas Trade (Room 50), 35 Old Queen Street, Westminster, S.W. 1. |
| No date | Concert Pavilion, Bournemouth, to seat 2,000. Estimated cost £100,000. Assessor, Sir Edwin Cooper, F.R.I.B.A. Premiums: £300, £200, and £100. Apply Town Clerk, Municipal Offices, Bournemouth. Deposit £2 2s. (cheque). |
| No date | The Crown Agents for the Colonies, acting on behalf of the Government of the Straits Settlements, invite competitive designs for the reinforced concrete work required in connection with the construction of a new general post office at Singapore Tentative designs, for which no fees will be paid, are required in the first instance, from which it is proposed to select a design and specify its adoption in the contract for the construction of the building. The firm whose design is so adopted will be subsequently engaged to prepare full detail plans, specification, quantities, &c., for an approved fee. Drawings can be seen and further details of the competition obtained from the Crown Agents for the Colonies, 4 Millbank, Westminster, S.W. 1, quoting Z/Straits Settlements 5664. |

## R.I.B.A.

### *American Honour for Mr. Waterhouse.*

On the occasion of the opening of its thirty-eighth annual exhibition the Architectural League of New York elected Mr. Paul Waterhouse, president of the Royal Institute of British Architects, as an honorary member of the league in recognition of his distinguished services to the art and profession of architecture.

### *R.I.B.A. Council Meeting.*

As announced last week, the Coun
of the R.I.B.A. have nominated "
John James Burnet, A.R.A., R.S.
Hon. LL.D., F.R.I.B.A., as the pers
whom they propose to submit to
Majesty as a fit recipient of the Roy
Gold Medal for the year 1923."

Following are other notes from t
proceedings of the last Council meeting :

Masonic Memorial Building.—A co
munication has been sent to Grand Lod
urging that there should be an op
architectural competition for the n
memorial building, and that a deput
tion should be received.

Registration Bill.—The Registrati
Committee was instructed to consi
the action to be taken to meet the vie
expressed at the general meeting
January 29, 1923.

### *The Special War Examination.*

The following candidates have pass
the Special War Examination held
Toronto in December last : Brown, Jo
Grey, 292 Second Avenue, Longue
P.Q. ; Illsley, Hugh Percival, 134 Clan
boye Avenue, Westmount, P.Q. ; Jeffr
James Rowe, 247 Elm Avenue, We
mount, P.Q. ; Kingston, John Lyndhur
336 Jackson Buildings, Ottawa ; Merrot
Edgar Samuel, 10d Souvenir Aven
Montreal ; Nesbitt, John Kenneth,
Tuque, P.Q. ; Prideaux, Arthur,
Messrs. Nobbs and Hyde, 14 Philli
Square, Montreal ; Wiggs, Henry Ro
Hessel Grove, St. Foy Road, Queb
P.Q.

### *The Bicentenary of Sir Christopher Wre*

The Christopher Wren commemor
tion banquet, which is being given by t
Royal Institute of British Architects
February 26, is being enthusiastical
supported by architects, and a remar
able number of distinguished guests w
be present to do honour to Londo
greatest architect, including : The Ar
bishop of Canterbury, the Earl of Balfo
the Earl of Crawford and Balcarres, Lo
Askwith, H.H. the Maharaj-Rana
Jhalawar, the Lord Mayor and Sher
of the City of London, the Chairman
the L.C.C., Dean Inge, Canon Alexand
the President of the Royal Academy, t
Minister of Health, Sir Arthur Schust
the Warden of All Souls' College, t
President of Magdalen, Sir Cecil Harco
Smith, Sir A. Selby-Bigge, Sir Erne
Hodder Williams, and many members
the grand committee representing learn
societies and other bodies interested wh
have assisted the R.I.B.A. in organiz
the celebrations.

In place of the usual after-dinn
speeches, three memorial addresses w
be delivered. The president of the Roy
Institute, Mr. Paul Waterhouse, will spe
of the man, Sir Reginald Blomfield, R.
of the architect, Mr. Mervyn Macartn
of the designer of St. Paul's Cathedral.

### *"So Many Men, So Many Minds."*

A week ago "The Observer" remark
that the R.I.B.A. were commemorati
the bicentenary of Sir Christopher Wr
by the giving of a banquet, and that t
Bishop of London was commemorati
the same occasion by the proposal
demolish many of Wren's City church

nesday, February 28, 1923 Vol. LVII. No. 1469

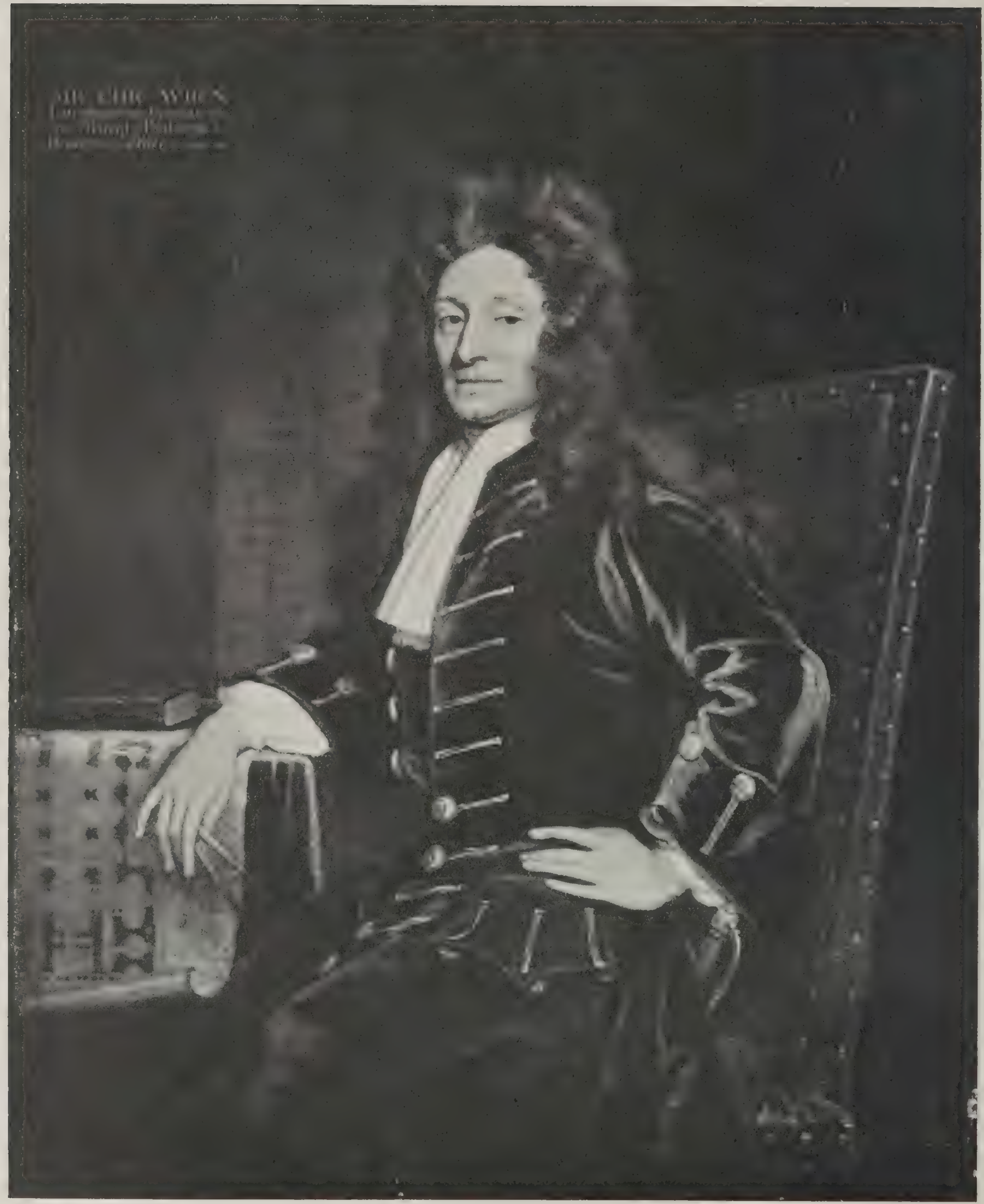
# THE ARCHITECTS' JOURNAL & Architectural Engineer

*With which is incorporated "The Builders' Journal."*

WREN'S FAVOURITE DESIGN FOR ST. PAUL'S

*(From a Model in the Cathedral.)*

27-29 Tothill Street, Westminster, S.W.1.



SIR CHRISTOPHER WREN

*(From the Painting by Sir Godfrey Kneller in the National Portrait Gallery.)*

THE
ARCHITECTS' JOURNAL
27-29 Tothill Street, Westminster, S.W.1.

ednesday, February 28, 1923 Volume LVII. No. 1469

# Wren's Influence on Modern Design

## By STANLEY C. RAMSEY, F.R.I.B.A.

TO attempt an estimate of Wren's influence on modern design is as difficult a task as it would be to write adequately of Shakespeare's influence on modern literature—that is to say, it is well-igh impossible. The most that can be hoped for is to arrive t an approximation, to catch some hint of how that great ervasive personality still affects and influences us to-day.

After two centuries the man looms larger than ever, olossally, almost threateningly; here in London we can o more escape his influence than we can ignore that mighty ome of his, which still dominates the capital city from the entre to the remotest of the suburbs.

It is peculiar to Wren that great as we think his work, hat splendid unfolding of his genius at Greenwich, Hampton ourt, and St. Paul's, we still hold the man greater than his reations. He dominates them as he does us, even to such n extent as at times to make us grow rebellious. Not nly we, but generations of architects that preceded us ave also been fretfully objective against the persistent ominance of that quiet-faced amiable man in the absurd ig wig, who knew so much better than the other "big-igs" of his day how to do things.

We carp at his detail, we call his work coarse and unsuitble, we accuse him of unworthy shifts and unreal devices, e point triumphantly to some lapse of taste, to some heatrical piece of design, and we think we have done with im!—and then one morning, as we hurry across Westinster Bridge in a flurry of excitement to get on with our wn little "masterpiece," we glimpse the view of Wren's ome—Paul's Dome—bathed in a glory of morning sunhine, like some benign and beautiful spirit watching over nd protecting London—then the critic within us is silenced, nd we mutter "that after all even Shakespeare at times rote some pretty poor stuff." In the end, if we are wise nd would have any peace, we accept him as we have to ccept all great men, and in the calm of the acceptance we ay be able to appreciate some of the influences he radiates.

He is, to use a somewhat hackneyed phrase, "Our great ational Architect." There were great English builders efore him, and there have been others since. The earlier uilders, those for instance, who built our Gothic catherals, are for the most part merged in the fame of their uildings, and if we remember their names it is with an ffort. There are others, like Inigo Jones, whose fragment t Whitehall, in my humble estimation, far exceeds in rchitectural distinction any work of Wren's, and yet someow misses just Wren's towering greatness. We feel that ith these others, though they include such giants as Inigo ones, there is something professional in their efforts, hat they miss Wren's broad generalizations and the sweepng majesty of his purview.

Like so many of our great English architects, such as anbrugh, Wren, the greatest, had something of the mateur in his composition.

I am not referring to the accident of his early training, r lack of training, as we understand the word, but rather o something in his mental outlook.

We live in an age of specialists, but Wren belonged to a broader and more generous time. To call a man of his attainments an amateur is, of course, ridiculous. Perhaps a better word to express my meaning would be to describe him as a "Universalist," and surely so distinguished a son of so distinguished a university should be a "Universalist."

He always seems to have been so much more concerned with "imagining the whole" than "fancying the parts," and this is, perhaps, what makes him so peculiarly English. He is always so broadly spacious in his designs—so robustly sane, ever ready to compromise on small details for the sake of main principles, that he is, as it were, the architectural embodiment of the national character. We, amongst the nations of the world, are the masters of compromise—a sailor-people, ever ready to adjust our sails and rigging to the storms and incidents of our voyages. And it is probably the spirit of compromise, this ability to adapt ourselves to circumstances, born of our island conditions, that has earned for us the title of "Perfidious" from the more logical and routine-governed land nations of the Continent. So in the same way Wren has been charged as an artist with "insincerity"—and the screen walls of St. Paul's form the main item of this tremendous indictment.

I will leave the defence of Wren and his screen walls to his many able defenders, and do but refer to the matter here in an attempt to show how Wren, in his character of typical Englishman, expresses the national indifference to the rules of pure logic. His was a logic of life, fluid and adaptable as life itself, and far above the little logic of schools and books.

Much of Wren's detail is careless, if not slovenly, and some of it is downright bad; I recall to my mind certain fireplaces at Hampton Court, which are to me the embodiment of ugliness; whilst some of his carved stonework, both here and at St. Paul's, is just as expressive (or as inexpressive) of wood or plaster, as of stone.

He typifies our national weakness as well as our national greatness, and despite all our addings and subtractings the sum total is a satisfying and respectable figure.

With, perhaps, the exception of the Dean's House in St. Paul's Churchyard and the Master's House in the Temple, as well as a few houses scattered up and down the country, there are few small houses that can be authenticated as Wren's, and yet he was essentially a "domestic" architect.

Running through all his palaces—at Hampton Court, Greenwich, Chelsea, and Kensington, as well as in his work at Oxford and Cambridge—is this note of domesticity. Even St. Paul's, in spite of its grandeur, has an intimate and homely air—it is still the parish church of London, as Westminster Abbey is the church of the Empire.

His work has none of the remoteness of a Greek or Roman temple, or the aloofness of a Gothic cathedral. So we see his influence working through the ages, through that wonderful eighteenth century, the first quarter of which he so illuminated, through the thwarted and muddled efforts of that industrial nineteenth, down to our own day, the twentieth century, the first quarter of which has nearly run its course. An influence, conscious and unconscious, exerted over the mind of layman and architect alike, a part of our national inheritance, to use and abuse, understand, or misunderstand, as we will.

As a nation we have always been slightly contemptuous of the artist, as a mere artist, as a specialist in the applied emotions, as a member of a select caste outside and beyond the comprehension of ordinary humanity—but we have always had the greatest respect for the man who could do things, and we prefer that he should do them well.

We are not indifferent to the claims of beauty and art. There never was a nation yet that loved its homes and gardens—the basis of all building-art—as we love ours, but we always insist that art shall be the servant of life, and not the master, and prefer that our architects shall serve rather than instruct us, in the same way that we insist that our soldiers shall be servants and not dictators, or our divines, ministers and not spiritual autocrats.

Wren, like all great men, artists or statesmen, was essentially the servant of his people; through his own medium he interpreted the spirit of his age, and he left it to his accomplished works to educate that public it was his privilege to serve.

So we have his influence always with us, an influence which we cannot escape, but which we must accept consciously or unconsciously; and as I shall attempt to show, it is as we accept the spirit rather than the formulæ of his teaching that we shall in our turn best express our own age in our own way.

He is the great national architect, and in addition he is the great Londoner. It is impossible to conceive London, as we know it to-day, without his cathedral, his palaces, and his City churches, or that mass of early and late eighteenth-century building through which Wren's influence runs like a fine strong thread on which are strung many and varied beads of great beauty.

We may sell our City churches to the money changers (I wonder what the value of St. Paul's would be expressed in pounds, shillings, and pence !), but we shall always carry their gracious influence in our hearts—and possibly more truly realize their peculiar significance when we have lost them.

I have said that Wren's influence persisted throughout the architecture of the eighteenth century, and this is true both of the work in this country and in the United States of America. Wren owed much to Inigo Jones—but Jones, though possibly the more brilliant architect of the two, has had nothing like the same personal influence on English architecture as Wren. His was a different mission, he revolutionized our style and produced some of the most beautiful, if not the most beautiful, of our classic buildings.

But his influence is rather more remote and impersonal, possibly because he more truly caught the Italian spirit than any of those distinguished architects who came after him.

I venture to suggest there is a greater difference in essentials between the work of Jones and of Wren than there is between that of Wren and of an architect of the late eighteenth century, such as Robert Adam. In no sense could one describe Inigo Jones as a "homely" or "comfortable" person, and although he built far more houses than Sir Christopher, he was not so domestic an architect. As an instance of what I mean, compare Lees Court, Faversham, with Groombridge Place, which, if not actually designed by Wren, is, for the purposes of my argument, sufficiently in the Wren manner.

Wren's influence is particularly discernible in the smaller houses and less important public buildings of the eighteenth century, which formed the greater part of the building work of that period.

As I have endeavoured to point out, Wren suffered, as do all great men, from the defects of his genius, and these defects must be taken into account in attempting to estimate the influence he exerted throughout the ensuing ages.

As a race we are somewhat indifferent to "fal-lals"; and English architects have for the most part been somewhat negligent of detail, and not very consistently logical in the expression of plan and section in their buildings.

But what a great architect may do with impunity often forms a fatal trap for smaller and less able men.

He who would write in the manner of Shakespeare without Shakespeare's gifts frequently but succeeds in writing mere high-sounding nonsense. Those who can with safety ignore the rules, must be above the rules—and even they sometimes come to grief !

During the nineteenth century the crime of façading (to coin a word) was particularly rampant. Both Gothicists and Classicists were guilty of divorcing plan and elevation to an alarming extent, and ornament was applied, or misapplied, according to the whims or dictates of the designers. We cannot lay the sin of all this to Wren, but he must bear his part.

Just now the whole profession is going through a tremendous schooling—"Education" is the watchword of the moment—and possibly the danger now lies in the other extreme. There is just a chance that our creative impulses may be stifled by too severe an application of rules and logic, and some of our students' work is beginning to have a suspiciously thin and papery look !

The cure would seem to be in some return to the methods of Wren, who was a master of robust actuality, and who directed the progress of his buildings on the site rather than from his office. If I could only use one word to describe Wren, I think I should select "vital;" all his works seem to radiate a living joyousness, as if each one had been his favourite creation, and this is the more surprising when one recalls the long list of his still extant buildings. Never does he appear to repeat himself; there are no threadbare devices for easy effects.

If we consider his City churches alone, we are amazed at his fertility of invention—not that all are equally beautiful, but the average is extraordinarily high.

In one respect Wren anticipated one of the worst features of the nineteenth century builders, though only in a minor degree, and that was in the confusion of locality in the use of his materials. He mixed the products of brick and stone districts with an easy disregard, using slate roofs on brick buildings, and even going to the lengths of employing brick and tile for the roofs of the same building !

The King and the capital city laid tribute on all districts, and Wren, as the King's architect and a Londoner, selected with a royal disregard of geographical distinctions.

Nevertheless, Wren as a great artist was always conscious of what he was doing, and when he uses slate for the roof of the Orangery at Kensington Palace and for the base of the cupola over the entrance, he would probably have preferred lead if it had not been for considerations of cost.

One feels with Wren that he realized the claims of locality even if he sometimes ignored them, but that our builders of the industrial period were simply ignorant—living in an age of cheap transport and with no real traditions of building; they muddled about with anything they could get hold of, mixing up timber and stone, brick and slate, marble and plaster, in one great inconsequential confusion.

It might be said that Norman Shaw was the first of the moderns to rediscover Wren, and the Queen Anne revival followed—one of the first steps in the direction of a return to simpler and better methods of building. Like most revivalists these earlier Queen Anne enthusiasts were more concerned with the letter than with the spirit of the style—it was a time of great sketch-book activity—delectable titbits of doors, cornices and swags were bagged in all directions, like a sportsman potting partridges !

These studies were quickly reflected in our buildings: a wondrous series of rich fruity swags dangled elegantly across our façades like the heavy gold watch-chain across the well-filled waistcoat of our uncle of youthful memory; cupids of an abnormal adiposity leered at us from all sorts of unexpected places; whilst doorways and cornices shouted "Wren" at us down the whole length of a street, and yet these buildings were singularly unlike the work of that great architect !

Perhaps this is the implicit antagonism that we feel to ery revival as opposed to a renaissance—the one is a *chauffé* of the details, the other a re-birth of the spirit.

Revivals (religious and otherwise) for the most part ppear to have an intoxicating effect on the revivalists. or a time we revel in our newly discovered "methods of fect"—we are graciously Georgian or grimly Néo-Grec as e mood affects us, but it is all of no avail.

To capture the spirit rather than the letter of the dead asters, we must approach the study of their works humbly d inquiringly, filling our sketch-books with analytical ans and sections as well as with mouldings and carving -striving to attain some glimpse of the purposes that spired them.

One of the worst tributes that we could offer to the emory of Wren would be to celebrate his bi-centenary with e inauguration of another Wren revival.

If he is still to influence our modern work, let it be his breadth of design, his dignity of purpose, his wide and spacious views, his joyful creativeness, that shall inspire us —let us be influenced by what was real and inherent in the man and his work, and not by that which was petty and incidental.

Many of Wren's problems are our problems. If we are no longer called upon to build great palaces for kings and queens, we have to provide great hotels and places of entertainment for the "sovereign" people. If we have no devastating fires giving us unparalleled opportunities—we also have our town-planning problems—and if we live in an age when economy of effort and of material is of primary importance, we cannot do better than study the works of that great little man who died two hundred years ago, and who created such miracles of architectural beauty out of the simplest of materials.

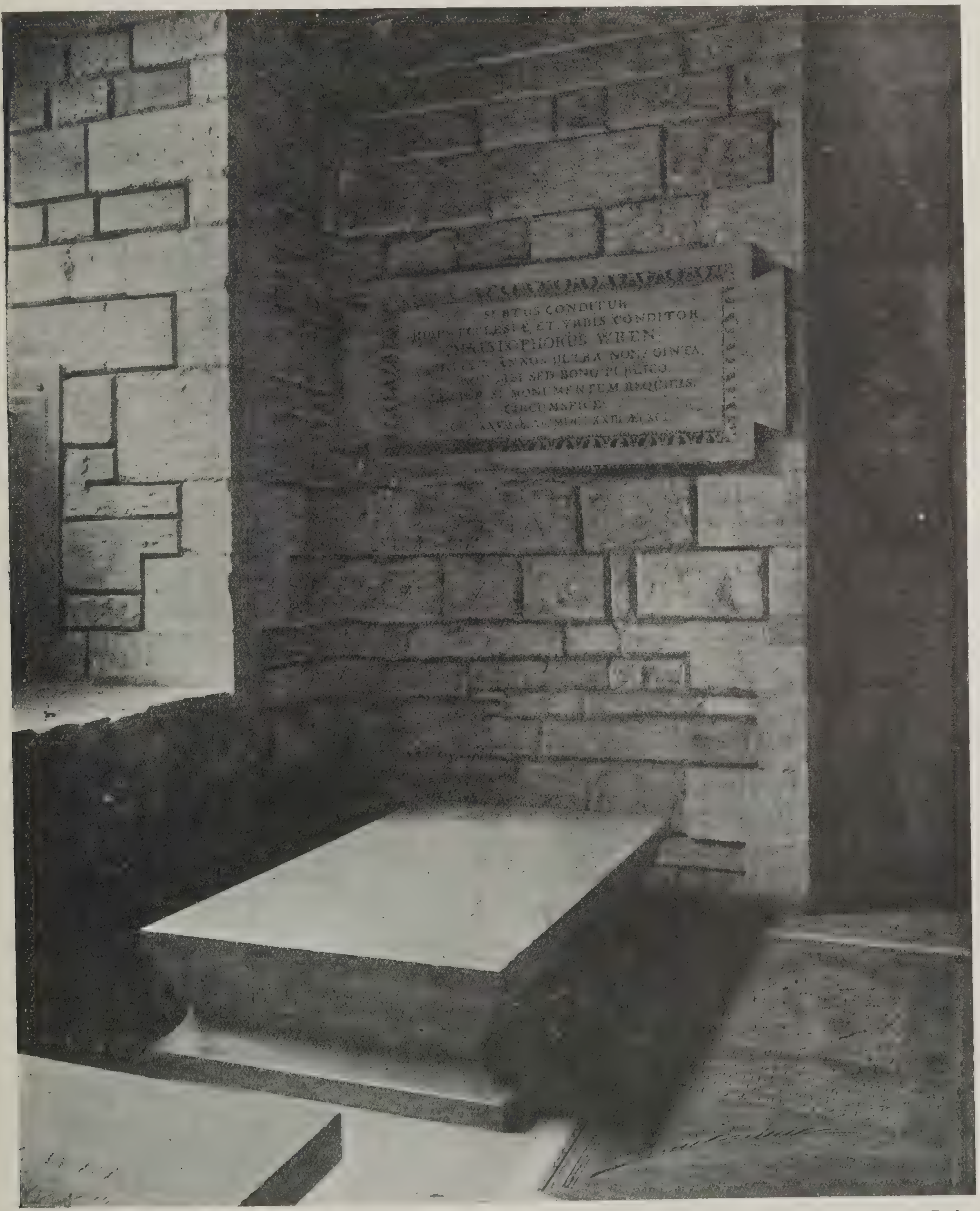


Photo: W. F. Taylor.

WREN'S TOMB IN ST. PAUL'S, WITH ITS FAMOUS INSCRIPTION.

# Sir Christopher Wren

## Born October 20, 1632; Died February 25, 1723

### By FREDERICK R. HIORNS, F.R.I.B.A.

> "Architecture has its political use, public buildings being the ornament of a country; it establishes a nation; draws people and commerce; makes the people love their native country, which passion is the origin of all great actions in a commonwealth."
>
> —CHRISTOPHER WREN.

THE most famous of British architects was born at the Rectory of East Knoyle, in the County of Wiltshire, on October 20, 1632. His father was Incumbent of the church of that place, and succeeded his better-known brother (Matthew Wren) in the Deanery of Windsor when the latter resigned office in 1636 to become Bishop of Ely. At that time Christopher was four years old, and, following a period with a domestic tutor at home, on account of his delicate health, he entered Westminster School (1641) at the age of nine. During his period there under the headship of Dr. Busby (a man of pronounced Royalist views), Archbishop Laud was, through Protestant persecution, imprisoned in the Tower, and both Bishop Wren and the Dean of Windsor suffered for the Royalist sympathies of their family.

Christopher Wren went up to Oxford in 1649, being entered as a Gentleman-Commoner at Wadham College, but not before he had already displayed brilliant talents at Westminster, attracting the notice and friendship of several distinguished men by, among other things, the composition of Latin verse, skill in mathematics, and the invention of an astronomical instrument, as mentioned in "Parentalia." A weeding out of Royalist influences had taken place at Oxford just before his arrival there, and young Wren found himself somewhat unsuitably placed in an atmosphere favourable to the authority of Parliament rather than of the King. His studies appear to have followed a course dictated by his generally scientific bent, with a continued leaning towards experiments with astronomical and mathematical instruments, such as fascinated and absorbed his inventive mind.

In 1651 came the defeat of Charles II at Worcester. John Evelyn records in his Diary a visit paid to Oxford at the end of term, in 1654, when, following entertainments at Wadham and All Souls, he "visited that miracle of a youth, Mr. Christopher Wren, nephew of the Bishop of Ely," and adds that Dr. Wilkins, the Head of Wadham, showed him a "variety of shadows of all perspectives and many other artificial, mathematical and magical curiosities, a way-wiser, a thermometer, a monstrous magnet, conic and other sections, a balance on a demi-circle, most of them of his owne and that prodigious young scholar, Mr. Chr. Wren, who presented me with a piece of white marble which he had stain'd with a lively red very deepe, as beautiful as if it had ben natural." But relatively little seems to be known of Wren's Oxford days, though such particulars as we have lead us, with no surprise, to his appointment to the Gresham Professorship of Astronomy upon its becoming vacant in 1657. His inaugural address is said to have been a notable example of Latin composition with the literary graces and finely turned phrases that, through life, were characteristic of him. The "juvenile blushes," to which his speech made reference, might well become a man holding so honourable a post at the age of twenty-five.

He was now started upon a London career, and—little though perhaps he guessed it—destined in the near future and through a period of over fifty years to hold the premier place in guiding the development of that city, and determine for centuries to come the general form and character not only of the buildings of London, but of the whole of his country. His father, the Dean, had in the meantime succumbed (1656) to the malicious oppressions of his persecutors—in which, perhaps, he was more fortunate than his brother, the Bishop, who dragged out a miserable existence in the Tower, in the King's cause, with fine patience and heroism.

The Professorship at Gresham was disturbed by the prevailing civil troubles, until, in 1660, came the Restoration of King Charles, and Wren was able to resume his interrupted lectures. He resigned his Gresham College appointment in the following year in order to succeed Seth Ward in the Savillian Chair of Astronomy at Oxford. His model of the moon, which he there prepared, attracted attention from the King, and Wren was received in private audience so that he might explain it. An event of some importance this appears to have been, for it confirmed the repute Wren had already gained at Court and established him in the Royal favour. The opinion expressed by Robert Hook about this time was probably general among the friends of Wren, that "there scarce ever met in one man, in so great a perfection, such a mechanical hand and so philosophical a mind." In the same year, as he returned to Oxford (1661), he became a Doctor of Laws of both that University and of Cambridge, though but twenty-nine years of age.

In 1662 we come to the year when Wren's attention was definitely turned towards architecture. The important post of Surveyor-General was held by Sir John Denham, in succession to Inigo Jones, and though many important works were demanding attention at the time, including the badly-needed repair of Old St. Paul's, Denham had no qualifications at all to carry them through.* He had, however, been a faithful servant to King Charles, and, to avoid dismissing him, the King ingeniously created a new post of Assistant to the Surveyor-General with the object, apparently, of inducing Wren to accept it. Yet, as Miss Milman says,† "it is impossible to account except by Evelyn's influence for the King's selection of a man unknown as an architect, who in the very Charter of the Royal Society itself (only just created) is entered as 'Christopher Wren, Doctor in Medicine, Saville Professor of Astronomy, in our University of Oxford.'" As she appropriately adds, the men of the seventeenth century so rarely specialized that no surprise would be likely to be expressed that Wren should have cared to become as skilled with the scapel (we may, perhaps, add the compass and T-square) as with the telescope.

The appointment certainly shows the extraordinary way in which Wren's abilities and personality had impressed themselves upon the men of his time. He was already recognized as the most remarkable of the many able men of his country and generation, and we now find him, within four years of the Great Fire, turning his great talents in quite a new direction and preparing himself, unconsciously, for the opportunity of his life. He was doubtless already familiar with architectural literature. His friend, John Evelyn, was a keen student of architecture and, at the time of which we are now speaking, had in hand the preparation of an English translation of Fréart's "Parallel of Architecture," which Sir Reginald Blomfield has described as "one of the most valuable treatises on the details of Renaissance Architecture ever written." It was actually first published in 1664, and gives very complete tails of the Orders from ancient examples and as treated the ten principal modern authors, including Alberti, gnola and Palladio.*

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* In John Evelyn's Diary (19 October, 1661) he says that he discussed the placing of the Palace at Greenwich with Denham, but "came away knowing Sir John to be a better poet than Architect, tho' he had Mr. Webb (Inigo Jones's man) to assist him."

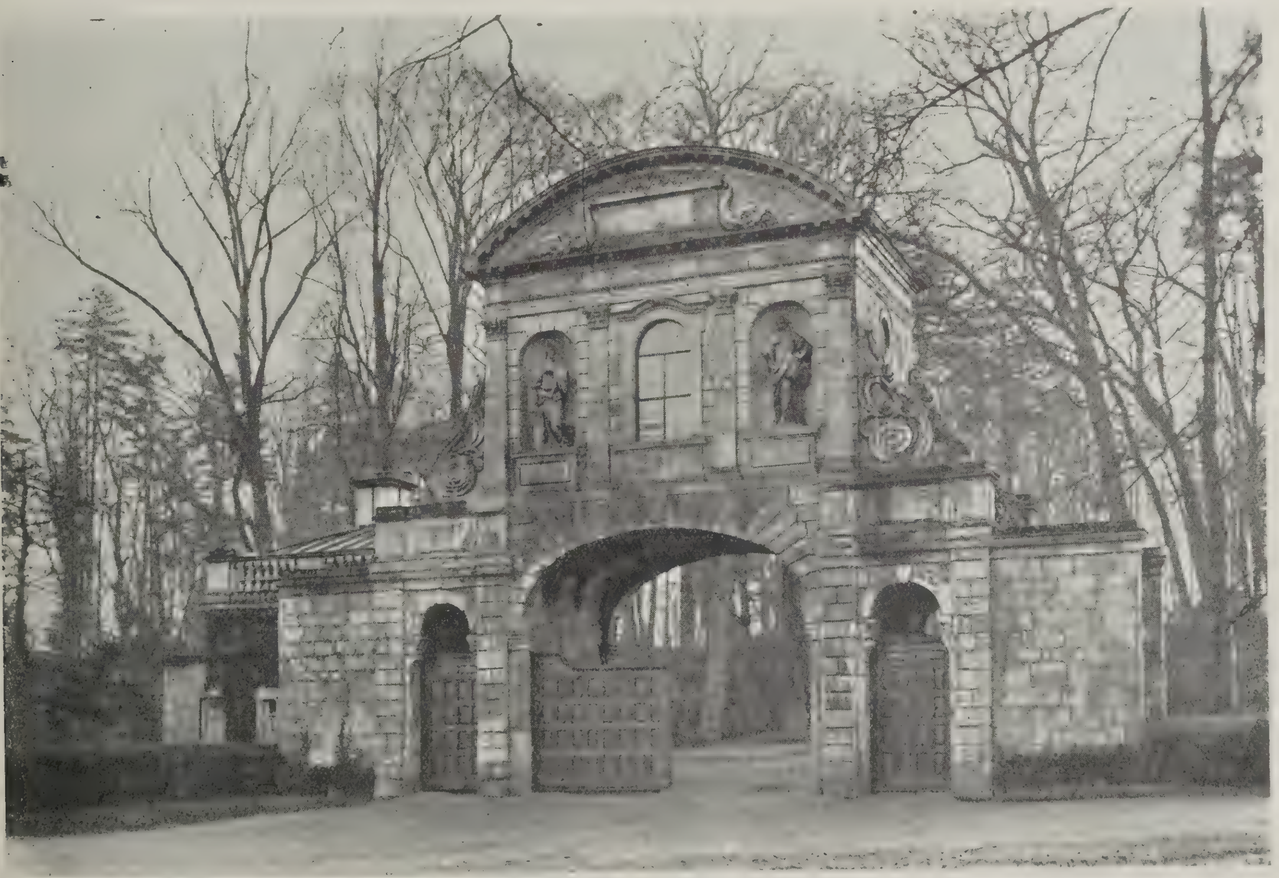
† "Sir Christopher Wren," by Lena Milman. 1908.

In the previous year, that immediately following Wren's pointment as Assistant to the Surveyor-General, Godfrey chard's edition of the first book of Palladio appeared, d though of little value as compared with the great alian editions of that master, its ready sale showed that met a need of the time. It is easy to imagine that ren would be acquainted with geometric diagrams and eories embodied in the various sixteenth and seventeenth ntury editions of Vitruvius, with the finely illustrated orks of the great Italian and French architect-authors,† d certainly with so readily obtainable and valuable a lume as Robert Peake's five books of Serlio "translated t of Italian into Dutch and now out of Dutch into nglish for the benefit of our English Nation, and sold his shop neere Holborne Conduit, next to the Sunne averne—Anno Dom. 1611." This copiously illustrated ork, published in London twenty-one years before Wren's rth, contains Raffael's and Peruzzi's plans for St. Peter's Rome and a design by Bramante for the dome of that urch, showing it in plan and section. Serlio's book ntains other illustrations of domes of lesser importance. ren would be acquainted with many of the great libraries d private collections of books that existed in London, xford and elsewhere, and there is no reason to suppose keen a student was not already quite familiar with neral and detailed representations of Classic and Renaissance architecture; while his interest in mechanics would evitably lead him towards the science of construction and sure him a considerable competence in that aspect of e art of building.

It would seem that, when the time came for Wren to take up, in 1662, the office of Assistant to the Surveyor-General, the work of Inigo Jones had become of great interest to him, and as one of the buildings for which he became, in effect, responsible was Old St. Paul's Cathedral —now suffering badly from long neglect—he probably looked with wonder upon the classic portico that Jones had but a few years before added to that dilapidated Gothic structure. With a lack of actual contact with revived classic work abroad, the very beautiful Italian work that Inigo Jones had left behind him would be keenly and carefully studied by one to whom, from the character of his own subsequent work, it must have made a great appeal. For it needs to be borne in mind that the revived classic architecture of this country was then practically limited to the few buildings erected by Jones, and his assistant and relation, John Webb; and that, apart from such works as they had executed, the City of London was almost exclusively mediæval in the character of the structures crowded together in its narrow, crooked and densely populated streets. The evil results of this condition, with its direct encouragement of ill-health and disease, was shortly to be revealed.

It is well to remember, too, that in the year 1662, when Wren was launched upon the architectural sea, that from the first he navigated so skilfully, Michael Angelo had been dead for nearly one hundred years, and his dome of S. Peter's at Rome was the wonder of Europe in the intervening period. Bernini, sculptor and architect, now held the Roman stage, and was receiving honours usually reserved for princes. He had, in fact, just completed his colonnaded approach to S. Peter's after Maderno's extension of the front of the church had changed Michael Angelo's Greek cross plan into a Latin one. In France preparations were in hand for an extension of the Louvre, and Louis XIV was about to seek a design from Bernini for completion of the building.

Having in view the nature of the career Wren had followed to the time of his appointment as Assistant to the Surveyor-General—and the fact that it had no apparent relation to architecture—it is of interest to recall the



TEMPLE BAR, AS RE-ERECTED AT THEOBALD'S PARK.

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* In Evelyn's Diary, under date of 27th October, 1664, he says: "Being casually the privy gallery at Whitehall, his Majesty gave me thanks before divers lords d noblemen for my book of Architecture, and again for my 'Sylva,' saying they re the best design'd and useful for the matter and subject, the best printed and sign'd (meaning the *taille douces* of the Parallel of Architecture) that he had seene.'"

† Bodley's Librarian at Oxford is able to confirm my own conjecture that when ren was admitted as a reader, in 1651, the Bodleian Library contained a number Architectural works, including Vitruvius, Serlio, Palladio, Vignola and Philibert l'Orme. It may be reasonably assumed he would not fail to make use of these, of which are well illustrated.—F. R. H.

point made by Quatremère de Quincy,* that the authors of what were regarded as among the finest works of architecture in France, Pierre Lescot, Claude Perrault and François Blondel, were not originally trained as architects. But, as we have already seen, in that age of real learning, men did not confine themselves so strictly as they do now to one special branch of art or science, and culture spread its capacity and knowledge over a far wider field. It was not, therefore, the surprising thing that it would be to-day to find a scientist or doctor of medicine erecting a building of the first rank, or even to find an architect or sculptor diverting himself with the writing of Latin odes, the planning of military campaigns, or composing treatises on Platonic philosophy. It has, indeed, been well pointed out that the architecture of Wren arose out of his exceptionally varied knowledge and the peculiar aspect of genius that induced the acquirement of every accomplishment necessary to an operative builder before he was called upon to cultivate the artist. Or, as Allan Cunningham observed,† "his mathematical acquirements gave him extensive command over the very principles out of which true architecture arises."

In the troublous time of the Commonwealth fine building would naturally be discouraged, but under a restored monarchy it was about to come into its own again. Almost simultaneously with taking up his new appointment Wren was commissioned to provide the building now known as the Sheldonian Theatre at Oxford, and which he completed in 1669. The early work of adding a doorway to the north transept at Ely—which he carried out for his uncle the Bishop—showed at once the characteristic Wren manner, and recalls the much later entrance to S. Mary-le-Bow Church at Cheapside, London, with its deep curved reveal and projecting rusticated voussoirs. The door at Ely is his earliest executed work, but a Memorial Chapel for Pembroke College, Cambridge, followed it very closely. While austerely treated, for reasons of economy, it has great distinction of proportion. As an almost first work of a man possessing no previous architectural experience, so far as is known, it is remarkably good, and the activities of modern restorers have fortunately left its beautiful western façade untouched. Its foundation was laid in May of 1663, and the completed building consecrated two years later upon the feast of S. Matthew. In the year 1664 he built the Storehouse of the Tower of London, a little-known building of considerable interest.

Meanwhile, a survey of Old S. Paul's was in hand, for its generally unstable condition made repairs imperative. Inigo Jones had spent more than ten years upon restorations, but appears to have effected little that was valuable in support of a Gothic structure with which his Italian proclivities put him out of sympathy. His mighty Corinthian portico, though unquestionably fine in itself, was incongruous, and probably regarded by its designer as a first step towards reconstruction of the whole cathedral in the classic manner. Even the portico was suffering at the hands of the vandals of the period when Wren, in 1663, began his inspection of the building. From all accounts, he found its condition precarious in the extreme; but to add to the difficulty of the problem it presented being fairly faced, the plague appeared in 1664, and the normal life of London was interrupted.

Though continuing his astronomical professorship, his regular attendance at the Royal Society, and engaged on repairs to Trinity College, Oxford, for his friend Dr. Bathurst, Wren broke away from these ties at midsummer of 1665, and, leaving the dangerously-infected air and generally unpleasant condition of London, went to Paris. There he spent six months, and, according to his interesting account, preserved in "Parentalia," ‡ appears to have used every opportunity that came his way to acquain himself with the course of architectural affairs in Franc at a most interesting period; meeting there, in addition t Bernini, the most notable native artists, including Mansart Le Pautre, Le Vau, Le Brun, Mignard and Poussin. H wrote "I have busied myself in surveying the most esteem' Fabricks of Paris and the Country around; the Louvr for a while was my daily object, where no less than thousand Hands are constantly employ'd in the Works some in laying mighty foundations, some in raising th Stories, Columns, Entablements, etc., with vast Stones, b great and useful Engines; others in Carving, Inlaying o Marbles, Plaistering, Painting, Gilding, etc. Which al together make a School of Architecture, the best probably at this day in Europe. . . . Mons. Colbert, Superintendant comes to the Works every Wednesday and, if Busines hinders not, Thursday."

After recounting the many fine buildings and "Rarities ' he had seen, he adds, "and that I might not lose th Impressions of them I shall bring you almost all Franc in paper, which I found by some or other ready designe to my Hand, in which I have spent both Labour an money. Bernini's Design of the Louvre I would hav given my skin for, but the old reserv'd Italian gave m but a few minutes view; it was five little Designs i Paper, for which he hath received as many thousan Pistoles." Perhaps a closer acquaintance with Bernini' work might have modified Wren's opinion of it, for ther seems little doubt of its inferiority to Claude Perrault' design. The author of the great Louvre colonnad he does not appear to have met, for he could hardl have seen his drawings without making reference t them.

In appraising the influences that made for Wren' greatness in architecture we should do well to attach muc importance to the effects of his six months' stay in France and the vast range of experience in the art of buildin which he crowded into that short period. He saw example of dome architecture actually constructed or in contem plation, including Lemercier's Chapel of the Sorbonn (1635) and the elegant Val-de-Grace Church of Françoi Mansart and Pierre Le Muet, commenced in 1645; an though he spoke somewhat disparagingly of "The Colleg of Four Nations"—the very beautiful building we nov know as the "Institut"—Miss Milman points it out a probably the most nearly allied to Wren's own interpreta tion of architecture.

Wren concludes his letter to Dr. Bateman by remarking like the fine philosopher he was, that "Works of Filgrand and little Knacks are in great Vogue, but building certainl ought to have the Attribute of eternal; and be therefor the only thing uncapable of new Fashions." His "Obser vations on the present State of Architecture, Art an Manufacture in France," which he promised upon hi return to England, appear never to have been written, an this we cannot but look upon as a great loss.

Wren returned to London early in the year 1666, where in a space of six months, over a hundred thousand inhabi tants are computed to have died of the Plague. Th condition of the City was, in fact, pitiable. Large portion of S. Paul's having actually fallen in, Wren hastened hi examination of it and concluded his report. This wa presented to the King in May, and in it Wren roundl abused the methods of the Gothic builders and, in effect advocated what was practically a re-building scheme with as its chief feature, the "cutting off of the inner corner of the Cross, to reduce this middle part into a spaciou Dome or Rotunda, with a cupola, or hemispherical roof and upon the Cupola (for the outward ornament) a Lanter with a spiring top, to rise proportionately." We see i this, probably, one of the effects of the Paris visit, an evidence of his essentially practical mind in the suggestio that, having conferred with and observed the "Engine and Methods" of the best Italian and French artists, i dealing with large structures, he had "promoted thi geometrical part of Architecture yet farther, and thinks th

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* Author of "Histoire de la Vie et des Ouvrages de plus célèbres Architectes," etc.

† "Lives of the Most Eminent British Painters, Sculptors and Architects," by Allan Cunningham. 1831.

‡ "Parentalia, or Memoirs of the Family of the Wrens," by Christopher and Stephen Wren. 1750. For other general and detailed information relating to Sir C. Wren, see the useful books of Lucy Phillimore (1881) and Lena Milman (1908), and "Sir Christopher Wren and His Times," by James Elmes. 1852.

# An Air View of St. Paul's

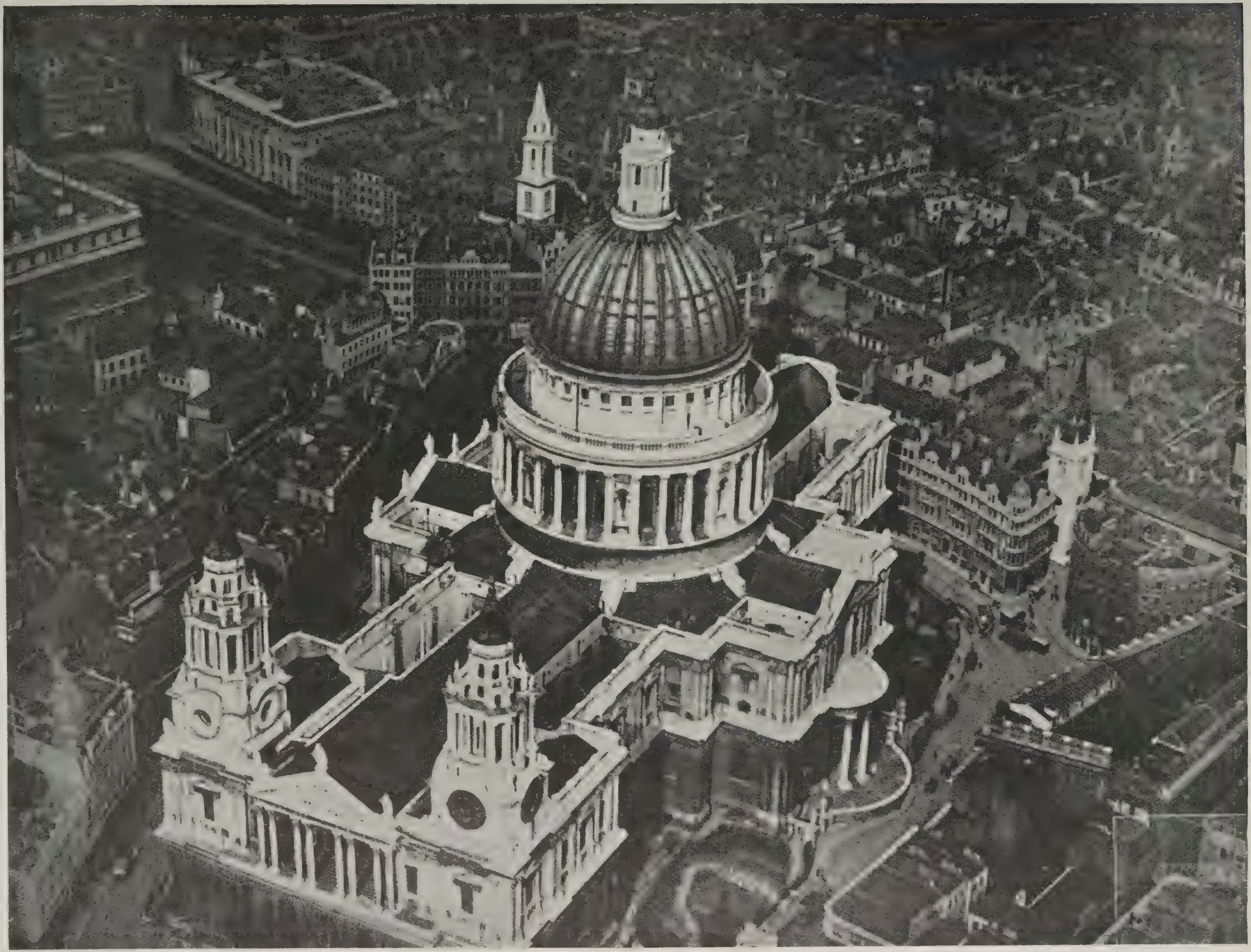

*Photo: Aerofilms, Ltd.*

This unusual view shows how dominant St. Paul's is. It appears as the Koh-i-Noor in a setting of old silver. The view also reveals certain points of construction not guessed at by the spectator on the ground—the flying buttresses behind the screen walls, and the way the drum of the dome sits upon the eight huge piers.

raising of Materials may yet be more facilitated, so as to save in lofty Fabricks a very considerable part of the Time and Labourers hire."

He advocated, too, a large and exact model being made of his suggested remodelling of the building so that "if the Work should be interrupted, or retarded, Posterity may proceed where the work was left off, pursuing still the same Design." And, naturally, he reveals his preference for carrying out new work "after the good Roman manner" rather than with the Gothic rudeness of the old design. This interesting report, which should be read in full,[*] is an extraordinary document as coming from a man who, so far as is known, had only been concerned with architecture for four years, yet who spoke already with the knowledge and authority of an experienced architect. It was referred to Wren's fellow Commissioners, including Evelyn, for consideration, and they met at S. Paul's for that purpose on August 27. Five days later, on September 2, 1666, occurred the Great Fire of London, determining the fate not only of the Cathedral, but of ninety churches and thirteen hundred houses, and incidentally obviating the execution of Wren's design, which, in view of its character, as shown in the All Soul's collection of drawings, can only be regarded, as Sir Reginald Blomfield says, as providential.

Evelyn's Diary gives a vivid picture of scenes resulting from the fire actually witnessed by him, showing the appalling effects of that calamity. From the standpoint of the subject of this Memoir the event cannot, however, be regretted, and Wren seems to have grasped at once the necessities of an entirely changed situation. In a letter to his friend Sir Samuel Tuke, Evelyn wrote that "the King and Parliament are infinitely zealous for the rebuilding of our ruins; and I believe it will universally be the employment of the next Spring; They are now busied with adjusting the claims of each proprietor, that so they may dispose things for the building after the noblest model: Every body brings in his idea, among the rest I presented his Majestie my owne conceptions, with a Discourse annex'd. It was the second that was seene, within 2 dayes after the Conflagration: But Dr. Wren had got the start of me." Wren's new plan of London, to which reference is made, was—apart from the short time in which it was sketched out—a remarkable performance, and represented quite an advanced piece of town-planning. Sir Reginald Blomfield[†] says of it that, had the scheme been carried out, London would have been one of the most beautiful cities in the world, and adds:—

> "Wren's fine intelligence grasped the full architectural possibilities of vistas of broad straight streets, linked together by groups of public buildings, the importance of a commanding site for these buildings, and the absolute necessity of a complete and consecutive scheme to the dignity of a great city as opposed to a mere farrago of houses. . . . . Wren saw at once that mere tinkering was worse than futile, and that it was a question of a large idea or nothing; unfortunately his scheme was never even attempted."

To meet the great emergency that had arisen, and having in view the obvious incapacity of Sir John Denham to deal with it, the King appointed Wren to act as "Surveyor-General and Principal Architect" for the repair of the whole City, S. Paul's, all the parochial Churches and other public structures. Wren set himself to clear away the debris resulting from the fire, in itself no mean undertaking, and to repair S. Paul's sufficiently to allow of use being made of its western portion.

From now onwards his works become so multitudinous that strict adherence to chronological order in dealing with them becomes almost impossible. The work at Oxford was being continued. The Sheldonian Theatre occupied from 1664 to 1669, and represents a skilful and practical solution of a difficult problem.[*] In the ingenious carpentry work which he there employed Wren was assisted by one "Richard Frogley, an able Carpenter." His repairs, and other works, proceeding at Trinity College, Oxford, have already been referred to. The complicated problem of rebuilding London, with its demands upon labour and material, would necessarily develop somewhat slowly, and in its earliest stages Wren was occupied with repair and other work on buildings of a public character—such as the Guildhall and the Halls of the Pewterers, Brewers, Mercers and other Companies.[†] He was being pressed, moreover, for designs for the new S. Paul's and fifty parish churches, the charge of rebuilding which had been now definitely placed upon him. A dense population was resettling in the City, providing houses and shops as best it could, with but a sprinkling of churches, relatively distant, that had survived the fire, to meet their needs. The post-Reformation attitude in respect of churches was to regard them as preaching houses, and not as buildings for viewing the Catholic ritual of the Mass. The same change of principle was to affect the design of the new Cathedral Church. The position is put quite clearly in Wren's own letter "to a friend," written in 1708 (after the fifty churches were built) concerning the Act of Parliament passed their provision. This interesting document should be read.[‡]

There is probably no group of buildings in the world, conceived and carried out by one man, equalling the Renaissance Cathedral of London and its attendant or satellite churches. They group happily with one another in the most pleasing variety and present from the lantern of the Mother-church a distinctive, imaginative charm that has no parallel. Yet, immensely valuable as this series of buildings is, and was, no fewer than eighteen of the churches have been destroyed, with the consent and even the active assistance of those who might reasonably be regarded as their natural protectors. And, what is even worse, there is at the present time serious risk of further depredations of the same sort being attempted, to the great and lasting discredit, in that event, of those responsible. Space will not admit of a detailed description of these churches, but the main types, as indicated by their plans, with a few outstanding examples, may be referred to. These are:—

(*a*) The simple rectangular room, or meeting-house type, with flat ceiling, as shown by the churches of All Hallows (1694) and S. Edmund, Lombard Street (1689);

(*b*) A variation on the last, with one aisle divided off by columns, as in the cases of S. Lawrence Jewry (1676), S. Vedast (1695) and S. Margaret, Lothbury (1690);

(*c*) The more purely basilican plan, with two aisles, of which examples are S. Magnus, London Bridge (1676), S. Bride's, Fleet Street (1680), and S. James's, Piccadilly (1683); the two latter having galleries;

(*d*) Churches with domes, the most interesting and beautiful class, including S. Stephen, Walbrook (1672–79), S. Anne and S. Agnes (1680), S. Mary Abchurch (1686) and S. Mary at Hill (1672).[§]

In the meantime Wren had taken in hand quite early the preparation of designs for S. Paul's—a task much complicated by the conflict between the general body of opinion desiring a preaching-house and the Romanist party (represented by the Duke of York, brother of the King), who more or less controlled the purse-strings. Many drawings were made, and the design that pleased Wren

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[*] The report is largely quoted in Miss Milman's book.

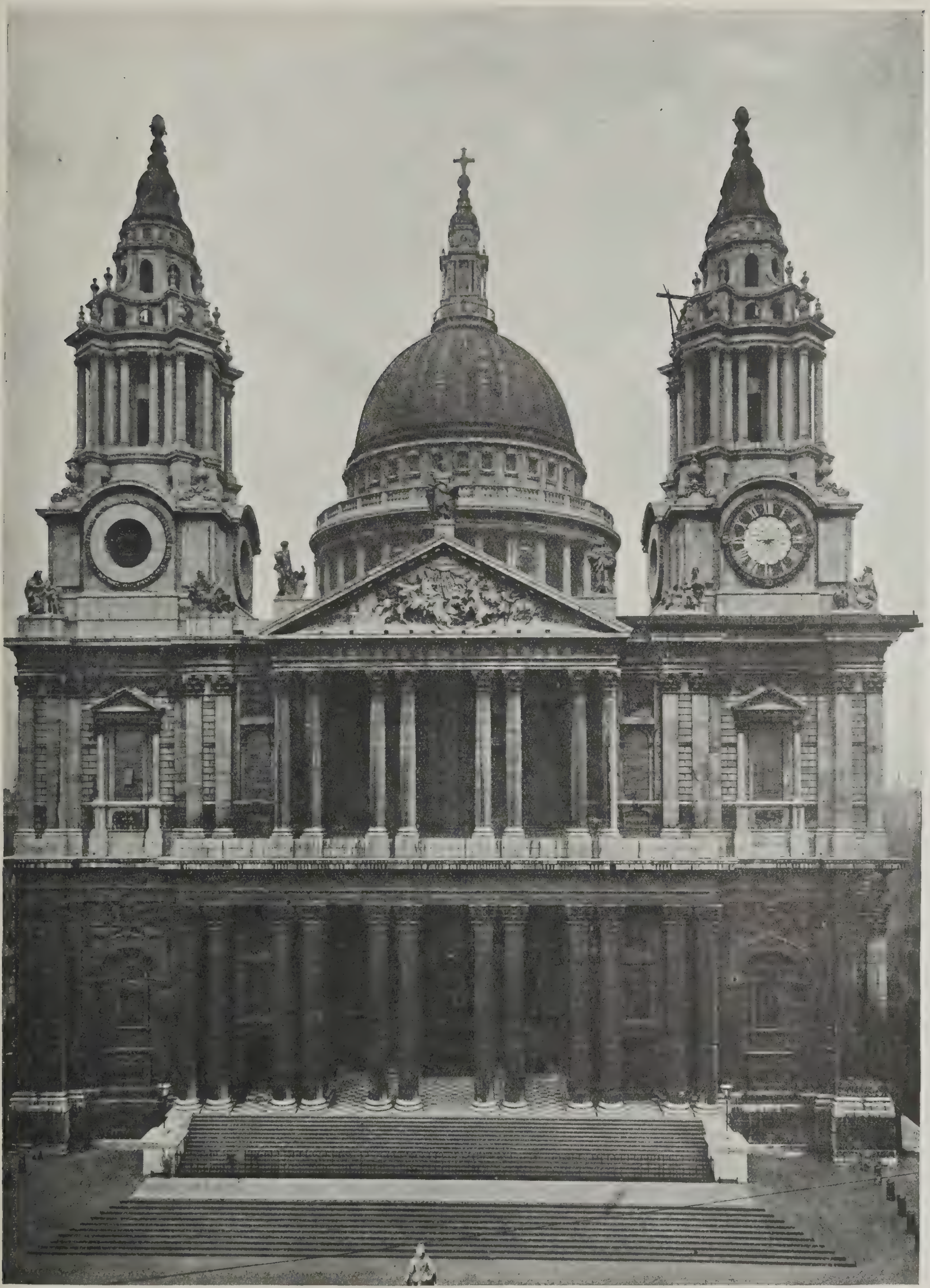
[†] "A History of Renaissance Architecture in England," 1500 to 1800, by Sir Reginald Blomfield, R.A., an invaluable work on the architectural art of the period.

[*] On 24th October, 1664, Evelyn looked over the works in Wren's company. He says, "The foundations had been newly laid and the whole designed by that incomparable genius, my worthy friend Dr. Christopher Wren, who shewed me the model, not disdaining my advice in some particulars."

[†] In conjunction with Jarman, then the City Architect, he is sometimes credited with having repaired and partly rebuilt over seventy of the Halls of City Companies—a quite incredible statement.

[‡] It is given as an Appendix in Miss Milman's book, and also quoted by Miss Phillimore.

[§] For an excellent critical description of Wren's Churches, splendidly illustrated by the author, *see* "Sir Christopher Wren and the City Churches," by Arthur Stratton. *See also* "Inigo Jones and Christopher Wren," by W. J. Loftie. 1893.



THE WEST FRONT OF ST. PAUL'S.

most was not favoured by the Court, causing the architect, it is said, tears of disappointment. He at length produced a design which the King was able to endorse (May 14, 1675) as being " very artificial, proper and useful," but which Wren, in disgust at the lack of taste and judgment shown in the King's dealings with him, possibly had not, as Mr. Loftie suggests, the slightest intention of carrying out. He certainly does not appear to have attempted to do so. No drawings were left, in fact, representing S. Paul's as we know it now, and it would seem that, as executed, it was the result of personal direction on the part of Wren, supplemented by sketches and working drawings supplied by him, assisted by his principal craftsmen, as the work proceeded. The greatest latitude was, in other words, taken with King Charles's permission to make modifications " ornamental rather than essential " in the Warrant design.

The first stone of the new cathedral was laid only a few weeks following the approval of design, and its construction then proceeded gradually but continuously to completion, in the form we now know so well, in 1710, the work of one controlling brain and probably the finest building in the modern world of which that could be said. The choir was brought into use for services in 1697.

The church undoubtedly embodies the finest example of classical dome construction—practically and æsthetically—yet carried out, and the adoption of the expedient of inner and outer domes, not concentric, with a brick cone in the interval between them, to carry the masonry lantern, was a great stroke of genius that places Wren in the front rank of inventive constructors. Only by this double dome arrangement can the effect of such a feature be equally satisfactory inside and outside a building. His upper screen walls to the aisles have been much denounced by the more extreme advocates of truth in art; but they can be effectively justified, both constructively and æsthetically. As to the suggestion that Wren adopted coupled columns through Perrault's use of them in the Louvre colonnade, such a supposition is quite unnecessary, when Serlio, and other authors with whom Wren was familiar, show their use in many examples. In fact, reasons for this, as well as other special features at S. Paul's, are given in " Parentalia."[*]

The sense of scale in the building is preserved with great judgment, and in this respect it is more effective than S. Peter's, at Rome. In Milizia's opinion, " few buildings can produce more grandeur of perspective than S. Paul's," while Horace Walpole asserted that as variety of knowledge proclaimed the universatility of Wren's mind, and a multiplicity of works its abundance, S. Paul's certainly proved its greatness.

The question of the application of colour decoration to S. Paul's is a very thorny one; but it is clear that Wren intended a fairly general use of colour, and that, apart from the contemporary paintings of Sir John Thornhill, he meant " to have beautified the interior of the cupola with the more durable ornament of mosaic work, as is so nobly executed in S. Peter's, at Rome."[†] Whether the colour decoration should have taken the form it since has is far too questionable a subject to embark upon now.[‡]

It should be added that S. Paul's, the City churches, and various other works of Wren gain considerably in their effect by the decorative carving work, chiefly in soft wood, of Grinling Gibbon—an artist craftsman of extraordinary talent, discovered by John Evelyn (January 1671) in an obscure cottage near his country seat, Sayes Court. Evelyn introduced Gibbon (commonly called Gibbons) to the notice of the King and to Wren, and the latter employed him to advantage in his numerous works; so much so, indeed, that all wood and stone carving of merit, concerned even remotely with the period, is popularly attributed to that artist.[*]

Between 1670 and 1672 Wren built the archway known as Temple Bar across Fleet Street at the western boundary of the City. This was removed in 1878 to and re-erected in Theobald's Park, Hertfordshire. The commemorative column near London Bridge, known as the Monument, was built by him at about the same time. The Royal Exchange was an earlier reconstruction, though not on the noble scale conceived in his plan of London, where it was to form what he obviously intended to be a new civic centre for the City in the Roman manner. Pepys records that King Charles went to the Exchange " with his kettle-drums and trumpets " to lay the first stone of the new building in October 1667; but in the fire of 1838 it was completely destroyed. A like fate befell the Customs House, which, rebuilt in 1668–9, was burnt down in 1719.

On December 7, 1669, Wren was married to Faith Coghill, daughter of Sir Thomas Coghill, of Bletchingdon, Oxfordshire. A letter from him to her is preserved in " Parentalia," and expresses well the charm of its author's disposition. Two sons were born to them—Gilbert, who died in infancy, and Christopher, born in February, 1675, in which year the mother died.[†] The following year Wren was married again—to Jane FitzWilliams, daughter of Lord Lifford, by whom he had two children—Jane, born in 1677, and William in 1679, in which year, by a somewhat curious parallel, the second Lady Wren also died. Wren's daughter, Jane, for so long as she lived, was her father's constant companion; but she pre-deceased him by twenty years, and was buried in the crypt of S. Paul's.

A knighthood appears to have been given to Wren in 1674, the year before S. Paul's was commenced and when a great number of his churches were in process of building. As Surveyor-General he was then being worried by numberless questions arising from the general reconstruction of London, and from his desire to prevent haphazard, irregular or unsound building. He found so many structures being carelessly or badly done that he petitioned the King on the subject, and asked for powers " to restrain the same or other ways to consider of the premises as in your Majesty's wisdom shall seem most expedient "—which petition was readily granted, and a Royal Proclamation issued, giving Wren the effective control he desired. His various works were now succeeding one another at such a rate that it is difficult to follow them. In the thirty-five years, 1675–1710, in which S. Paul's was under construction the great mass of his City churches was built, together with Trinity College Library (1673–1679) and the Chapel of Emmanuel College (finished 1677) at Cambridge; the Honywood Library at Lincoln (1675), the Kilmainham Hospital at Dublin (1680–1686), a portion of the Palace at Winchester (1683–1685) for King Charles, little of which remains, and the schoolroom of the College of that place at about the same time; the Guildhall at Rochester (1687), the Town Hall at Windsor (1688), the College of Physicians, London (1689); the Chapel of Trinity College, Oxford (1691–4), Morden College, Blackheath (1695); and, in or near London, work at Drury Lane Theatre, Chelsea Hospital (1682–1692), large additions at Hampton Court (1689–1694), the Orangery at Kensington (1705), and the magnificent Greenwich Hospital (1696–1705). These do not by any means exhaust Sir Christopher Wren's works at this period, to describe which, or touch upon their merits, would occupy many volumes.

Of the splendid Library for Trinity College, Cambridge, a more distinctively Palladian treatment than is usual with Wren may be remarked; and, as showing his care for details,

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[*] Some main dimensions of the Cathedral may be useful as given by A. Pugin in " Public Buildings of London," viz. :—

From the vaults or crypt to the top of the cross, 381 feet, the crypt representing 21 feet to nave pavement; from the western steps to the east end, 550 feet; from the top of steps to pine apple of western turrets, 210 feet; diameter of walls supporting the outer dome, 107 feet; length of the short arm of cross (plan of building), from north to south doors, 240 feet; and from base of transept steps, 313 feet; height from pavement to ridge of roof, 112 feet; from the springing of the outer dome to the top of the cone supporting the lantern, 53 feet; inner measurement of nave and side aisles, 93 feet 8 inches.

[†] " Parentalia."

[‡] A great number of useful papers on the subject of the colour decoration of S. Paul's were produced about the middle of last century, when the question was being keenly discussed. They may be found in *Transactions*, R.I.B.A., and other Architectural Journals of the time, and their authors include Professor Cockerell, Barry, Donaldson, Penrose and others. Needless to say, there has also been a mass of discussion since.

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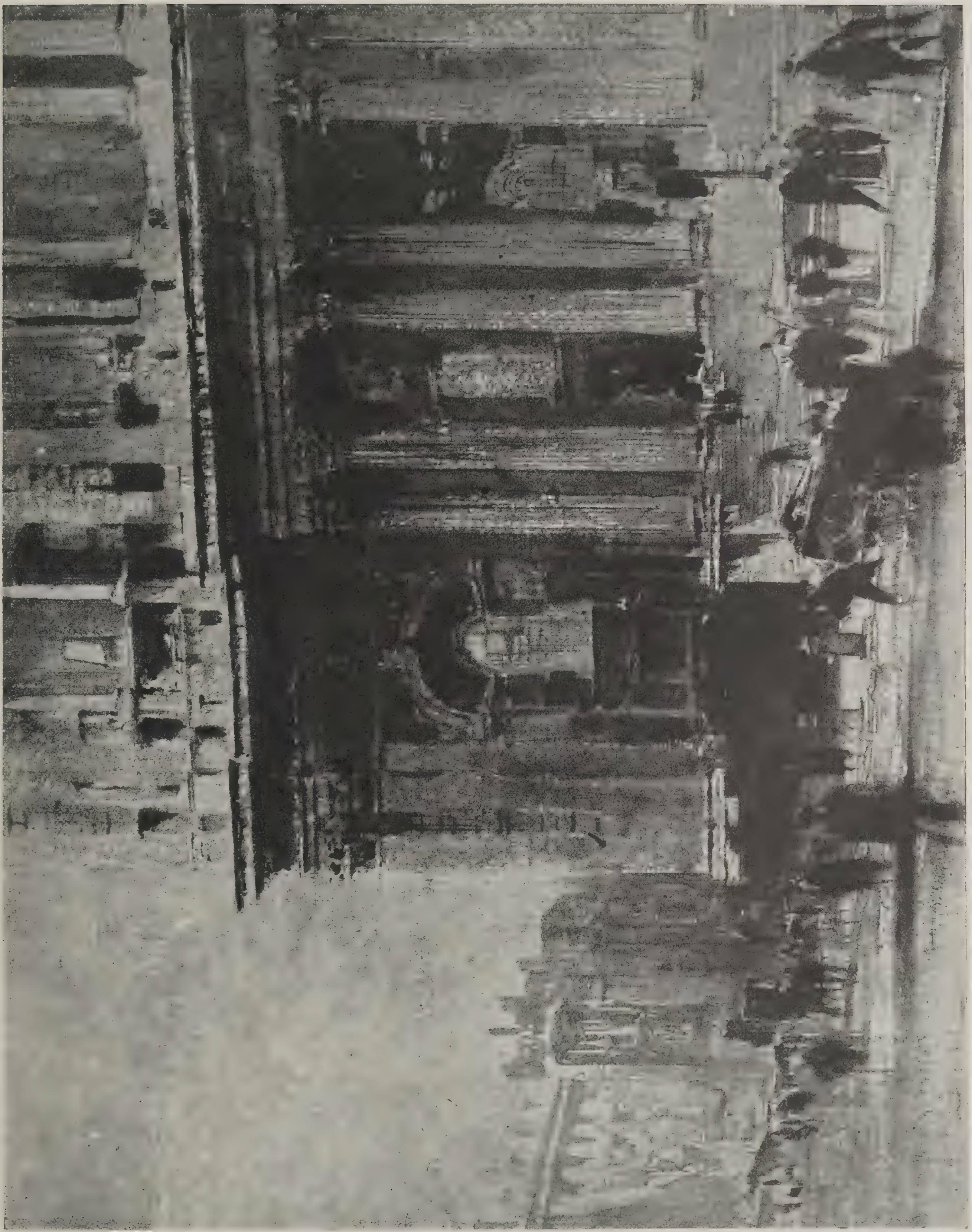
[*] *See* Diary of John Evelyn, 18th January and 1st March, 1671.

[†] The first Lady Wren and her infant son Gilbert were buried in the chancel of the then Church of S. Martin-in-the-Fields.

From a Water-colour Drawing by William Walcot



In this drawing Mr. Walcot gives us a glimpse of St. Paul's under typical London atmospheric conditions. The feeling of rain and mist is deftly suggested, with the weathered mass of the cathedral looming through.

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an extract from a letter to the Master of Trinity may be quoted, in which he said " I would willingly take pains to give all the mouldings in great; we are scrupulous in small matters and you must pardon us, the architects are as great pedants as critics and heralds."

The masterly simplicity of Chelsea Hospital causes it to be less remarked upon than most of Wren's buildings; but a study of it emphasizes the elegance of his taste and his skill and judgment in the appropriate use of materials. Few, ndeed, could have combined such effect with so rigid an economy. The buildings at Hampton Court and Greenwich were more ambitious and ornate. The former of these constituted a considerable addition to the earlier Tudor palace, to meet the desires of William and Mary for a country residence offering greater quietude than the associations of London admitted. Wren met the requirements in the stately manner that all may now see, and if some parts are not so esthetically satisfying as others, the interference of the King is probably responsible. But Greenwich Hospital is without much doubt Wren's finest scheme of buildings of a civil or domestic kind, and its situation on the edge of the river, near the former palace in which Queen Elizabeth was born, adds to the magnificence of its effect. Only the block known as the Queen's House had been built by Inigo Jones, of the residence contemplated by King Charles I, and a portion of another by John Webb for Charles II. In the extensive additions which Wren made, and in which he was assisted by Hawksmoor, he formed the whole into one great dignified scheme, and out of the hospital for disabled seamen created an architectural masterpiece. The angle domes are notable features, happily placed, that much assist the general effect of this remarkable group of buildings. Alone, and apart from his other work, Greenwich would suffice to place Wren in the front rank of Renaissance architects, among the greatest masters of Italy and France.

Mention should, perhaps, be made of Marlborough House, now one of the minor Royal residences, and of the fact that Wren acted as Surveyor for Westminster Abbey from 1698 to 1722, the year before his death. While in that capacity he made recommendations in respect of a ofty central spire and the western towers, though the atter were not built by him, as is so often supposed. Even through the most strenuous period of his life, interest in the affairs of the Royal Society, of which he became President in 1681, was sustained, and his multitudinous public duties were added to by his representation of Plympton, Weymouth, and Windsor in Parliament beween the years 1685 and 1700.

The closing phase of Sir Christopher Wren's life was reached as the construction of S. Paul's approached completion. King William had died, and been succeeded by Queen Anne, in 1702. John Evelyn, who from the first had been one of the S. Paul's Commissioners and a valued friend of Wren's, died in 1706, at the age of eighty-five. In 1710 the crowning act in the structural completion of the cathedral was performed, when Wren's son, Christopher—born in the year when its building commenced—placed the final stone of the lantern in position in the presence of his ather, the workmen (including Strong, the master-mason) and of a vast concourse of citizens. From this same lantern might be viewed all round scores of buildings, with towers and spires of extraordinary beauty and variety, owing their origin to the same inspired spirit. Yet for fourteen years Wren had been persecuted on the false and petty charge that he was prolonging the construction of S. Paul's in order to enjoy his inadequate salary for a longer time. A moiety of his salary had, indeed, been stopped from the year 1697, " the better to encourage him to finish the same work with the utmost diligence and expedition."

Such treatment seems incredible. Worse was to follow, and culminated in a scurrilous pamphlet on " Frauds and Abuses at S. Paul's," published anonymously, but probably encouraged if not inspired by the Commissioners, who, as the building approached completion, showed themselves actively in opposition to the architect. Sir Christopher's answer to the pamphlet and his petition to the Archbishop of Canterbury and Bishop of London availed nothing; but an appeal to the House of Commons obtained support for his own view of an extraordinary situation and an instruction for payment of the arrears of his salary. Much of the beautiful decorative finishing of the building which he had in mind to do—metal work, the application of coloured marbles, mosaic work and gilding among other things—was frustrated by these annoyances, and every difficulty seems to have been placed in the way of his achieving the result that he intended. Among other things Wren desired to employ Tijou on a low, graceful railing of wrought iron round the exterior of the cathedral, but he was overruled in favour of a high and clumsy fence. Such humiliating and senseless irritations continued until, following the death of Queen Anne, the new King (George I) dismissed Sir Christopher Wren from his office and bestowed it upon one Benson, " whose cringing incompetence," as Miss Milman puts it, " marked him out for Court favours."*

Wren now returned permanently to the house at Hampton Green, that had been granted to him by Queen Anne some years before, saying " Nunc me jubet Fortuna expeditius philosophari,"† and there, free from worldly affairs, he passed the remaining years of his life, " in contemplation and studies and principally in the Consolation of the Holy Scriptures; cheerful in Solitude and as well pleased to die in the Shade as in the Light."‡ It appears afterwards to have been his custom to drive, once a year, to S. Paul's, and, sitting beneath the dome, spend some time in viewing his master-work. On one such occasion, being in wintertime, he caught a chill, and, after dining on February 25, 1723, died in his chair, with an appearance of perfect calm upon his features. They laid him near his much-loved daughter in the south-eastern portion of the crypt of his Cathedral Church. The famous inscription, composed by his son, formerly placed in the crypt but now prominently inscribed above the door of the north transept, could hardly have been bettered. From its position and the fine simplicity of its wording it constitutes the most appropriate memorial that could be given him, " Subtus conditur hujus Ecclesiæ et Urbis Conditor Christophorus Wren, qui vixit annos ultra nonaginta, non sibi, sed bono publico. Lector, si Monumentum requiris circumspice." And we may now look around us in a still wider sense, for he has impressed his influence upon the architecture of two further centuries, wherever the English language is spoken.

To a greatness of mind and character and a variety of abilities that have been rarely equalled, Wren added a modesty and disinterestedness in respect of material advancement or worldly gain that exposed him to persecution and the ingratitude of mean persons holding power in the times in which he lived. The debt his country owes him has never yet been acknowledged. His contemporary, Steele, truly said of him§ that " he was not only in his profession the greatest man of that age, but had given more proofs of it than any other man ever did "; that though some said " Surely Nestor will now be famous, for the habitations of gods, as well as men, are built by his contrivance," it was not so, and his labour and skill were all forgotten. Can it be said that it is not so now? In the interval of two hundred years since his death the greatness of Wren and the influence of his work have been increasingly felt by those whose interests, in however humble a degree, run in the same direction as his. These will surely seek now to secure such general regard for his memory as will enable it to be truly recorded of him, as did Tacitus of Agricola, that " delineated with truth and fairly consigned to posterity, he will survive himself and triumph over the injuries of time."

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* An entry in " Parentalia " bearing on this incident appropriately quotes, " And there arose a King who knew not Joseph " (Acts vii. 18).

† " Now Fortune commands me to apply myself more closely to Philosophy."

‡ " Parentalia."

§ In the 52nd Tatler. August 9, 1709.

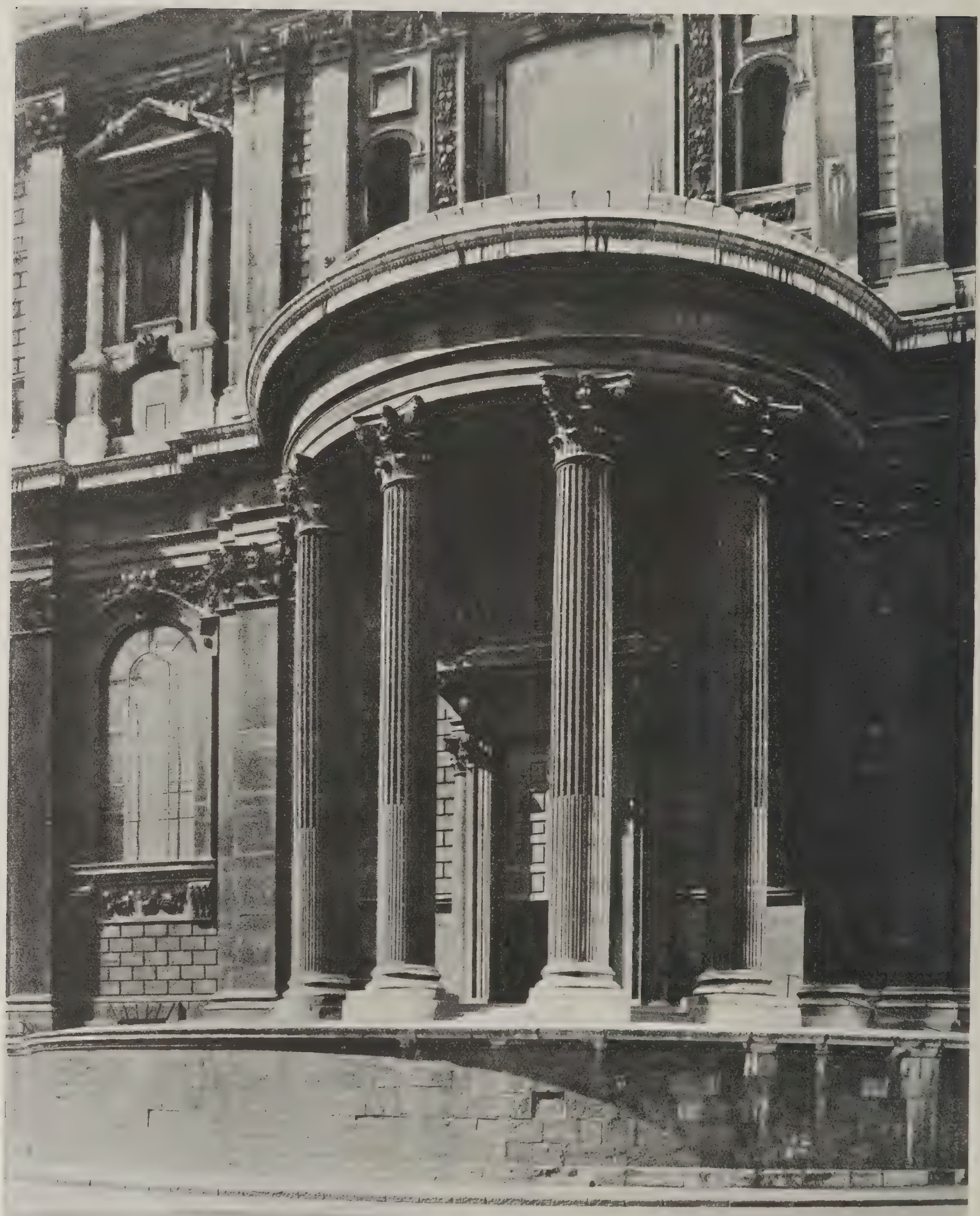


Photo: W. F. Taylor.

ST. PAUL'S CATHEDRAL: THE SEMI-CIRCULAR PORTICO TO THE SOUTH TRANSEPT.

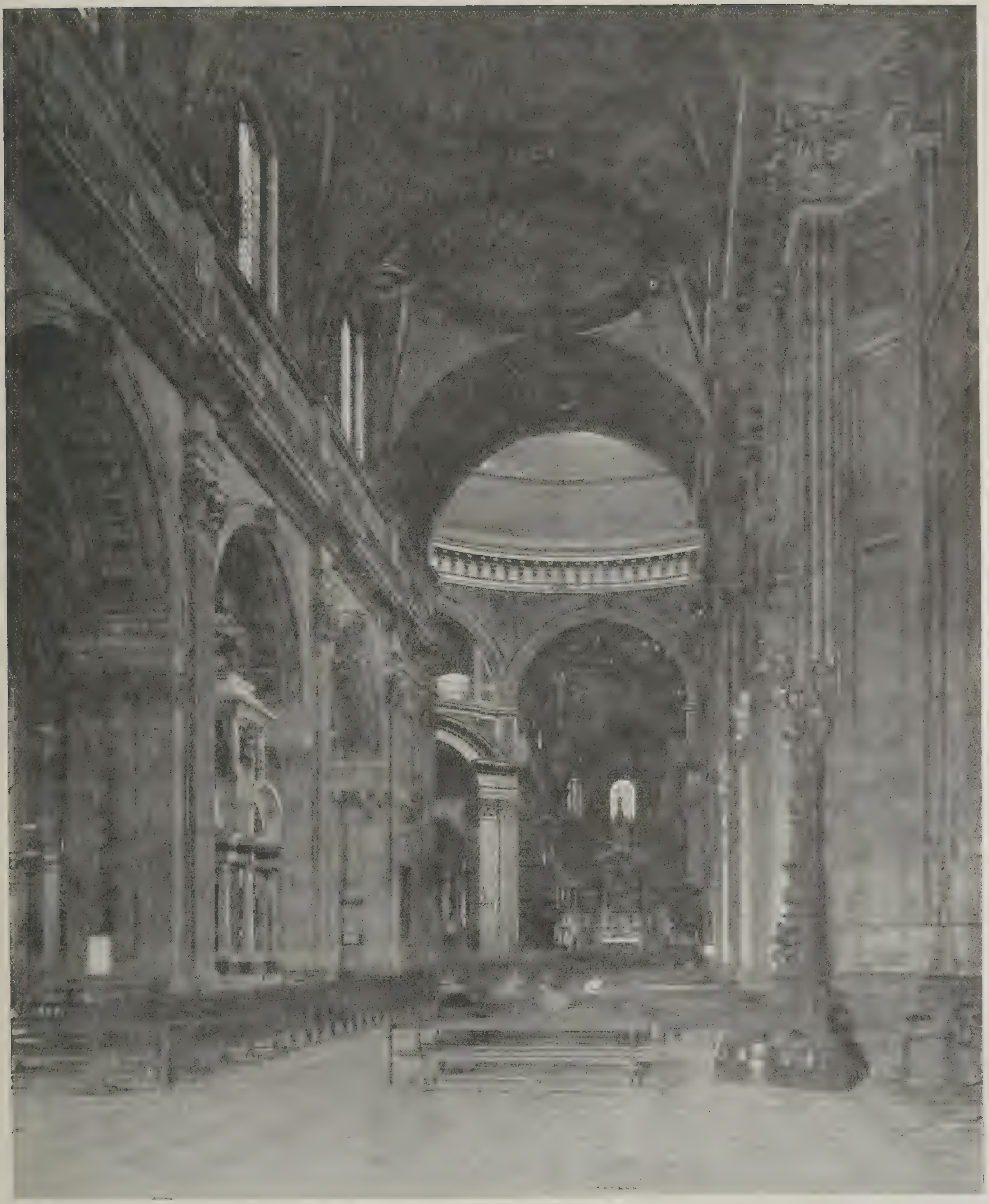


Photo: W. F. Taylor.

THE NAVE OF ST. PAUL'S, LOOKING EAST.

# The Public Buildings of Sir Christopher Wren

## By WALTER H. GODFREY, F.S.A.

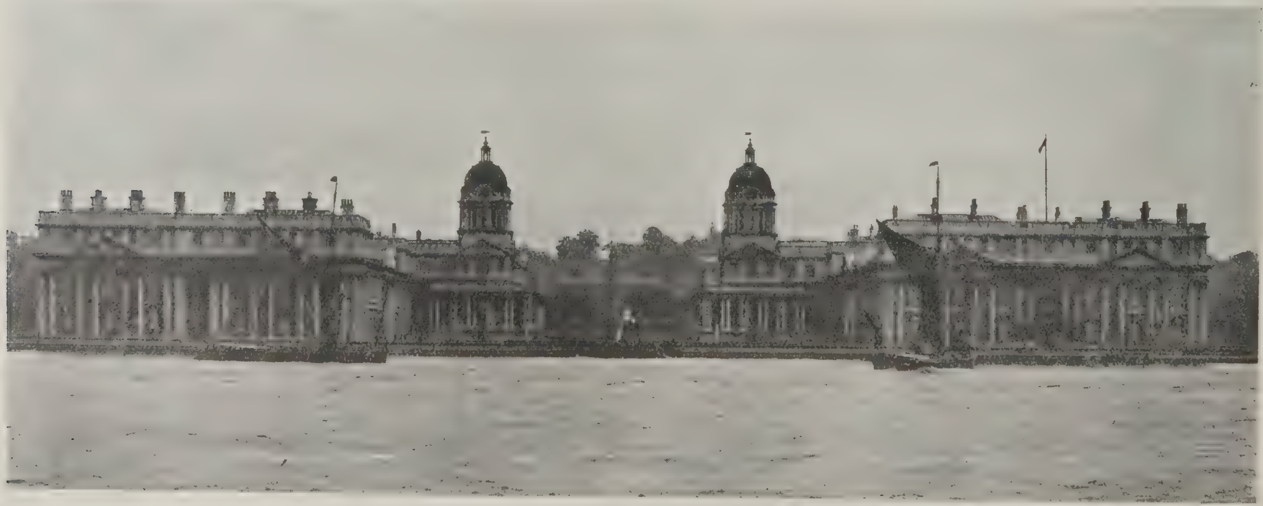
THE *dictum* of Jean Mignot, when he consulted with the architects of Milan Cathedral in 1398, *"ars sine scientiâ nihil est,"* attains a deeper significance when illustrated by the signal success of Sir Christopher Wren. And yet, are we not sometimes surprised when we consider that so transcendent an accomplishment in the world of art as Wren's work exhibits should apparently be the outcome of the scientific mind? The explanation, if we seek it, will probably be found in the fact that the really great man moves freely in all the departments of mental and emotional activity; he does not recognize the limitations which nowadays too often tie the feet of the expert; *nihil humani a me alienum* is literally his vital principle.

Wren has been called an amateur, and if the title is justly bestowed on all who have not served a youthful apprenticeship to the art of building, he is without doubt one of a noble company who have given the world architectural gifts without price, which are cherished in every land. The great builders of the middle ages, and even of the Renaissance, turned to the supreme problems of architecture energies which had been trained in quite other pursuits. The architect—the super-artificer—must possess an unusual type of mind, an insight into the potentialities of a hundred crafts, and he needs, more than any technical skill, the power of absorbing what is essential from each of these. Sir Reginald Blomfield has laid stress upon the extraordinary resourcefulness of Wren, and on his ability to turn the knowledge of other people to account. He was, however, no compiler of contemporary designs; he was not the slave, but the master of his means and his material. He stamped his whole output with the hall-mark of his own greatness.

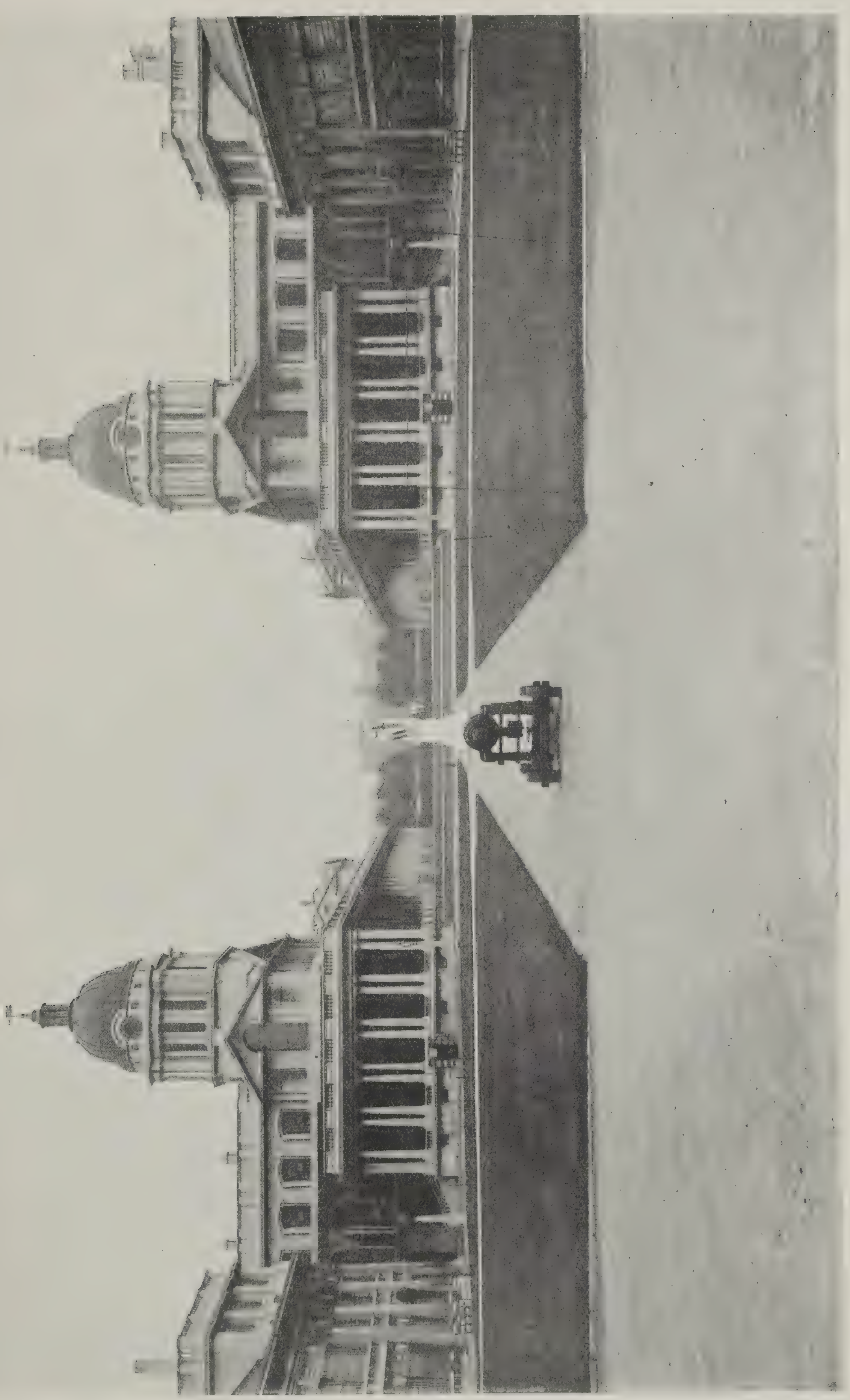
To Wren came the almost unique opportunity of designing a veritable host of public buildings, and he seized on the occasion with eagerness and used it with remarkable consistency. He trained himself to be one of the world's supreme builders, which, translated into modern parlance, is to be an artist of the front rank. To-day we divide the world into three classes—the artists, the connoisseurs, and the more or less indifferent or bewildered public—and we talk of teaching the last-named the mysteries of art, and quarrel as to whether this is best done by encouraging the receptive or executive faculties. It is an unnatural division, and does not occur in the realms of literature or music, where the author and composer are sure of a reasonably general and intelligent reception of their compositions. In the plastic and pictorial arts there is no such freemasonry or common understanding. To the man-in-the-street the genius of Sir Christopher Wren is unperceived; the chief exponent of what was, at one time, the most popular form of art receives homage from the student and the connoisseur alone.

It is perhaps due to this fact that Wren's attainments are discussed in a somewhat critical and artificial atmosphere. Here is a man who without the slightest hesitation assumed the architectural command of his age and maintained the position to the end of an abnormally long life. The list of buildings to his credit is so long and so important that it seems not unreasonable to attribute everything that is outstanding in his period to this over-reaching genius. The demands of modern criticism require documentary evidence in support of the ascription of any building to a given architect, but this insistence on complete proof may be carried too far in the case of a man whose advice and counsel were sought by everyone and the characteristics of whose design are manifest in a number of buildings for which he may not have been the titular architect. In the case of the College of Physicians, Warwick Lane, for instance, Mr. Arthur Stratton has pointed out the extreme probability of Wren's authorship, although Robert Hooke is generally credited with the design. The latter, a scientist like Wren, assisted the great architect as surveyor, and if he were, in fact, the designer of Montagu House and Old Bethlehem Hospital, he certainly has a claim to the rank of artist. Unless, however, we regard Wren as merely the chief practitioner in a style that arose independently of him, instead of the virtual creator of the phase of the later Renaissance that obtained from Charles II to Queen Anne, we are bound to see the hand of the master in such designs as these.

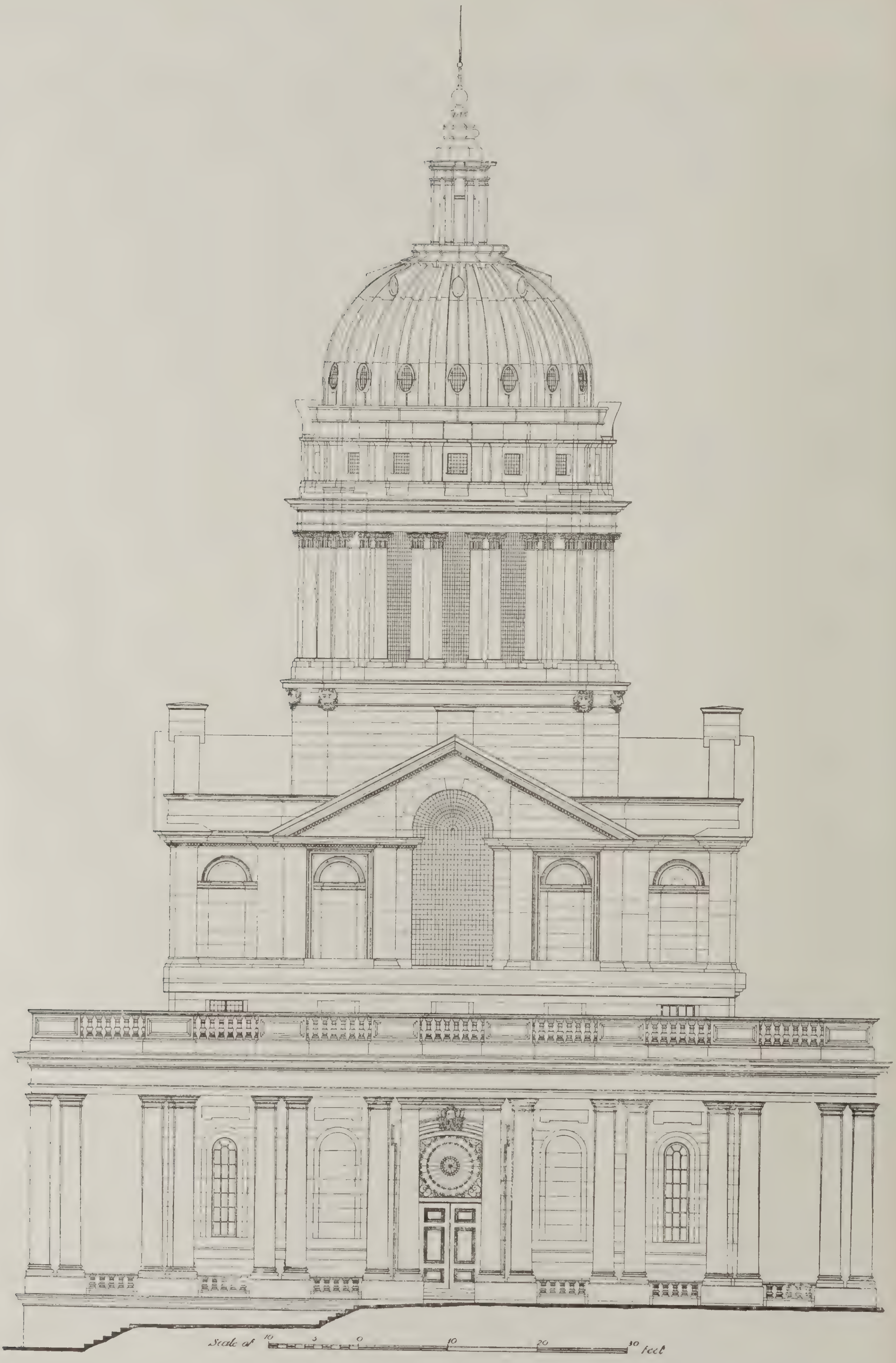
It is common to hear some disparagement of Wren's early work on account of his inexperience, and his eccentricities, as displayed most notably in the warrant design for St. Paul's Cathedral, are cited as due evidence of the limitations of his genius. And yet, if one dares to possess a catholic taste in architectural matters, one can find a relish in even these so-called failures, and experience a joy in the tireless experimentation of Wren's self-tuition. The purist may recoil from the vision of St. Bride's tower poised on the top of St. Paul's dome, but we may be sure that it would have been infinitely more delightful than scores of more recent buildings that have disfigured the City, and it might have set the fashion in an inconsequent gaiety which our sombre architecture often lacks. Tom tower at Oxford is a case in point, an ever-present joy that laughs at criticism. Here was a live force, handling every problem with vigour and imagination, marshalling all the conflicting elements which combine only in an attempt to defeat the distracted architect. How often are materials



GREENWICH HOSPITAL FROM THE RIVER.



GREENWICH HOSPITAL: THE RIVER FRONT.



GREENWICH HOSPITAL: DETAIL OF DOME AND PORTION OF COLONNADE. MEASURED BY A. E. MAYHEW AND L. H. BUCKNELL. DRAWN BY A. E. MAYHEW.

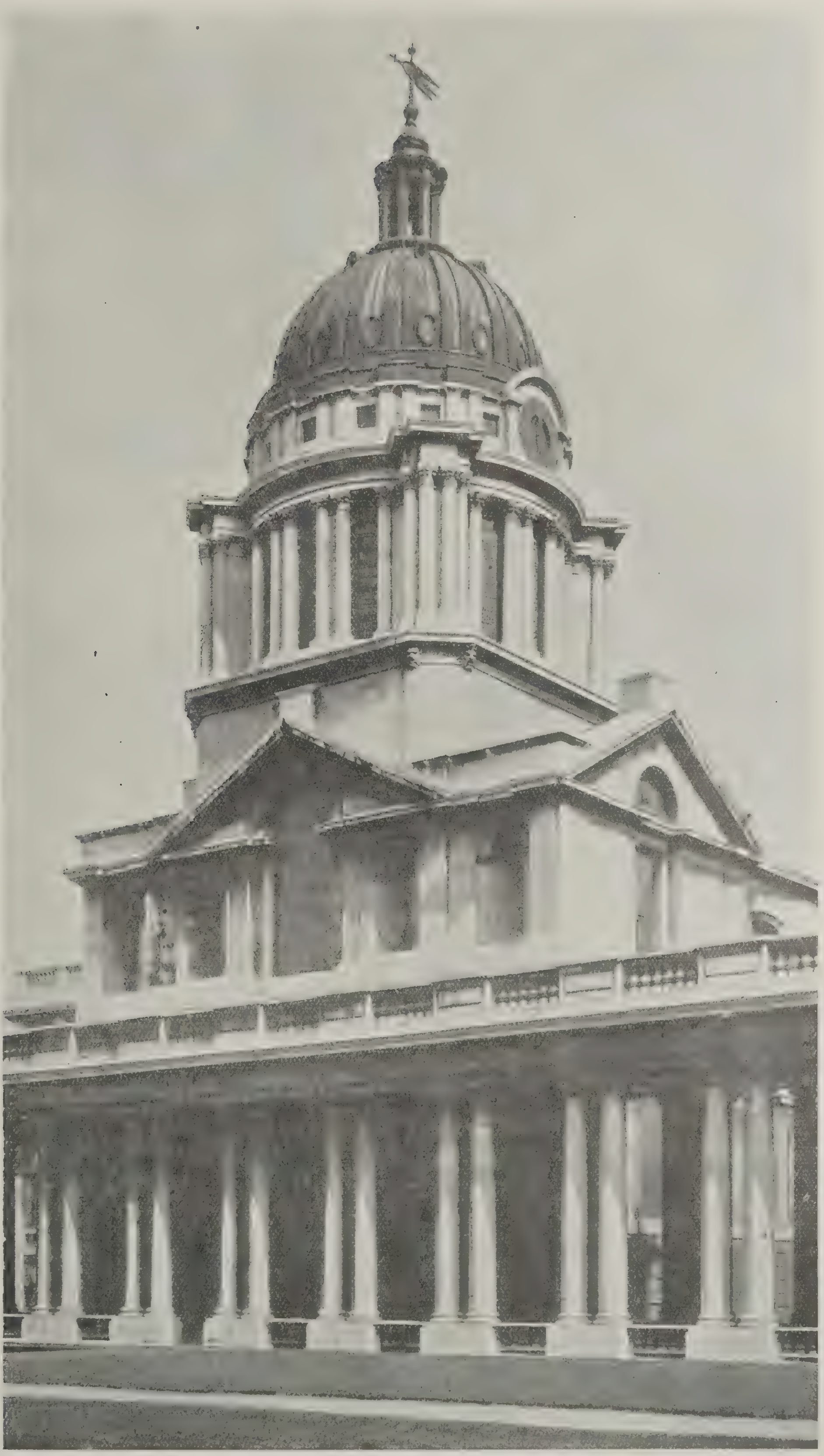
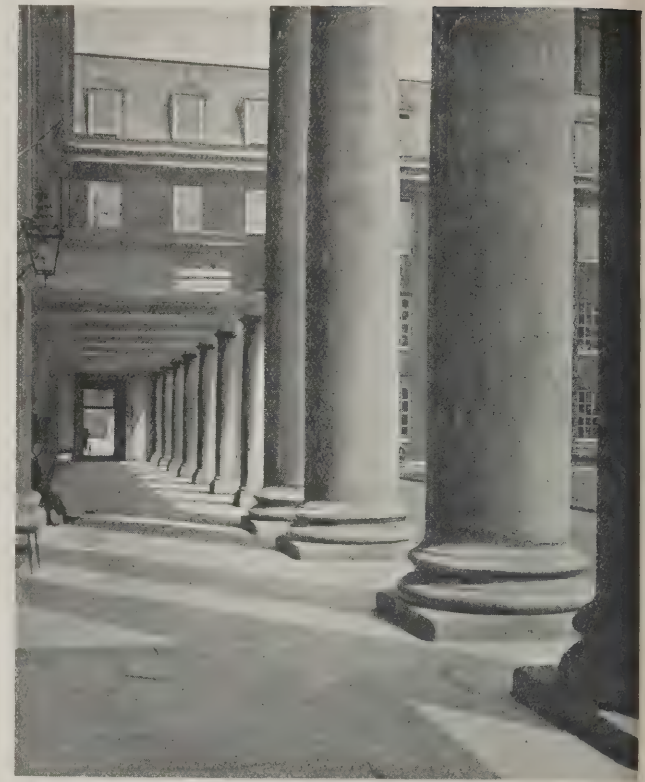


Photo: W. F. Taylor.

GREENWICH HOSPITAL: ONE OF THE END PAVILIONS.



CHELSEA HOSPITAL: THE CLOISTER WALK.

hard and stubborn, sites unyielding, clients antagonistic or suspicious, means scarce, and inspiration far to seek! It is enough that Wren triumphed over a legion of difficulties, maintained his powers until his ninety-first year, and left posterity a more important legacy of fine building than any other Englishman.

Wren's first public work was the Chapel of Pembroke College, Cambridge, which he designed for his uncle, Matthew Wren, Bishop of Ely, in 1663-4; quite a simple and charming building with fully developed Renaissance detail. While this was in course of erection he began the Sheldonian Theatre at Oxford, which now adjoins the Ashmolean building—the latter an exquisite little design formerly attributed to Wren, but recently assigned to an architect named Wood on the evidence of an early engraving. The inner court of Trinity College, Oxford (1665), has also always been held to be the work of Sir Christopher Wren, but in recent years some doubt has been cast on its authorship. The interior of the chapel is richly decorated with carved wainscot and is a most effectively arranged apartment with coved and enriched ceiling and an elaborate reredos. Another work at Cambridge at this time was the chapel and cloister at Emmanuel College, on which Dr. William Sancroft consulted Wren. The roof of the chapel projects forward so that its façade forms the centre of the cloister and picture gallery above, a most pleasing composition with its lower range of thirteen pierced arches.

All this work preceded that historic event which was fated to turn Wren's life into one of monumental activity. The Great Fire of London of 1666 was both an emergency and an opportunity that called for real genius to cope with all the problems which it involved. If Wren was an amateur before, he was soon to become, by means of the number of works in hand, the most experienced of builders. The raising of St. Paul's and the City churches alone would prove more than the work of an ordinary lifetime.

In the process of his City work Wren built, in 1671, the commemorative column known as the Monument, over 200 ft. high, to mark the locality where the Great Fire originated. In the same year he put up the beautiful gateway at Temple Bar, now removed to Theobald's Park, a design which in its gentle dignity and graceful outlines, seems to be a veritable mirror of Wren's character. In this vicinity also are the spacious and delightfully arranged squares of the Temple, built from 1674 to 1684, issuing on to Fleet Street by a gatehouse which is always regarded as one of Wren's happiest efforts. The square opening of the carriageway, flanked by two side arches, is contained in a pedestal of boldly-jointed masonry, forming the base for a tetra-style façade, of which the four Ionic pilasters traverse three stories and support a fine pediment, pierced by a single lunette. It is a beautiful piece of architecture, unnoticed, it is to be feared, by the crowds that pass in Fleet

*Photos: W. F. Taylor.*

CHELSEA HOSPITAL: THE MAIN FRONT.

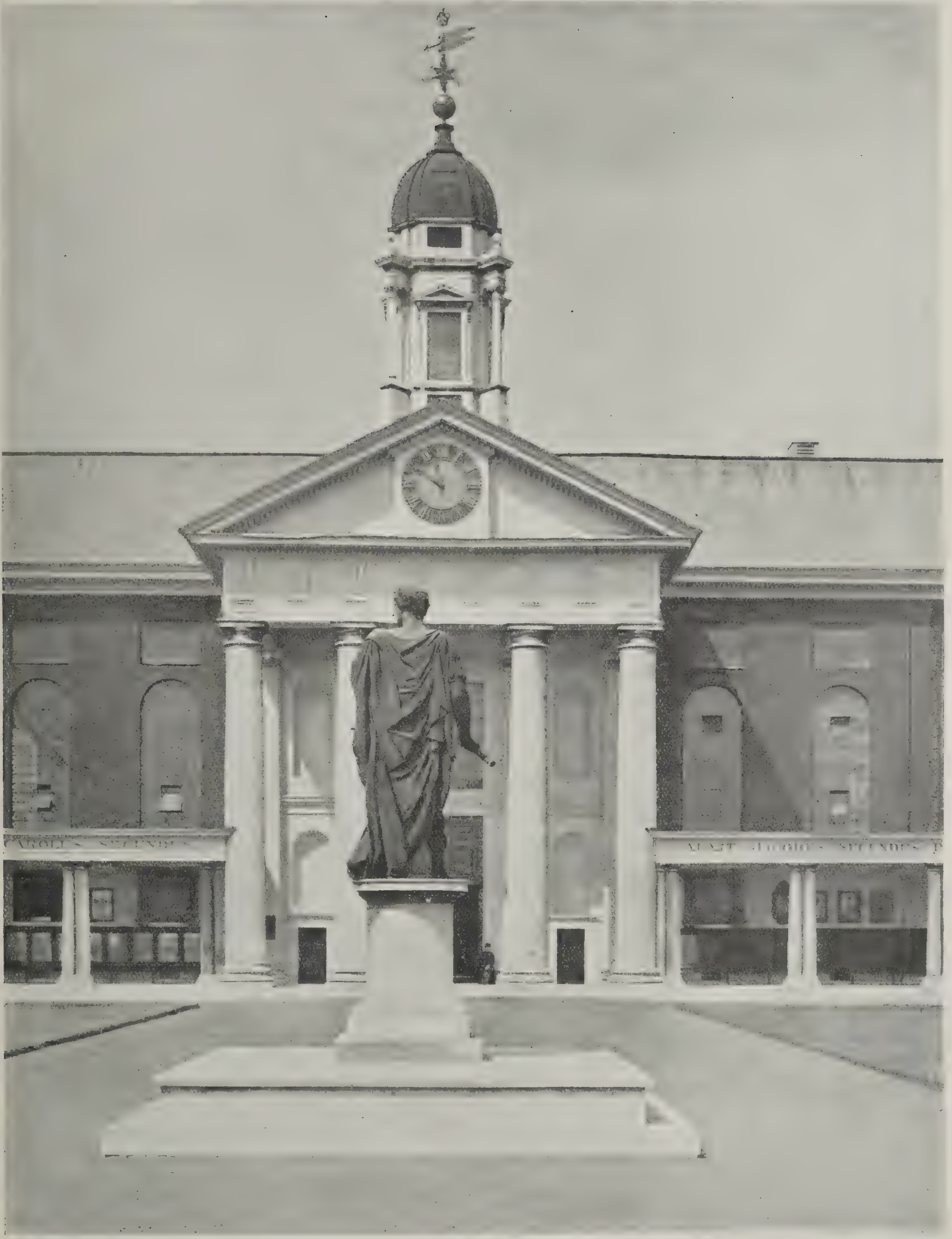
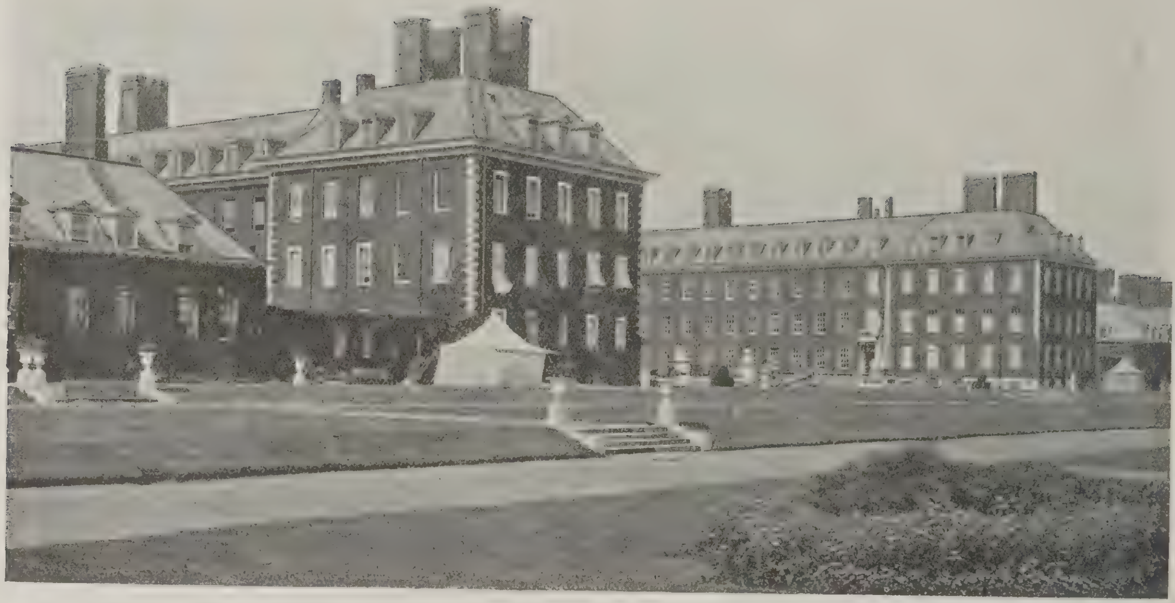
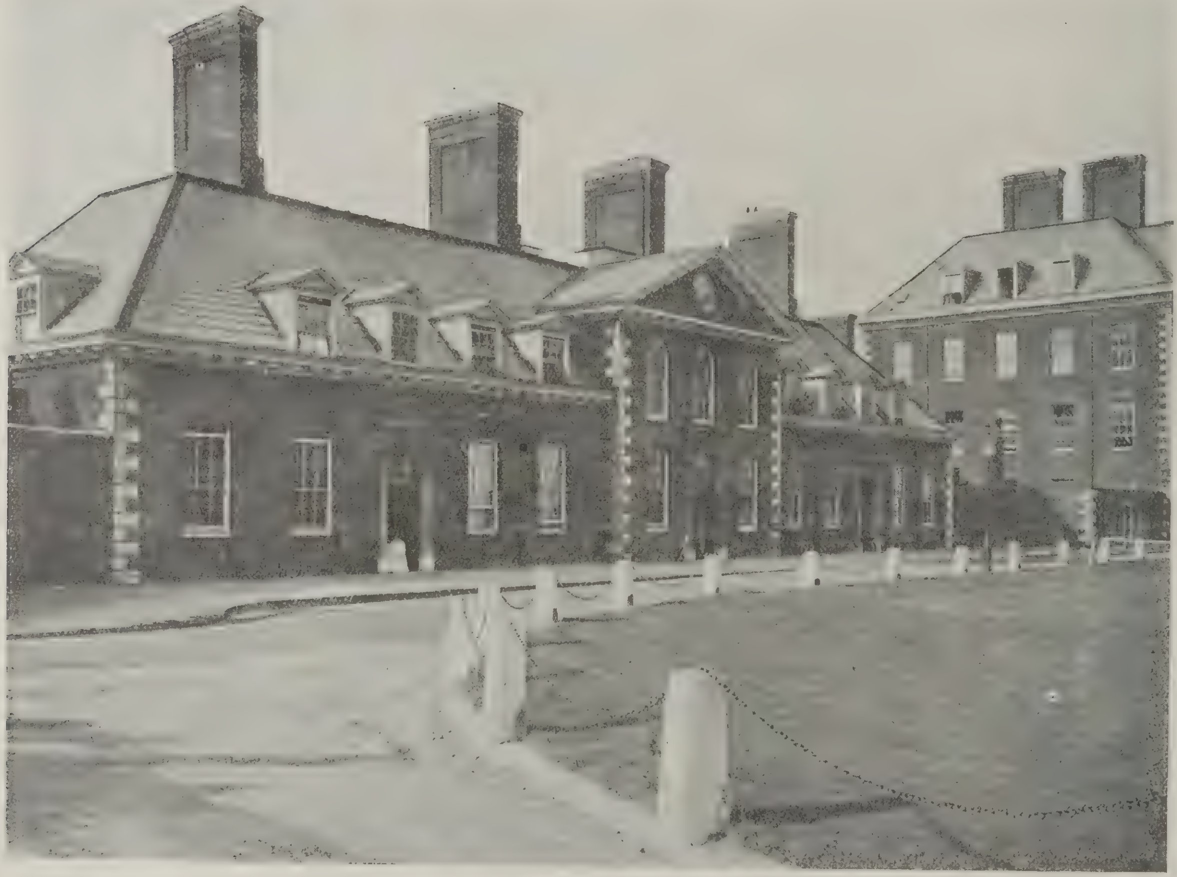


*Photo: W. F. Taylor.*

CHELSEA HOSPITAL: A DETAIL OF THE MAIN FRONT.



A VIEW FROM THE GROUNDS.



AN OUTBUILDING.

*Photos: W. F. Taylor.*

CHELSEA HOSPITAL

# The Garden Front, Hampton Court

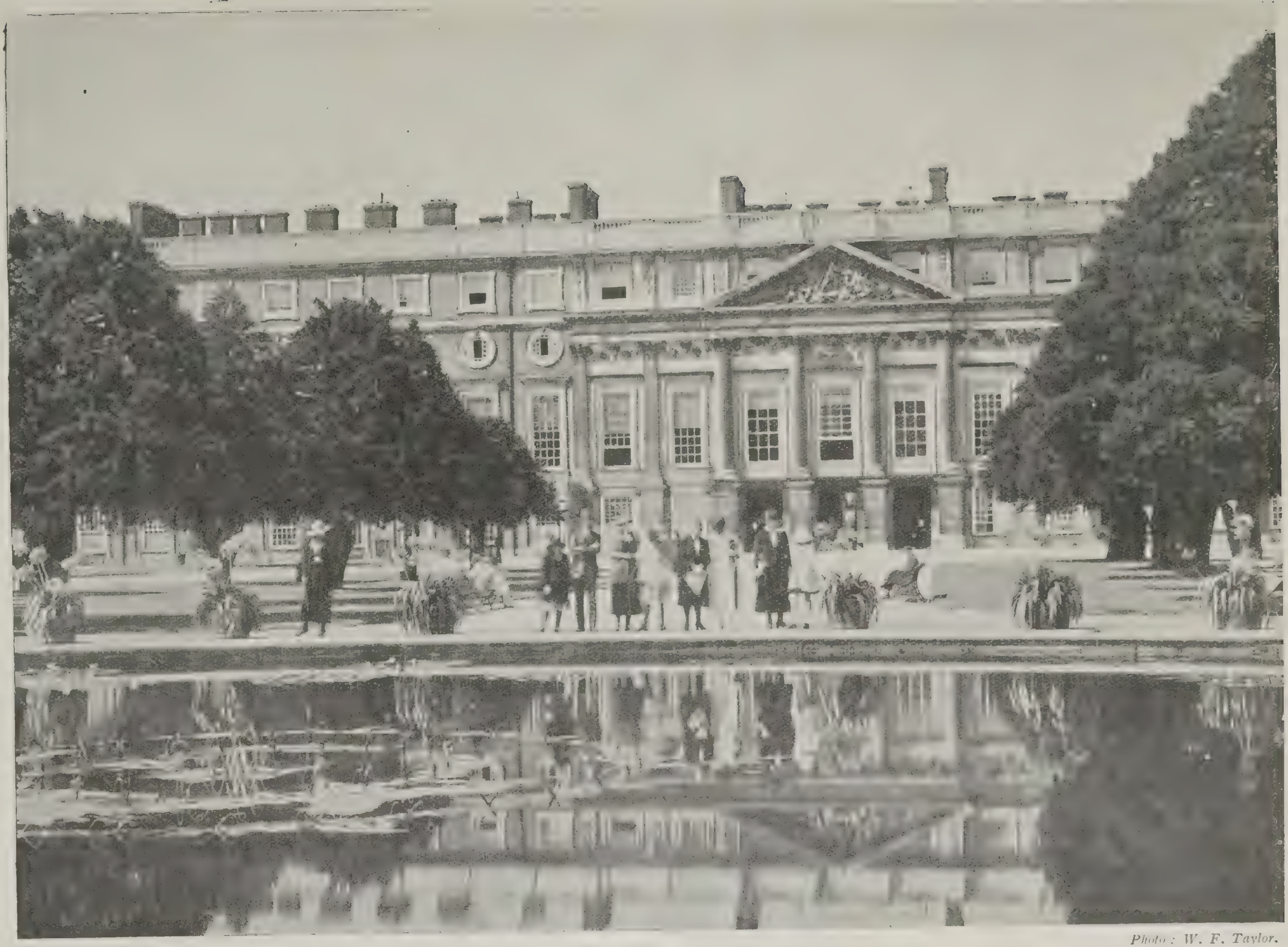


Photo: W. F. Taylor.

Hampton Court Palace is mainly of warm red brick with stone dressings, and was one of Wren's later and most finished works. The work here has that air of quiet dignity which is to be found in nearly all Wren's buildings, and which can be conveyed only by a master. Obviously the creation of one who was an artist and a genius to the finger-tips.

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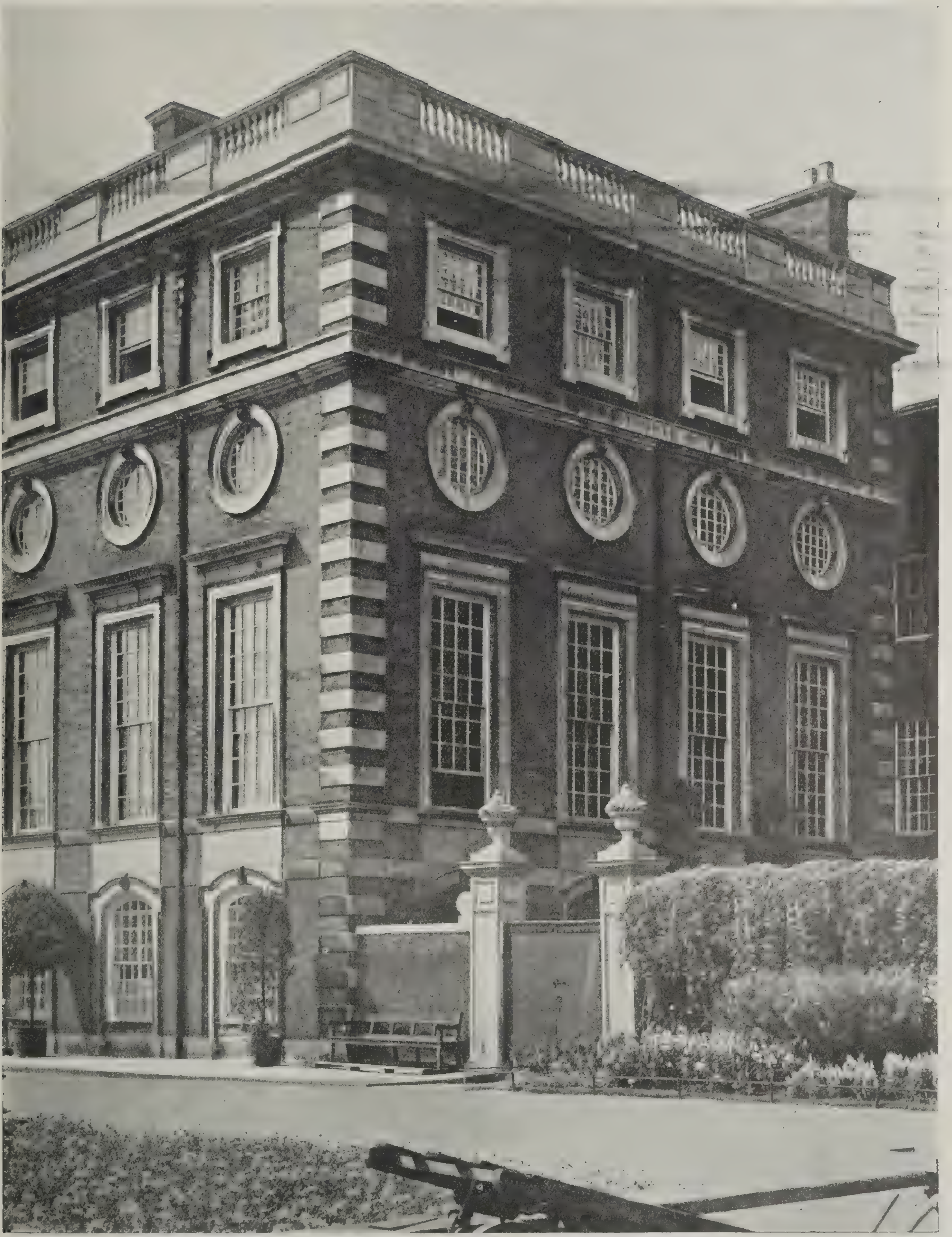

Photo: W. F. Taylor.

HAMPTON COURT PALACE: A DETAIL OF THE GARDEN FRONT.

Street, but loved and remembered by all admirers of Wren. Another interesting public building of this date—the south front of Christ's Hospital—was ruthlessly destroyed not many years ago.

From 1675 to 1690 Wren was building his fine library at Trinity College, Cambridge. Too much praise cannot be bestowed on this beautiful building, or on the thoroughness and skill with which it was worked out. The device by which the lowering of the library floor (required by the fittings) was screened by partly filling the tympanum of each arch below is well-known, as is its repetition in the Fountain Court at Hampton Court. Wren's own words are worth recalling: "I haue given the appearance of arches as the Order required, fair and lofty; but I haue layd the floor of the Library upon the impostes, which answar to the pillars in the cloister and the levells of the old floores, and haue filled the arches with relieues of stone, of which I haue seen the effect abroad in good building, and I assure you where porches are lowe with flat ceelings is infinitely more gracefull than lowe arches would be, and is much more open and pleasant nor need the mason freare the performance because the Arch discharges the weight, and I shall direct him in a firme manner of executing the designe. By this contrivance the windowes of the Library rise high and giue place for the deskes against the walls." In the same document occur the oft-quoted words regarding the importance of the details: "Wee are scrupulous in small matters and you must pardon us; the architects are as great pedants as Criticks or Heralds." Such stray glimpses as these into the mentality of the artist show us that Wren's success was no more fortuitous than that of lesser men who have to strive hard to gain distinction in their work.

The years 1683 to 1687 saw Wren on important work at Winchester—the royal palace, the college, and Wolvesley Palace; but his three most important public buildings were the two hospitals at Greenwich and Chelsea and the palace at Hampton Court. These works are so well-known that detailed description is unnecessary, and yet it is as well to recall to our minds the great qualities in all three of these important schemes. The general disposition of the open courts at Chelsea, with the wide cloister walk to the south, is a triumph of quiet yet dignified building, completely appropriate to the purpose of this noble refuge for our soldiers. The chapel is one of the most perfectly conceiv interiors from the hands of Wren, and the principal roo in the governor's house is justly praised for its beaut At Greenwich Wren had to incorporate the buildin erected by his predecessors, but he quickly grasped th magnificent opportunity presented by the site, and in th scheme which he devised, and which was subsequentl carried out, he reached the highest degree of breadth an largeness of design. The open square by the waterside wa led like a broad avenue between buildings, made fascinatin by their long colonnaded screens, and marked at the nea angles by lofty dome-covered towers, until the eye reste on Inigo Jones's Queen's House in the distance, and th rising ground of Greenwich Park.

At Hampton Court Wren's magnificent scheme entaile the destruction of the Tudor palace, and we may be gla for historical reasons, that it was not completed. Enough however, was done to exhibit the greatness of the design and to produce one of the noblest buildings of the worl from the contributions of two such entirely different period Hampton Court is largely of red brick, and in this materia Wren made his additions to Kensington Palace, includin probably the delightful Orangery. Among his public work in this material may be counted Morden College, Blackheath—a gem among almshouses—and perhaps Trinit Ground, Mile End Road, and many another building in th same manner.

One would like to have the privilege of compassing backward journey through the years and taking a pee into Wren's office when all his important works were in fu swing. If a magician could work such a miracle we migh find even greater evidence than we now possess of the fa reaching influence of his gentle and yet all-conquering pe sonality. To-day we pay our tribute of gratitude to on who deserved well of his country, and not only of his own but of all ages, for his memory will assuredly win immorta remembrance. In him imagination and a practical commo sense found themselves united. His skill as a builde always breathes the poetry of form, and his most engagin compositions have a genuine fitness for their purpose tha satisfies our desire for "commodity" in building. Englis architecture owes to him a debt of gratitude which onl our homage and gratitude can repay.

PEMBROKE CHAPEL, CAMBRIDGE.

# Middle Temple Gatehouse, London

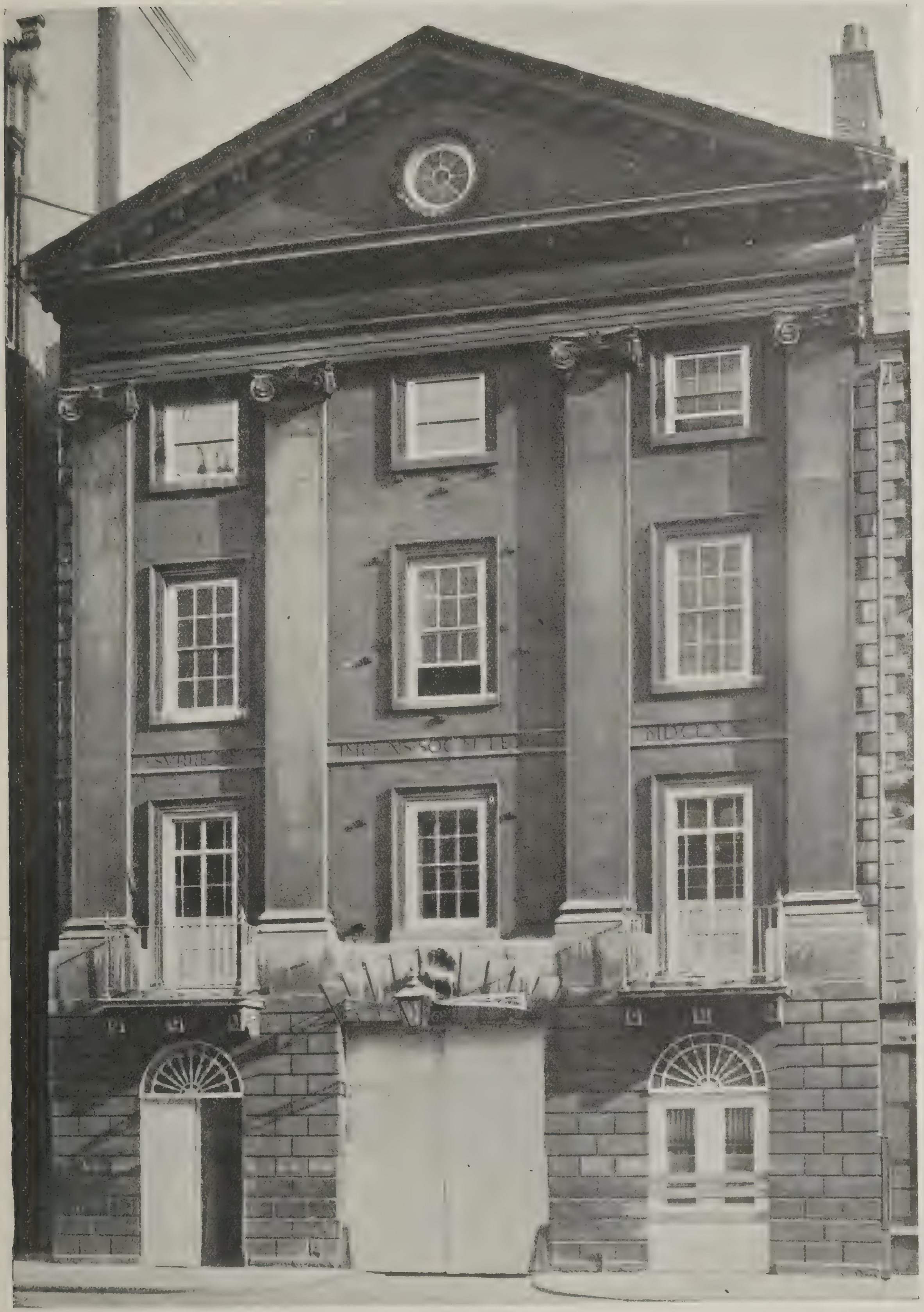

*Photo: W. F. Taylor.*

The Gatehouse to the Middle Temple is one of the last surviving fragments of old Fleet Street. A delightful architectural composition, it ranks as one of the happiest of Wren's minor efforts.

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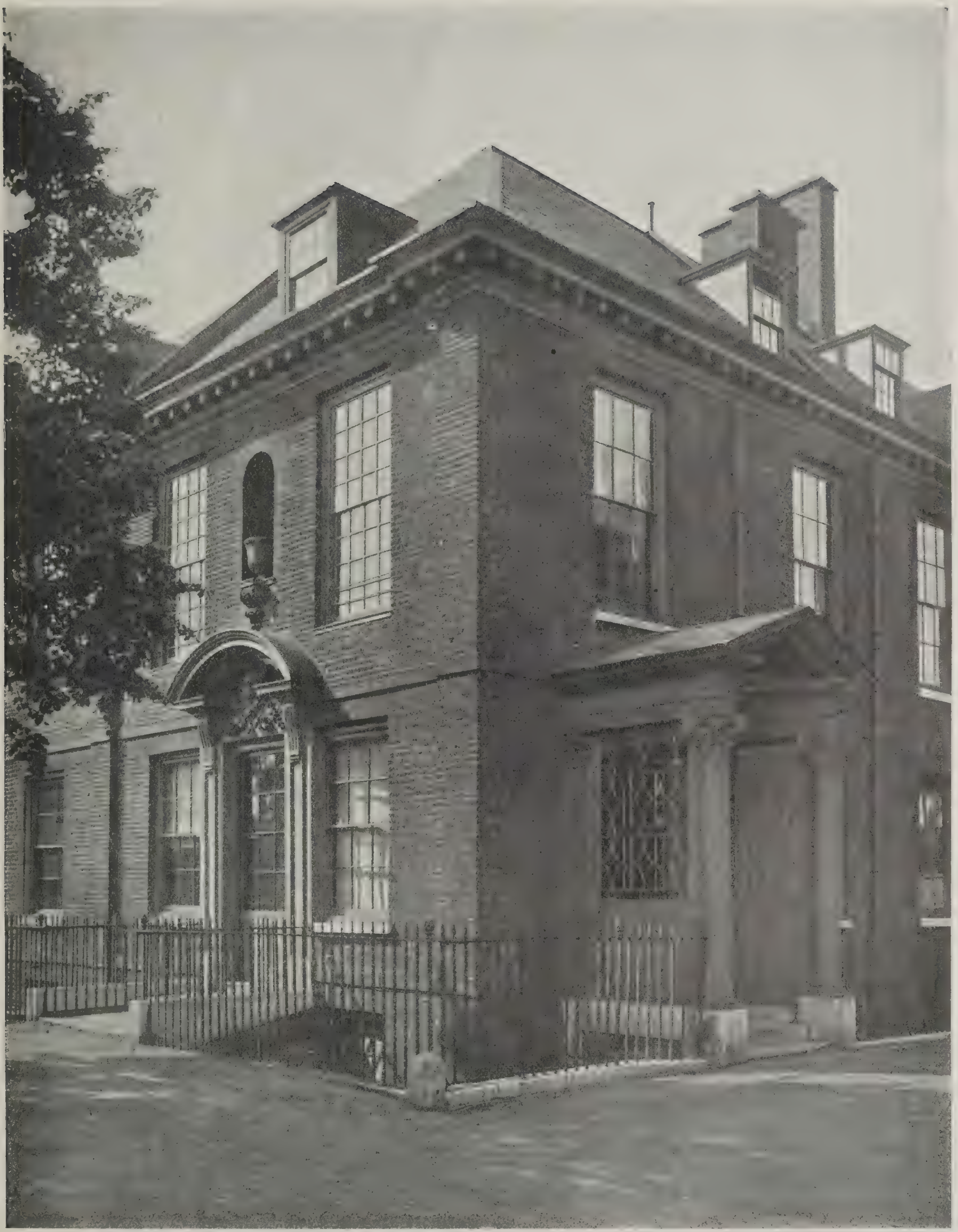
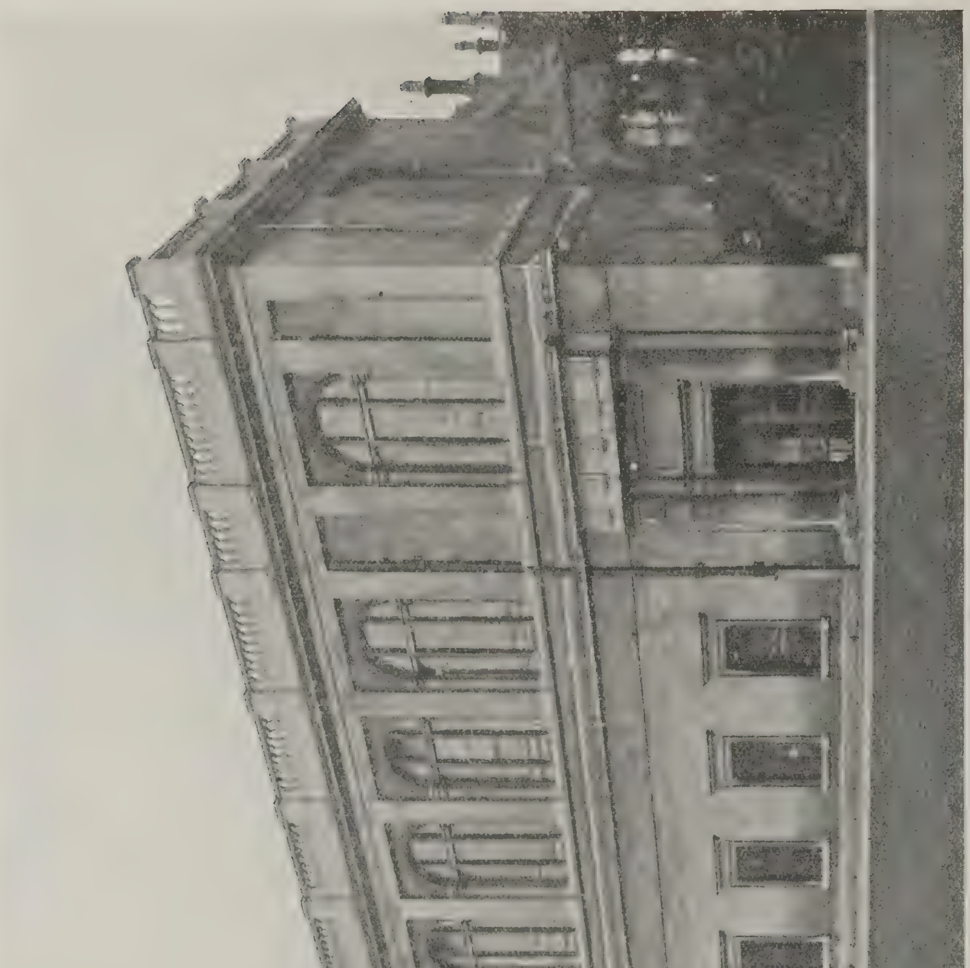
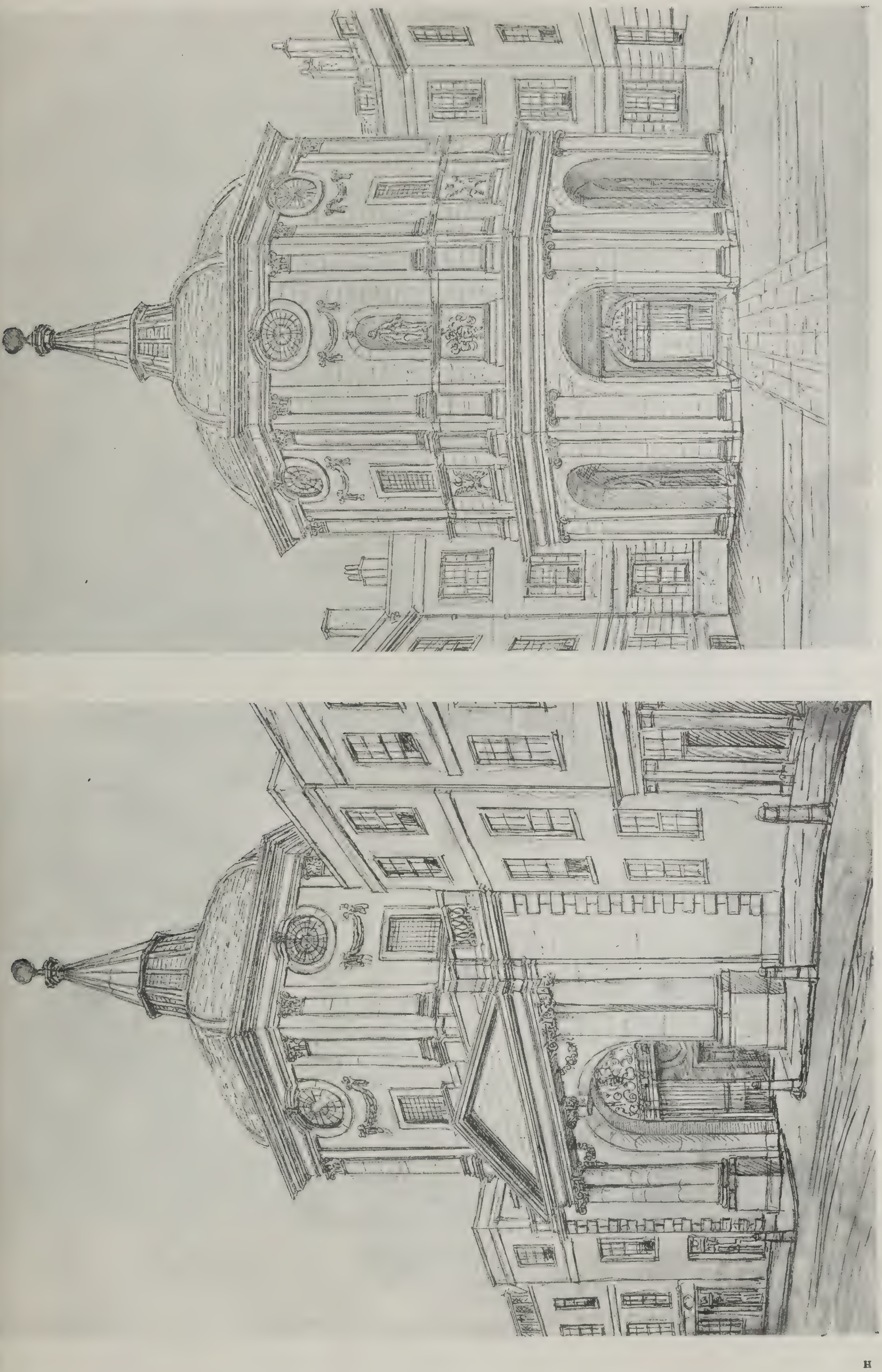


*Photo: W. F. Taylor.*

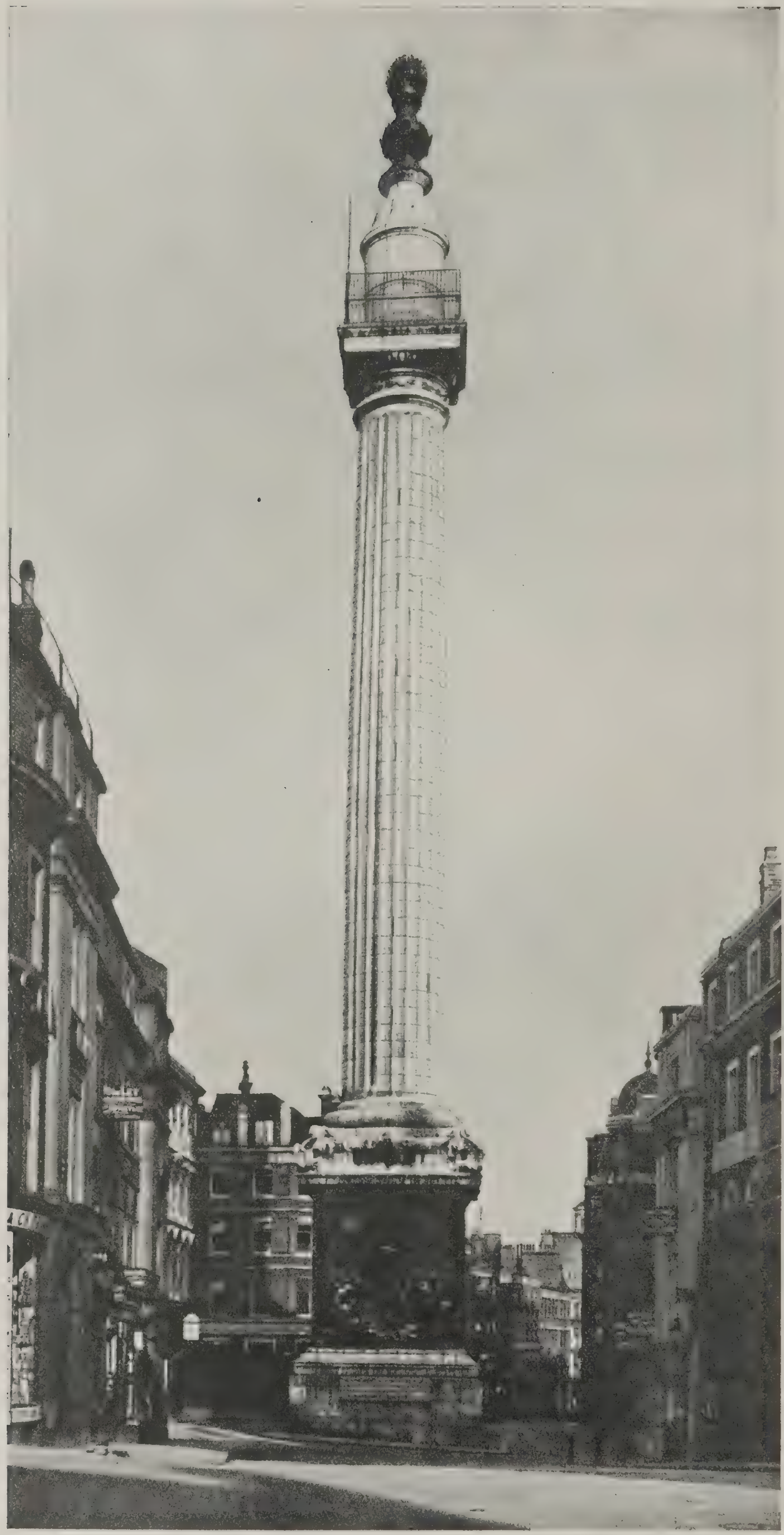
A DETAIL OF KENSINGTON PALACE.



TRINITY COLLEGE LIBRARY, CAMBRIDGE.

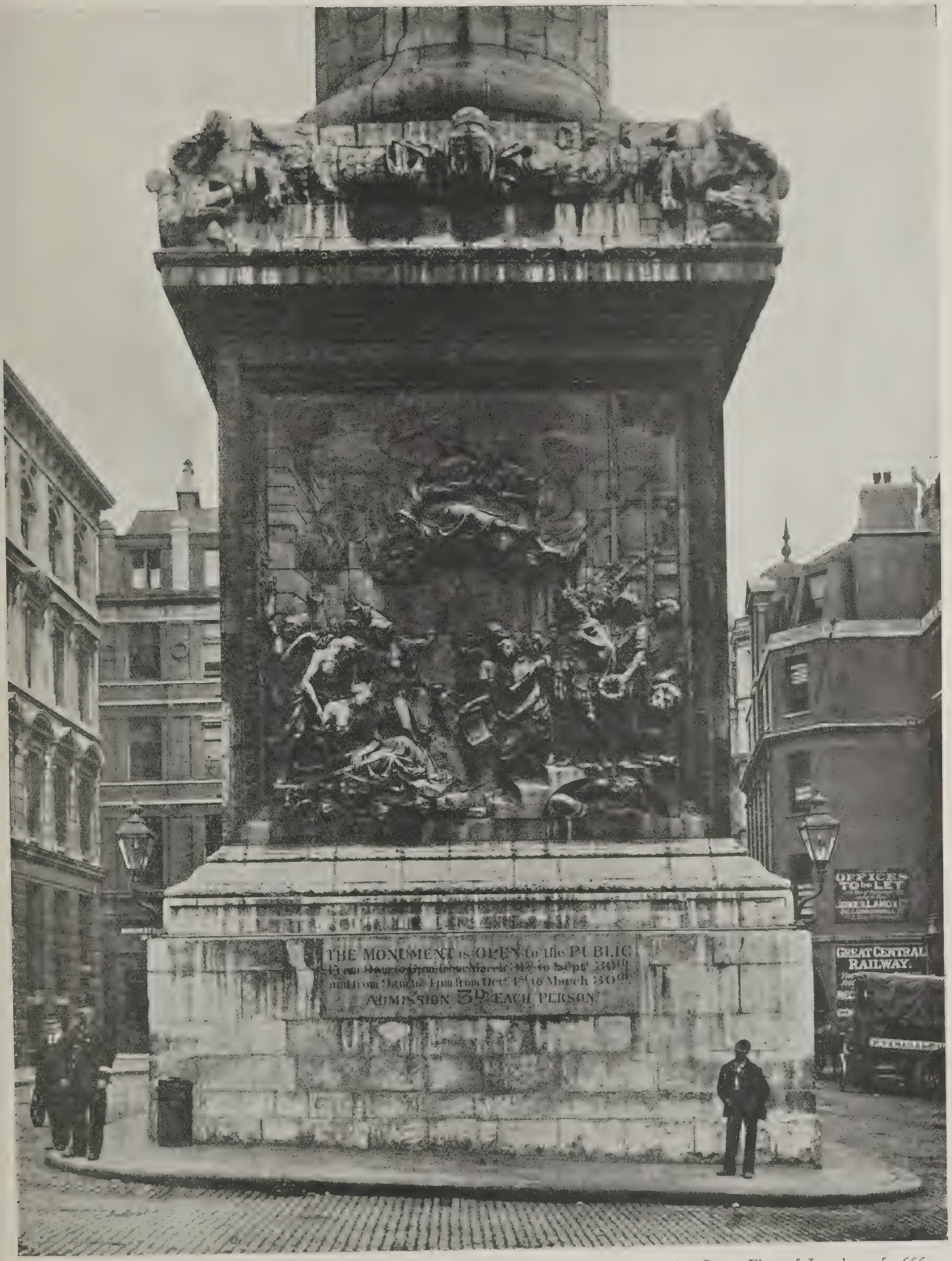


WREN'S COLLEGE OF PHYSICIANS IN WARWICK LANE, LONDON (NOW DEMOLISHED).



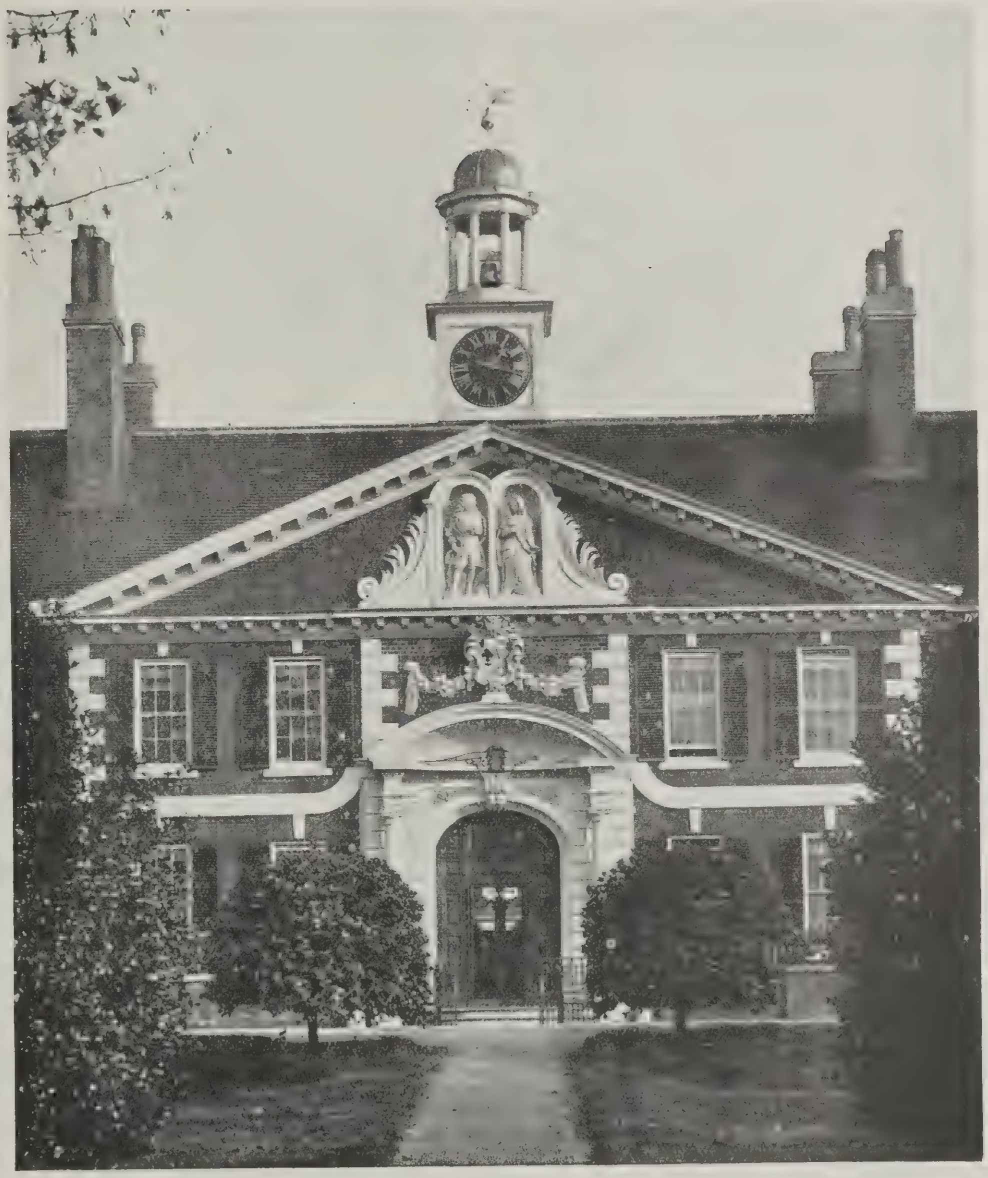
THE MONUMENT.

# The Monument: A Detail of the Base



This great fluted column of Portland stone, 202 feet high, was built to commemorate the Great Fire of London of 1666. The height of the Monument is said to exactly equal its distance from the baker's shop in Pudding Lane, where the fire began. The base bears inscriptions and allegorical reliefs; the large and curious relief by Cibber shows the destruction and restoration of the city.

# Morden College, Blackheath : A Detail of the Principal Entrance



Morden College, Blackheath, built in 1695, is one of Wren's most delightful works of a domestic character. It shows the apt employment of many of Wren's favourite features, notably, the broad pediment, the graceful lantern, and the generously proportioned doorway.

# Wren Once Lived There . . .

"The house to which this tradition clings is a fine example of the City architecture of the time; it embodies the idea of a private residence of a gentleman whilst men still lived in the City. From its design, detail, and general appearance, a careful observer would be strongly inclined to say that Wren built it, and not improbably built it for himself."—From an article in "The Architectural Review," "Wren's Reputed House in Botolph Lane."

WREN lived in many houses in his time. Great Scotland Yard (where once lived Inigo Jones), Hampton Court, Oxford, Greenwich, Clapham, St. James's, have all housed him in accordance with the proximity of his work. But for myself I like to think of him dwelling in the City, and walking down its narrow lanes.

. . . Walking down the lanes of the City, casting an appraising eye here, an angry glance there, and always dreaming of London as he would like it to be. . . . This thoroughfare he would make greater use of, that warren of slums he would sweep away, here he would raise a Renaissance spire, and there he would plan a palace for the King. . . . In the ways and byways behind the Monument, the soft footfall of that little, great man echoes still.

Whenever I walk through the City at night I think I meet Sir Christopher, sunk in thought, and seeing not at all the big business buildings and the huge warehouses of to-day. Regardless, wrapt in thought as in a veil, he thinks of that last talk he had with Gibbons; is perplexed in mind about the restrictions and petty interference of some cleric, or the Duke of York.

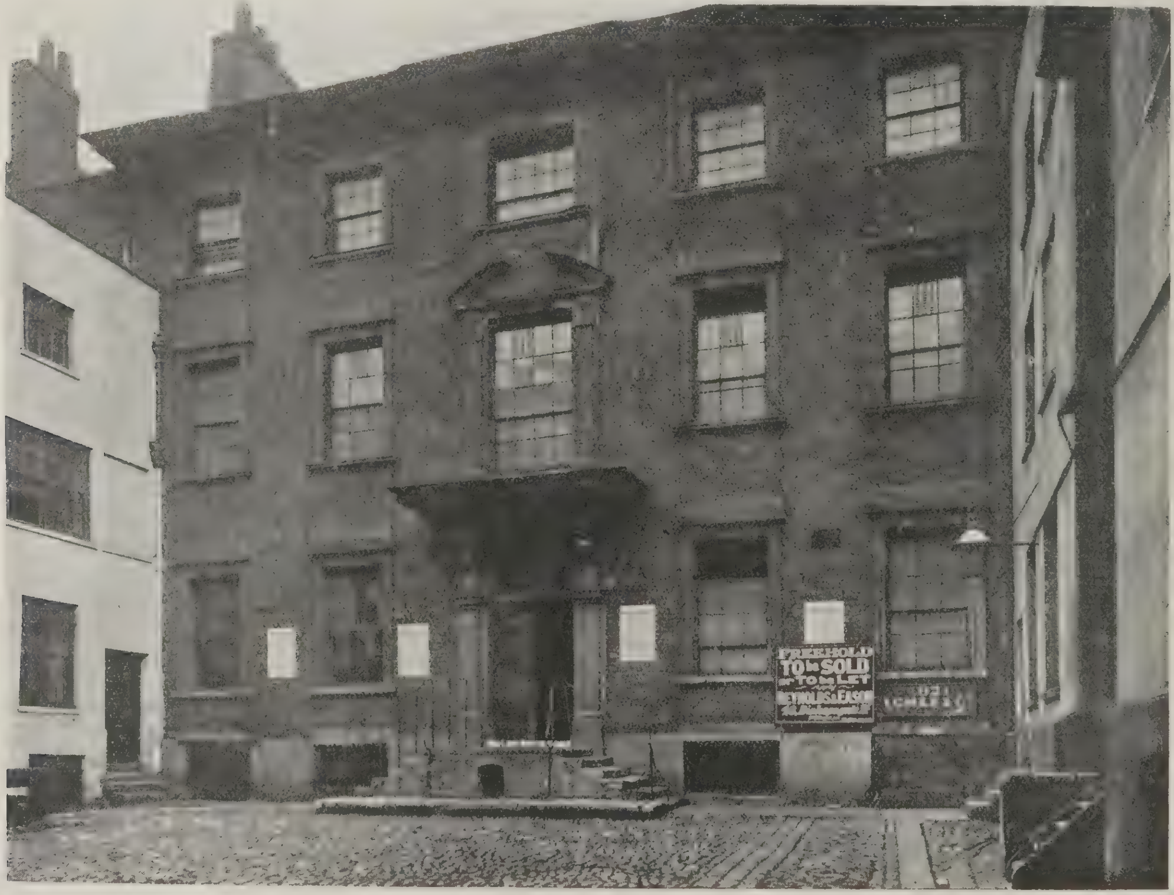
He turns along Eastcheap, and then down the steep Botolph Lane. He ascends the half-dozen steps which lead up from either side to his doorway and passes inside the house without the opening of any door.

—— But by day the big vans rattle over the cobbles, and the strong odour of drugs, corn, damaged oranges, and herrings assails the nose.

Visitors to Wren's house in Botolph Lane will enquire uselessly. It was demolished in 1906, and the fishporters and others who pass up and down the street know not where it stood. Its doorway with the arched fanlight and wide projecting hood; the broken pediment over the central window on the first floor, its "grand staircase" of oak, with the panelled and carved newels, its handsome chimneypieces and rich ceilings—these shall be found only in the measured drawings and photos of a score years ago. Sir Christopher himself must often have lifted that latchet? It is rusting now, no doubt, in the scrap-iron shed of some rags-and-bone dealer near by. And the doors, floors, and window-frames have been sold for firewood these many years.

Whenever I walk through the City at night, I still look to meet Sir Christopher, turning down Eastcheap, and trying to find his house in Botolph Lane. I approach, and try to explain, but he hears me not. He is too absorbed in that argument with Gibbons; he is deaf to voices of to-day. And there falls not upon his ear even the noise of the housebreaker's hammer, and the crashes of the falling masonry of "the nineteen City churches" would disturb him not.

H. JOHNSON.



WREN'S REPUTED HOUSE IN BOTOLPH LANE, LONDON.
(NOW DEMOLISHED.)

# Wren's Plan for London after the Great Fire

### By Professor PATRICK ABERCROMBIE, M.A., A.R.I.B.A.

WREN'S plan for rebuilding London after the Fire is one of the stock examples of town-planning, a subject which suffers from the fewness of its historical parallels: it is a tock example, both of bold design and of lost opportunity of realization. In this way it serves as a timely warning of the danger that awaits schemes prepared to-day and approved of in high places (as Wren's was), but spoilt or even lost in execution through the lack of popular support and the direct undermining of interested selfishness.

But while Wren's plan is thus a commonplace of every town-planning text-book or even lecture, its exact reference to earlier and contemporary town-planning theory and subsequent practice is largely neglected. We know that Wren is frequently said to have got his architectural ideas from France; did he learn his town-planning in Paris? It is true that at about the time he was preparing the London plan Paris was considering turning her fortifications into popular promenades, though the first plan showing Bullet & Blondel's proposals was not published till ten years after the Fire. But without in any way belittling their great contribution to town-planning—the creation of the first circle of boulevards, or ring street—one must point out that no attempt was made to modernize the congested interior of the city of Paris for at least another hundred years. So that Wren could learn nothing there, unless it were that the park-planning of Louis XIV, with its insistence upon the straight avenue and the "Rond point" fired his imagination.

We must turn to Rome for a closer exemplar: there it may be said that Domenico Fontana, working for that progressive Pope, Sixtus V, and confronted with a problem very similar to Wren's—the re-planning of a derelict site—invented the modern straight city street, which pursues its logical way, emancipated from Roman and mediæval thraldom to the building plot. Fontana also established that true Renaissance feature, the vista, utilizing the mighty existing churches which he found to terminate his straight streets. But in spite of one's admiration for Fontana's pioneer work, it must be confessed that, looked at as a whole, it is a sketchy performance, full of unresolved details, such as the connection between the Via Babuino and the Via Sistina—so impossibly steep, that a later hand has there placed those glorious Spanish steps.

Wren had no more than a hint, then, even from Rome. He was faced with a problem much tighter and more contained than Fontana's desert city, straggling endlessly in all directions. Here was a defined area, burnt out by fire, hemmed in with the surrounding undestroyed city, with a frontage to the river from the Temple Garden on the west to the Tower on the east, the face of the City proper to the Thames. His plan had to fit into the existing approach streets at their point of contact with the periphery of the fire area: the Strand, or Fleet Street, and Holborn on the west, and that series of streets on the north and east that lead up to the old gates [Aldersgate, Cripplegate, Moorgate, Bishopsgate and Aldgate] and finally to Tower Hill, the open space behind the Tower.

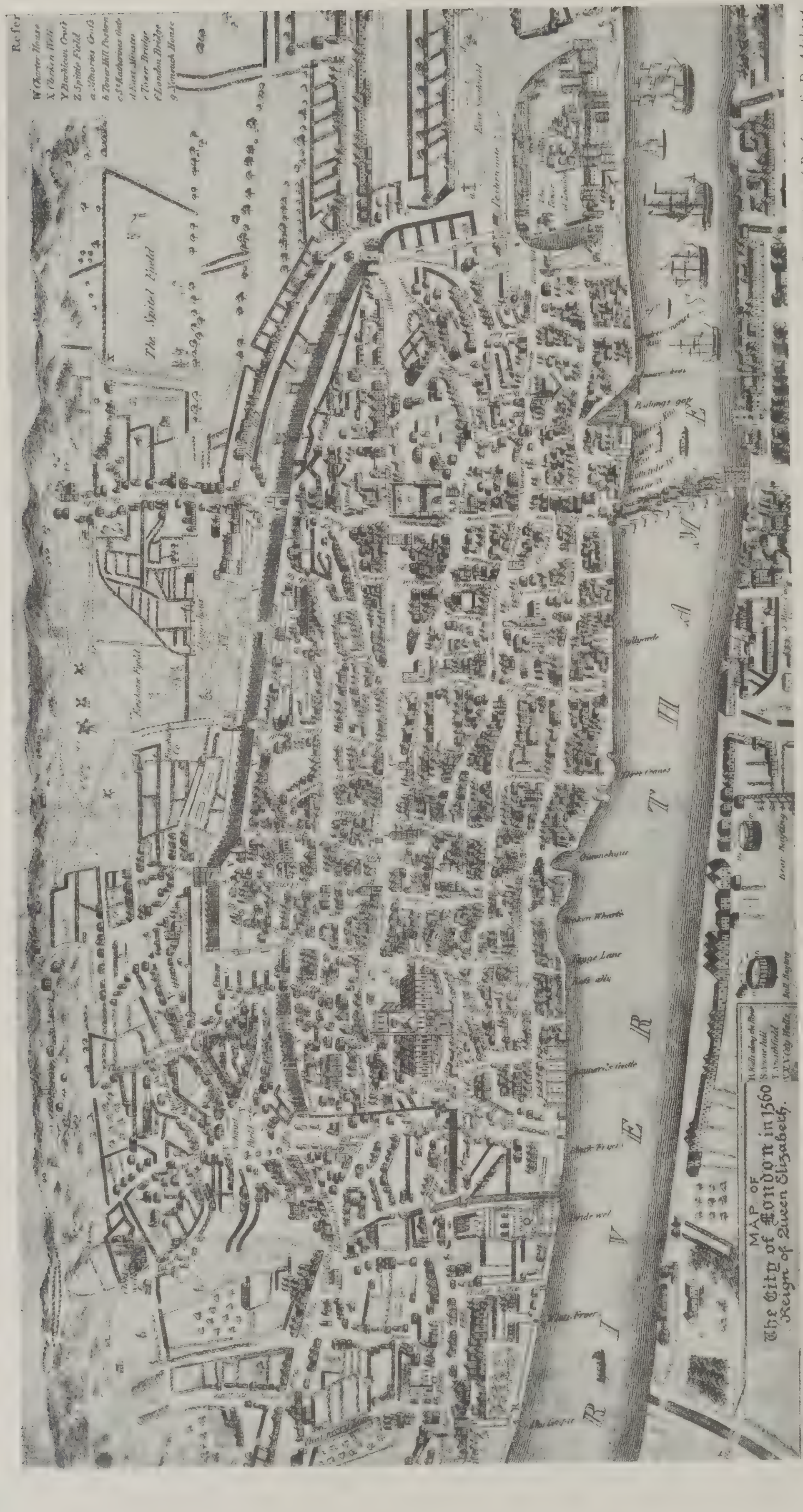
There were to be two major focal points, religious and commercial—St. Paul's and the Royal Exchange, each building occupying its original site. In general, of course, he aimed at and in his masterly way achieved the threefold requirements of all complete town-planning—convenience, health and amenity, the last in the case of the heart of a capital city becoming, naturally, magnificence. A casual scrutiny of the plan will show how easily these requirements are met and without any straining after rigid symmetry.

The road system is simple and direct: the main roads 90 feet wide, run chiefly east to west. Ludgate forks at St. Paul's, the southern leg forming the very necessary riverside-parallel street (with a smaller one nearer the Thames), and the northern leading past the Exchange (where it connects with Holborn) to Whitechapel: thus giving London its vital through route east and west. There is an admirable radiation to the approach of London Bridge and a lesser one to the Customs House. The secondary streets were to be 60 feet wide and the lanes 30 feet, but there were to be no culs-de-sac or courts.

As a town-planner of an architectural complexion Wren, while disposing his main traffic routes unhampered, did not neglect his building plots. His design herein affords an exact contrast with the plan prepared by L'Enfant, the engineer town-planner for Washington, a hundred years later; while no whit behind Wren in his main road system and in architectural magnificence of the general conception, L'Enfant seems to have completely neglected the building plot, placing his worst and even impossible shapes on his main avenues. Wren, however, moves with equal ease in his minor street plotting on the gridiron or radiating system: his western portion beyond the Fleet Ditch is radiating; his centre, squared; and his eastern, taking its cue from the focal point of the Exchange, is again radial. It all looks so simple that the consummate skill is hardly realized until one attempts to plan on similar lines and within similar conditions of existing streets. But it is impossible to find a single awkward block or a single road which has sharp or dangerous intersections. For this absolute control of all the practical elements of street and lot plotting Wren was indebted to no earlier planner of cities.

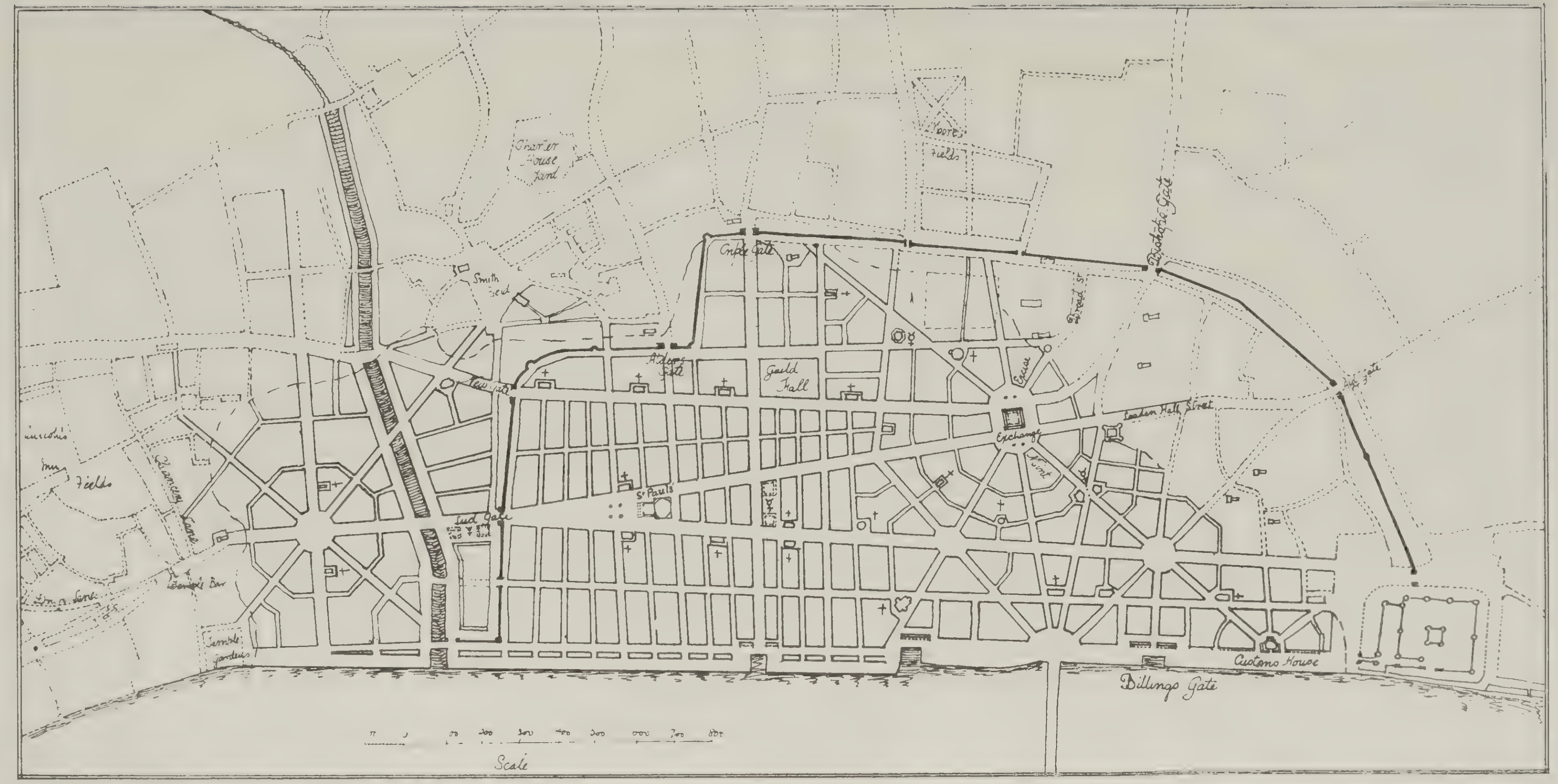
From the point of view of health, Wren no doubt considered that his wide streets and the frequent open spaces at their intersections (and possibly the markets) provided a sufficiency of light and air; and when one compares them with the old narrow, tortuous alleys and their overhanging houses, the contrast is immeasurable. He evidently did not consider small town parks or gardens suited to this heart of the capital, and even intended that churchyards, gardens and "unnecessary vacuities" should be placed outside the town—treated, indeed, in the same way as "all trades that use great fires or yield noisome smells." Probably, without any due provision for upkeep, Wren had seen that these small open spaces can become little better than ashpits, and he thought by placing them with the churchyards in a ring without the town they would have a chance of continuing clean and flourishing, and that they would also be some sort of check on the ever-spreading tendency of the city. Modern experience has taught us that grass and trees will grow in the very centre of a London that is far more confined than Wren's city would have been.

The magnificence of the plan need hardly be laboured. The two principal buildings are provided with splendid and dissimilar settings: St. Paul's is, as it should be, all leading up to the approach of the great west portal; the Exchange is the centre of a radiation of ten streets, four of them 90 ft. and the others 60 ft. wide. The triangular forecourt to St. Paul's would have been extremely effective: it is, in its publicity, as different as possible from the privacy of the approach to St. Peter's; St. Paul's is clearly the cathedral of London, set at the parting of two of her greatest streets—not the metropolitan church, cut off from the city, as in Rome, or in a country retreat, as at Canterbury. At the same time, Bernini's colonnades may have suggested the design in the Soane Museum, which shows Wren's piazza surrounded similarly.



By courtesy of Professor S. D. Adshead.

A MAP OF LONDON IN 1560.



Sir Christopher Wren's Plan for rebuilding London.

From a Drawing in the All Souls' Collection.

The remarkable thing about the other piazzas is that they take the form of the modern place occasioned by street intersections, and have no echo of the secluded monumental examples so frequent about this time on the Continent, such as the Places Vendome and Des Victoires at Paris. But though lacking the sense of enclosure of the Continental type, Wren was careful to give to all of his a satisfactory shape, and particular ingenuity is shown in the one designed for the head of London Bridge, where, owing to his retention of the site of the Royal Exchange, the connection to London Bridge could not be in alignment with it.

The river front was to have a magnificent quay, treated in two parts: the eastern section near the bridge and Customs House was the wider for commercial use; the western section was to take the form of a terrace, upon which faced the halls of the City companies.

Wren also gave careful study to the streets themselves: he closed the vistas of many of the smaller roads with churches, and he intended to add interest to the wide thoroughfares by designing great triumphal arches on the sites of all the old gates, of which that at Ludgate was to be the chiefest, in honour of the founder of the new city, Charles II. The view from this arch would, of course, have been the great scenic effect of the plan. One must visualize St. Paul's, flanked with smaller churches, situated just in front of the portico; then, in the middle distance, each of the forking streets has its pair of churches (enriched, we will suppose, with typical Wren spires), and finally, if the traffic would permit it, in the distance the terminal arches to Aldgate and the Tower.* The picture to-day is very different, possessing, it is true, the fortuitous beauty of picturesqueness. And it is very necessary to remember that the spire of St. Martin's, which stands as so conspicuous a foil to the dome and tower of the cathedral, was designed by Wren himself. Finding he was debarred from one extreme of regular beauty, he wisely went to the other extreme of sharp contrast.

Of the fate that befell the plan as a whole it is not necessary to say more than is contained in the well-known words of his son.

"The practicability of the whole scheme, without loss to any man or infringement of any property, was at that time demonstrated and all material objections fully weighed and answered; the only, and as it happened insurmountable, difficulty remaining was the obstinate averseness of great part of the citizens to alter their old properties and to recede from building their houses on the old ground and foundations; as also the distrust in many and unwillingness to give up their properties, though for a time only, into the hands of public trustees or commissioners till they might be dispensed to them again with more advantage to themselves than was otherwise possible to be effected, for such a method was proposed that by an equal distribution of ground into buildings leaving out churchyards, gardens, etc. (which were to be removed out of town), there would have been sufficient room, both for the augmentation of the streets, disposition of the churches, halls and all public buildings and to have given every proprietor full satisfaction, and though few proprietors should happen to have been seated again directly upon the very same ground they had possessed before the fire, yet no man would have been thrust any considerable distance from it, but placed at least as conveniently and sometimes more so to their trades as before. By these means the opportunity in a great degree was lost of making the new city the most magnificent as well as commodious to health and trade of any upon earth, and the Surveyor being thus confined and cramped in his designs it required no small labour and skill to model the city in the manner it has since appeared."

It is fortunate that we have an alternative plan, prepared at the same time and under exactly similar conditions, for there is no better touchstone of the quality of a piece of work than someone else's effort. It would seem that, unknown to him, Wren's great friend, John Evelyn, set to work on a plan simultaneously; the general confusion resulting from the fire may have prevented their comparing notes. Wren saw the King first, who approved his plan: Evelyn was pleased to find coincidences in their schemes, and it is suggested that the King asked Wren to embody some of Evelyn's details.

But the truth is that Evelyn's plan is as feeble as Wren's is fine: it is a mere piece of pattern-making, and shows the difference between the work of a cultured amateur and of a skilled technician.

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* These terminal arches and the two pairs of churches are shown in John Gwynn's engraving of Wren's plan, but do not appear in the original drawing in the All Souls' Collection. They might, however, doubtless have been added in execution, though, of course, Leadenhall Street was not destroyed.

# The Toll of Wren's City Churches

*Of the* 107 *parish churches existing in the City at the time of the Fire,* 86 *were burned down. Of these,* 35 *were never rebuilt.* 51 *were actually re-erected, and of these* 18 *of Wren's buildings have been destroyed. The Bishop of London's Committee now proposes to demolish* 19 *further churches,* 13 *of these being either by Wren or containing something of his work.*

### DESTROYED.

All Hallows, Bread Street.
All Hallows the Great and Less, Thames Street.
St. Antholin, Watling Street.
St. Benet Fink.
St. Benet, Gracechurch Street.
St. Bartholomew, Moor Lane.
St. Christopher-le-Stocks.
St. Dionis Backchurch.
St. George, Botolph Lane.
St. Mary, Somerset.*
St. Mary Magdalene, Old Fish Street.†
St. Michael, Bassishaw.
St. Michael, Queenhithe.
St. Michael, Crooked Lane.
St. Michael, Wood Street.
St. Mildred, Poultry.
St. Matthew, Friday Street.
St. Olave, Old Jewry.*

* Towers left standing.
† Destroyed by fire and not rebuilt.

### THREATENED.

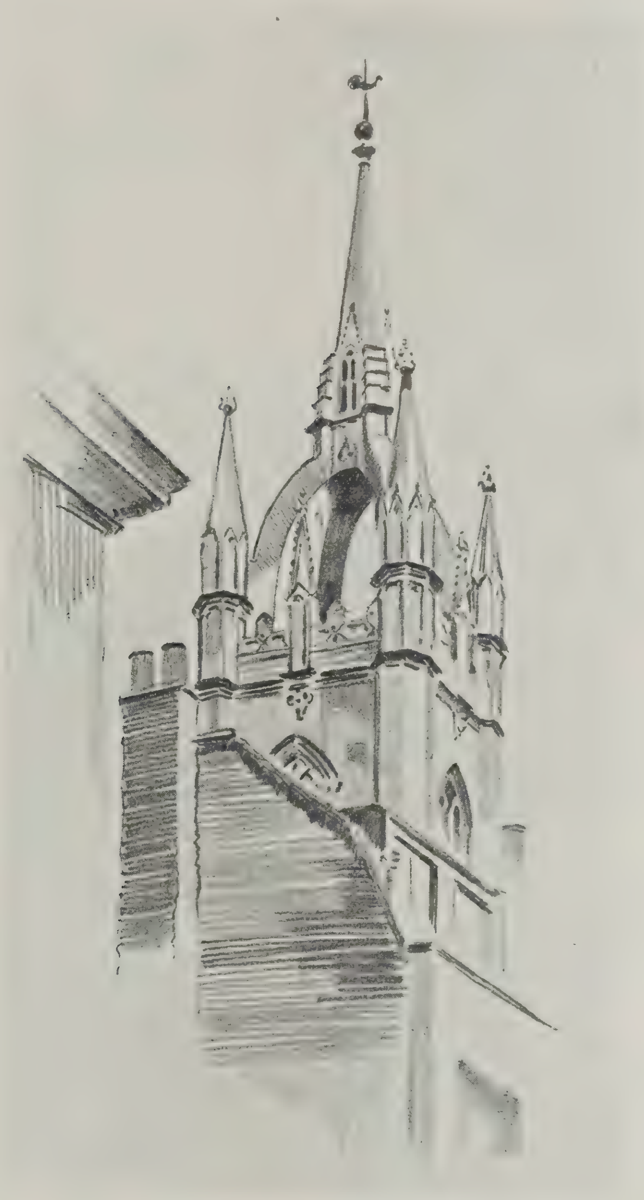
All Hallows, Lombard Street.
St. Alban, Wood Street.
(Repaired by Wren in 1685.)
St. Anne and St. Agnes.
St. Clement, Eastcheap.
St. Dunstan-in-the-East.*
(Tower and spire only by Wren.)
St. Magnus the Martyr.*
St. Mary, Aldermanbury.
St. Mary-at-Hill.
St. Michael, Cornhill.*
St. Michael, Paternoster Royal.
St. Nicholas, Cole Abbey.
St. Stephen, Coleman Street.
St. Vedast, Foster Lane.

* Towers to be preserved.

# Wren and his City Churches

## By E. BERESFORD CHANCELLOR, F.S.A.

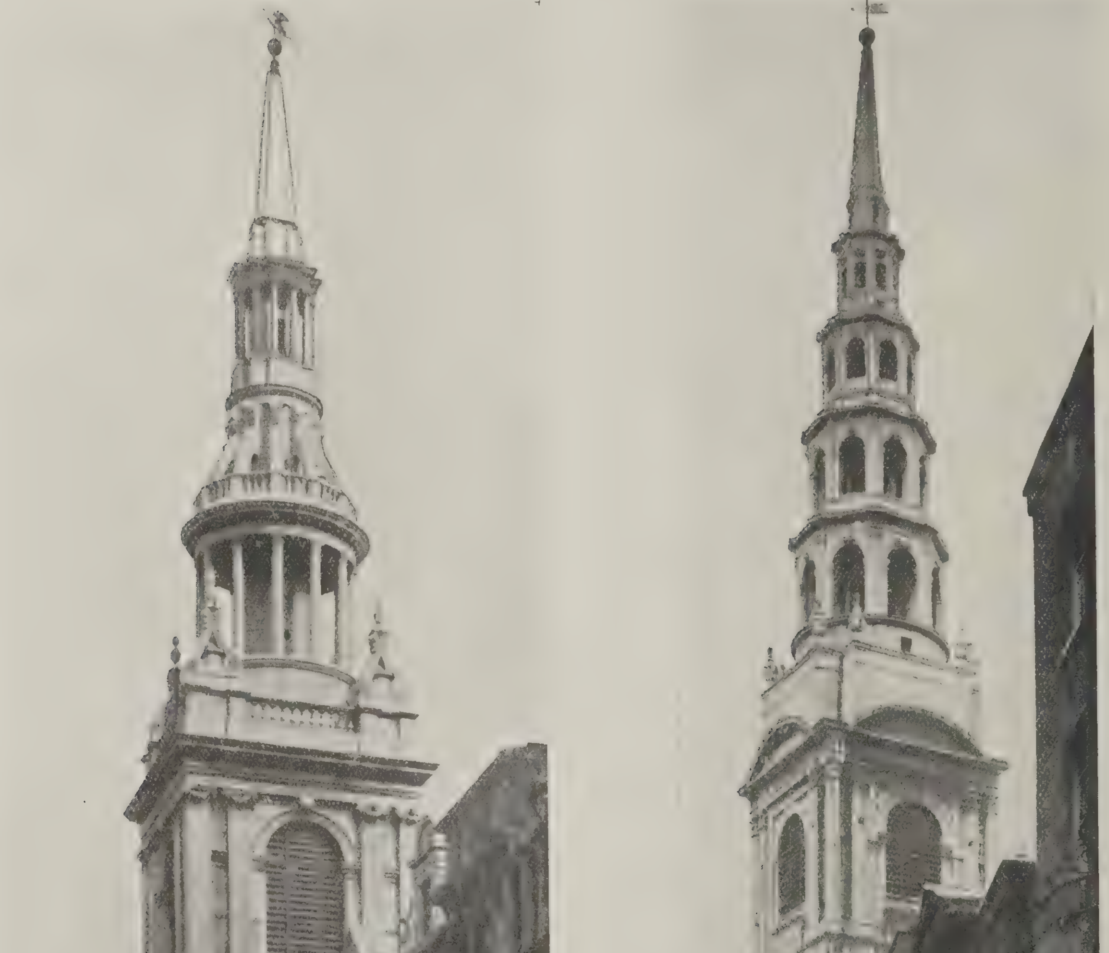
SIR CHRISTOPHER WREN is our national architect. His fame dominates that of any of the other designers who have worked in Great Britain. To most people even Inigo Jones is known relatively little in comparison; Chambers and Gibbs even less. The one building in London to which the man-in-the-street can, without hesitation, assign an architect's name is St. Paul's. Who, outside the limited circle of professional architects and antiquaries, can say off-hand who designed St. Martin's-n-the-Fields, or St. George's, Hanover Square, or the Law ourts, or the Imperial Institute? But every one knows vho built St. Paul's, from the child who has been brought p on the well-worn riddle to the woman of fashion who inds herself out of her bearings east of Charing Cross.



THE TOWER AND SPIRE OF ST. DUNSTAN'S-IN-THE-EAST.
*(From a sketch by W. H. H.)*

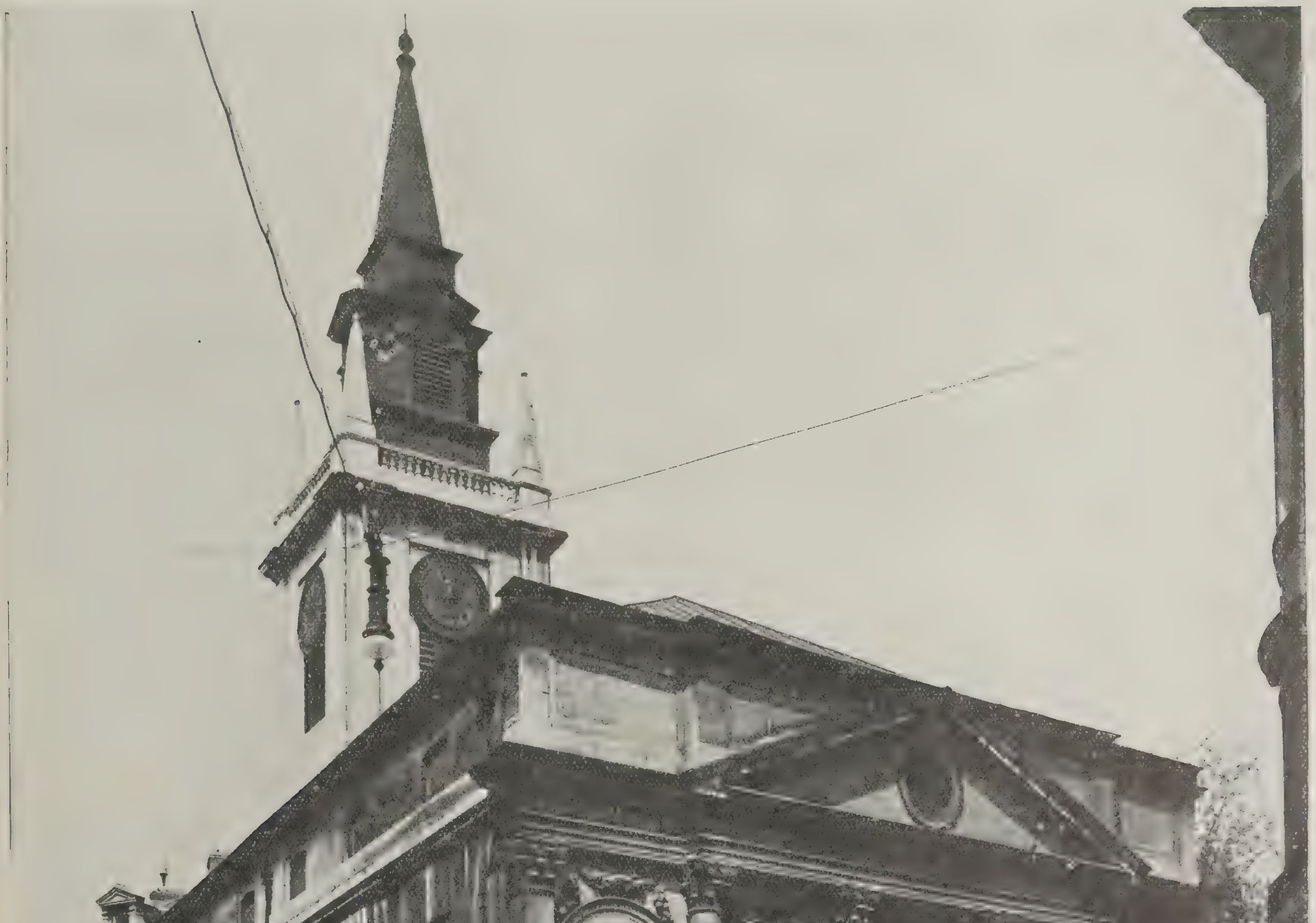
In the annals of our native architecture Wren occupies he same outstanding place as does Wellington as a soldier, elson as a sailor, and Shakespeare as a poet. London is ull of the monuments of his genius, and his masterpiece oars above the city's buildings in the same way as its reator's fame surpasses that of all native competitors. One has only to imagine what London would be like denuded of Wren's foremost achievement and that forest of spires, tapering to the skies like so many lovely exhalations, to realize for what he was in "the beauty's heightening" of our city.

Had Wren's comprehensive scheme for the rebuilding of London after the Great Fire materialized, it would have been found that he had anticipated many of the drastic and effective improvements which have, since his day, taken place. He would have given us buildings as noble as Somerset House, streets as wide as Portland Place, spaces as vast as Trafalgar Square. But it was not to be, and the active brain of one of the foremost architects in the world was restricted to the production of its one outstanding masterpiece and the reconstruction of innumerable small churches on impossibly limited sites. Nothing, however, proves the variety and originality of his mind better than the use he made of these opportunities. He, indeed, took occasion by the hand, and left to a wondering posterity so many evidences of his tireless



ST. MARY-LE-BOW ST. BRIDE'S.

TWO OF WREN'S FINEST SPIRES.



*By courtesy of Ingleson C. Goodison.*

ST. LAWRENCE JEWRY

activity that London is literally studded with the landmarks of his consummate achievement.

As I must limit myself to a few words about the city churches, there is no space here to speak of the noble cathedral which dominates them. I may, however, remind the reader that its first stone was laid in the June of 1675, that the choir was opened for service in 1697, and that the dome was completed in 1710. Three things have to be remembered in this connection. The first is, that when he produced the earliest and, as many thought, the finest design for the new cathedral, Wren had only been once abroad, and then only as far as Paris; secondly, that he designed the spires and reconstructed or rebuilt the bodies of his city churches during the period in which he was engaged on his greatest undertaking; thirdly, that at least seventeen of these churches have been destroyed for one reason or another, or, I dare say, for no really good reason at all, during a period ranging from 1831 to 1905.

Of these I may mention St. Christopher-le-Stocks, pulled down for the extension of the Bank; St. Benet-Fink, destroyed when the Royal Exchange was created; St. Olave Jewry (1887); St. Dionis Backchurch (1876); St. George, Botolph Lane (1905); St. Michael, Wood Street; St. Mildred, Poultry (1872); St. Michael, Queenhithe (1876); St. Bartholomew-by-the-Exchange (1841); St. Antholin, Watling Street (1875); All Hallows the Great, Upper Thames Street (1896); St. Mary Magdalene, Old Fish Street (1886); St. Benet, Gracechurch Street (1867), and St. Michael, Crooked Lane (1881).

When Wren began the rebuilding of the churches destroyed by the Fire, he was faced with one of the greatest difficulties with which an architect has to contend—restriction of space. The destruction of the city in many cases left walls standing, and the reconstruction was limited to the erection of fresh churches on the original sites and often bounded by the original foundations. Most of these sites were exiguous to an extraordinary degree, and Wren, who showed what he could do when this was not the case, as with St. Paul's, and, in a lesser degree, with St. Clement Danes, was shackled in this respect as perhaps no architect of his calibre has been before or since. In judging many of the interiors of Wren's churches this fact must not be overlooked. Rather is his remarkable treatment of the spaces at his disposal, and the ingenuity with which he surmounted difficulties, to be wondered at. This is specially the case with St. Stephen's, Walbrook. Here, in consequence of a variety of reasons, into which I need not enter, the exterior is plain almost to baldness. As has been well said, " never was so sweet a kernel in so rough a shell;" for the interior is masterly. There may be, to the purist, " a lack of convincing strength," as it has been called. This will, no doubt, strike the trained eye, but to the ordinary man the beauty, the amazing sense of space conveyed by the architectural achievement will be as patent as it was to Canova, who once remarked that he would gladly journey from Italy to England again to gaze on its effective charm.

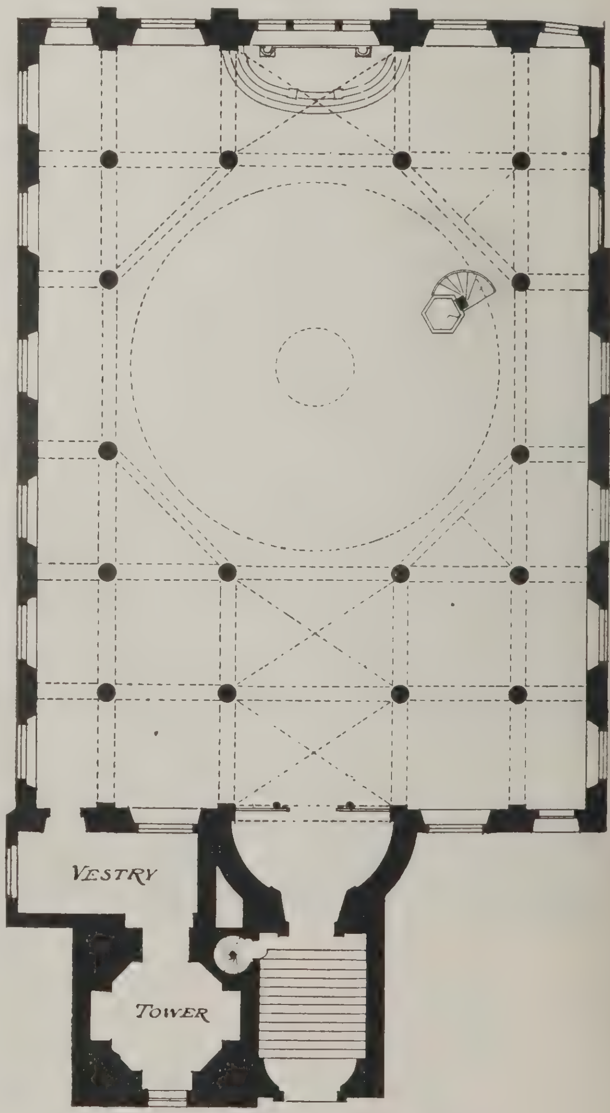
Another example of the ingenious way in which Wren treated the limited spaces to which he was confined is to be found in St. Lawrence Jewry, especially in the vestry, with its lovely cornices and its wonderful wreathed doorway, both due to his designs.

Again, many of the churches were rather what he could make them, with limited funds, than what his genius would under more favourable conditions have evolved. Thus, when the money available would not run to stone, he had perforce to construct many a spire in lead. Even in these instances he created beauty, if not the beauty he dreamed of or which he achieved in other instances. Sometimes, too, brick had to be used instead of stone for the bodies of the churches, as in the case of St. James's, Piccadilly, and St. Andrew's, Holborn, buildings not dissimilar from each other in external appearance and having an internal similarity, which they share with St. Andrew's-by-the-Wardrobe in being galleried.

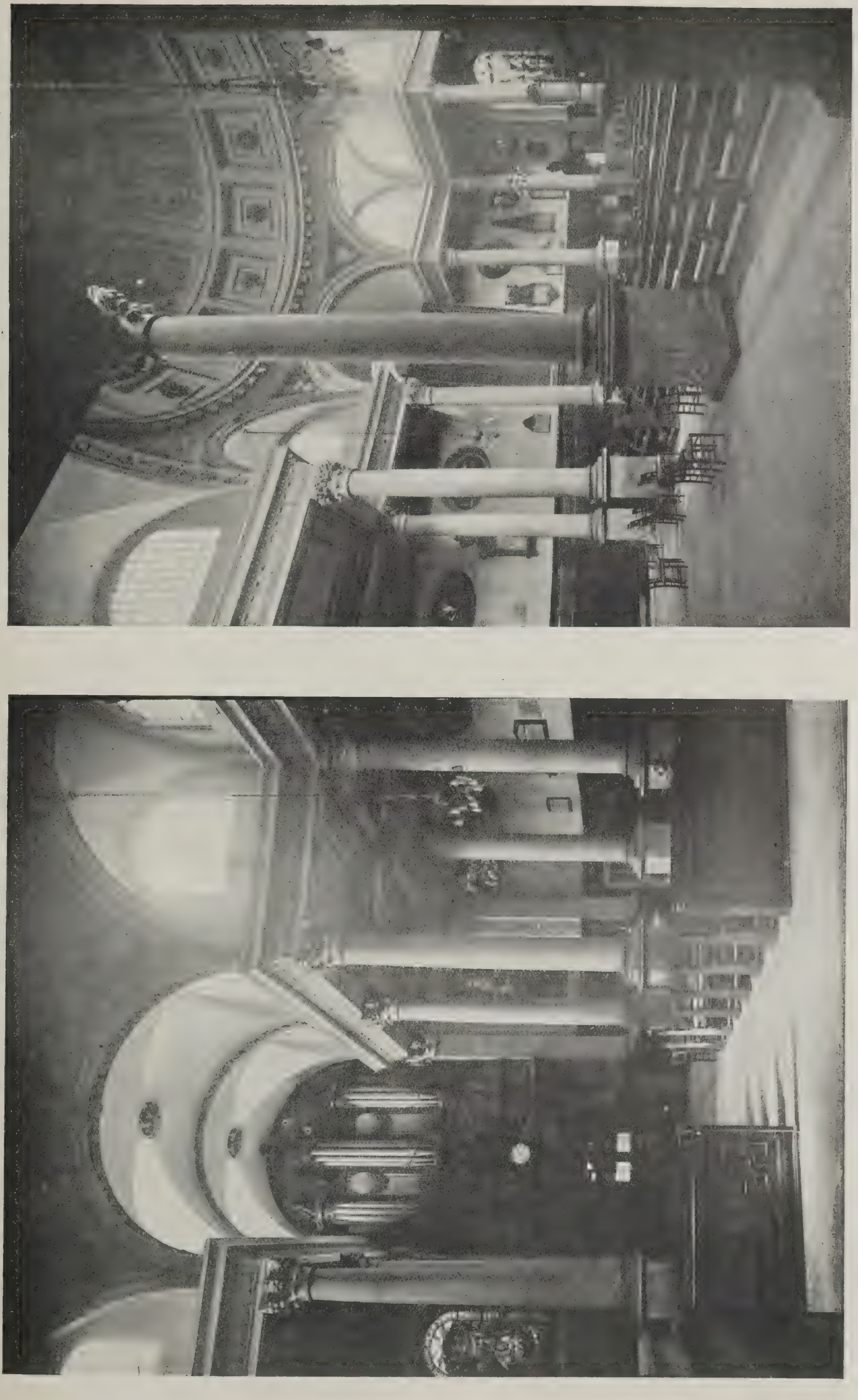
But whatever the form, whatever the material used, whatever the exigencies of space, Wren somehow contrived to give to the least impressive of his city churches some special characteristic by which his touch can be identified. Whether it was in the outlines of the building itself, or in its decorations; in a gallery here or a staircase there, a doorway or an altar-piece, we come upon his distinctive note, his unmistakable hall-mark. Since his time nearly all his churches have suffered a change from what they were when they emerged fresh from his hand. The old high pews have been lowered, the original high pulpits have been truncated, the position of seats has been changed, and there are practically none in which, were Mr. Secretary Pepys to enter, he would not be bewildered by strange alterations and unaccustomed alignments.

Again, stained glass, often of horrific character and almost terrifying colour schemes, has been in some cases substituted for the original plain glazed windows, while many a Wren church presents a certain coldness and crudity because of the removal of panelling which once gave a warmth and richness to the interior. What the eighteenth century and the early nineteenth did in this respect is unspeakable.

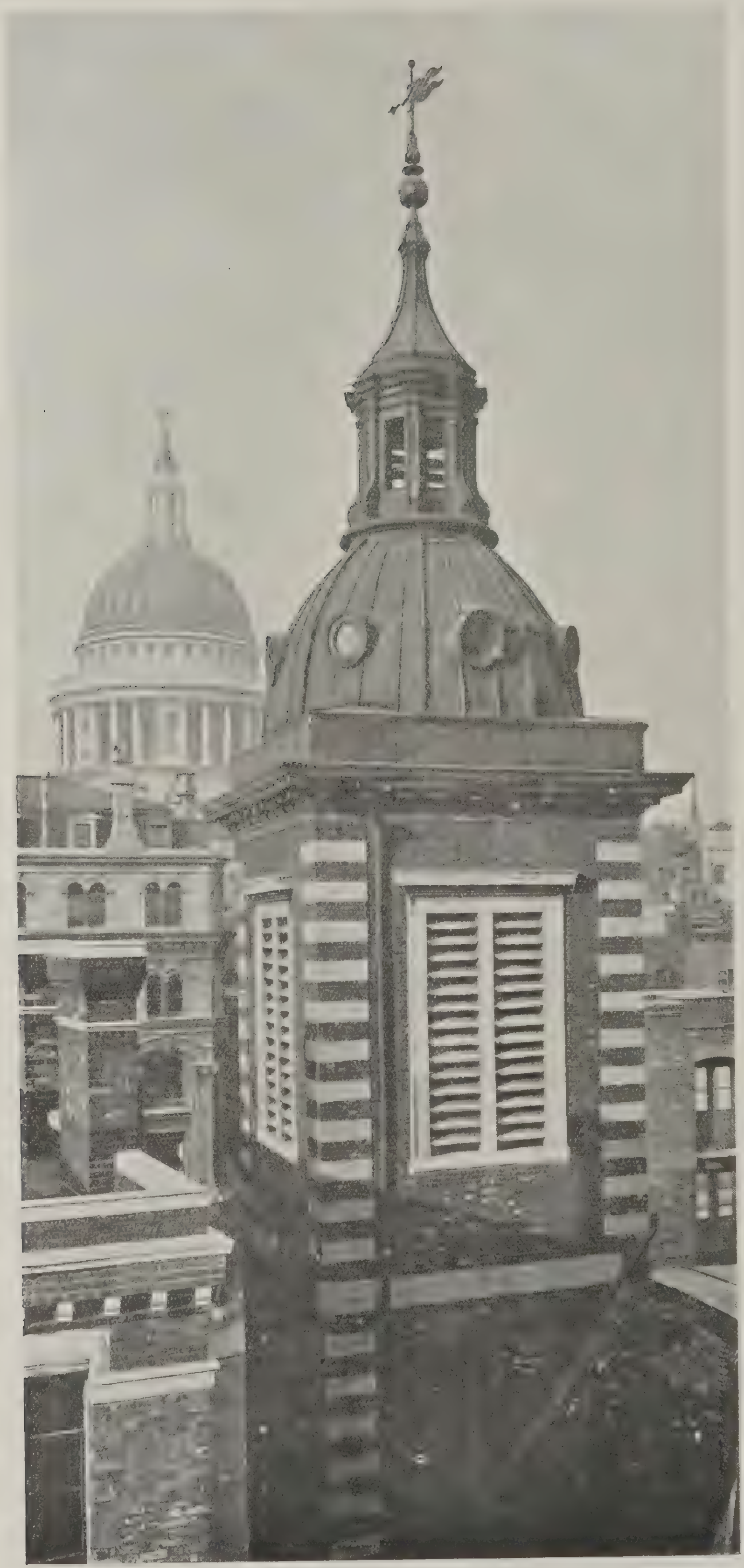
One thing, however, has been left untouched by the restorer and innovator; I mean the beauty of Wren's incomparable spires and steeples. These remain as one of his most precious legacies to posterity. And of them those of Bow Church and St. Bride's are, by common consent, the most perfect. It was once affirmed by William Morris that Wren designed his spires and steeples as a setting for the supreme glory of St. Paul's: a sort of constellation around the moon of his genius. But this could hardly have been, because, as I have pointed out, his new



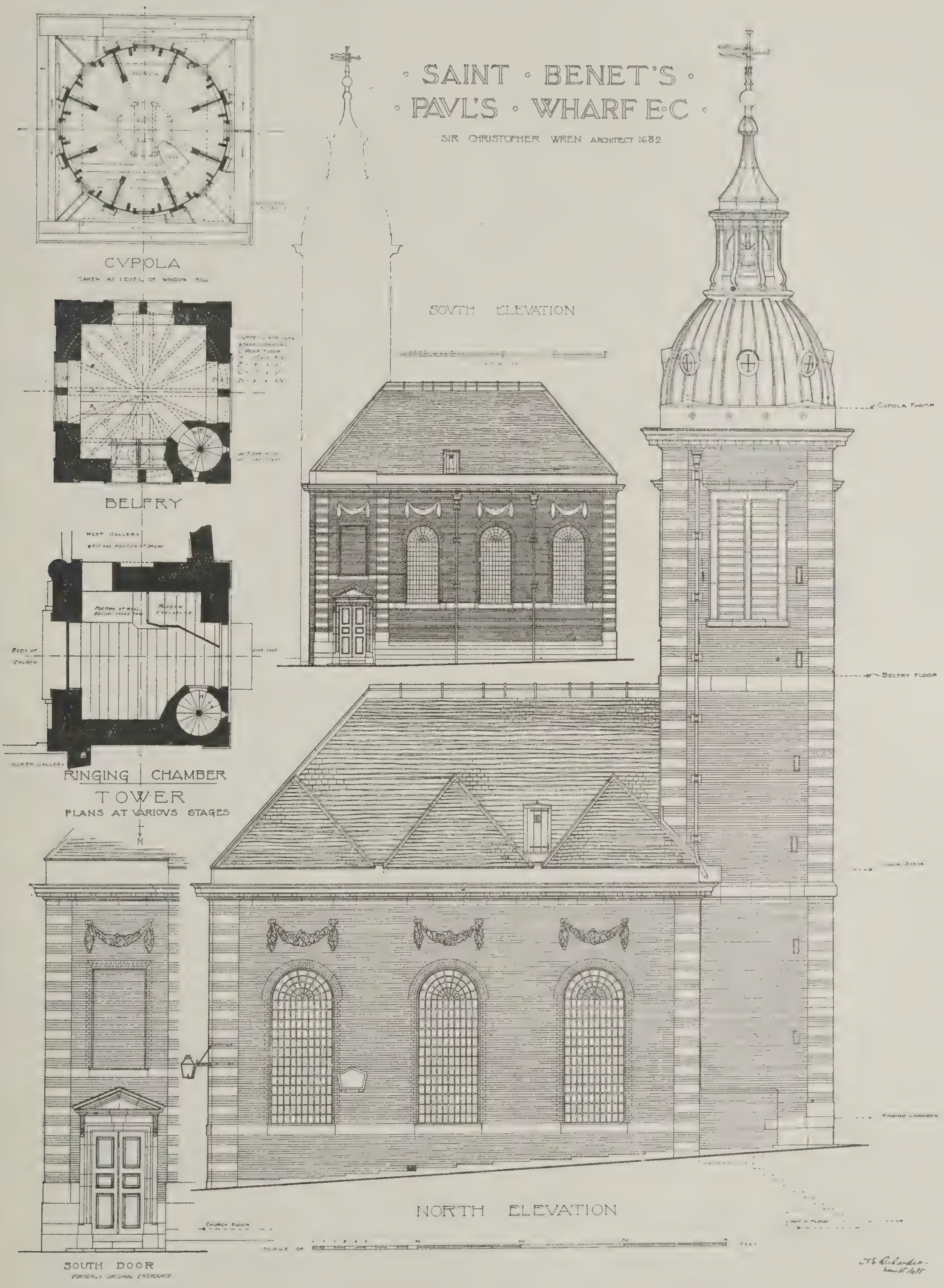
PLAN OF ST. STEPHEN'S, WALBROOK.



ST. STEPHEN'S, WALBROOK



THE TOWER OF ST. BENET'S, PAUL'S WHARF.



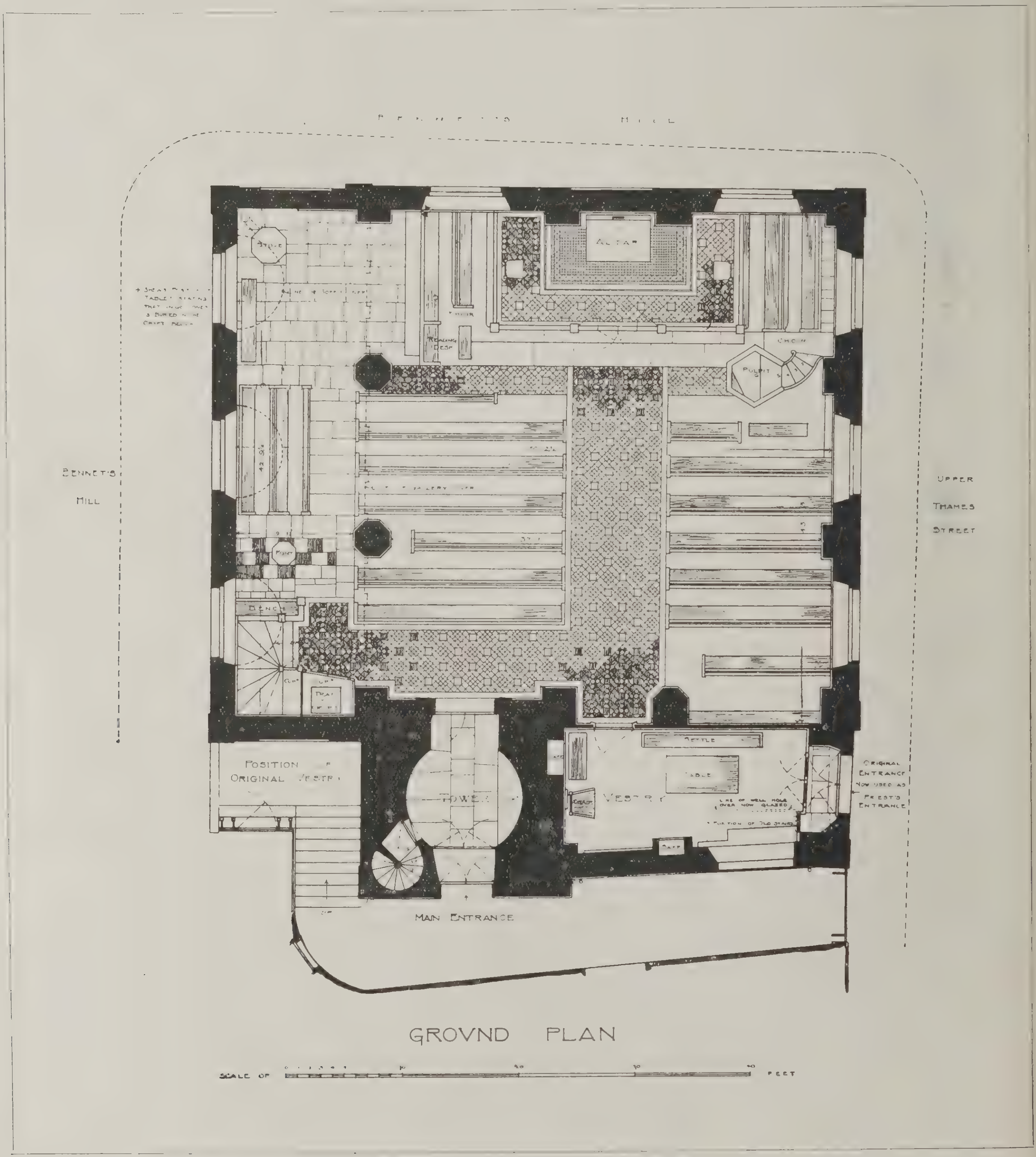
ST. BENET'S, PAUL'S WHARF.

*(Measured and Drawn by A. E. Richardson.)*

churches arose on sites already chosen for their predecessors, and no particular arrangement on his part was possible.

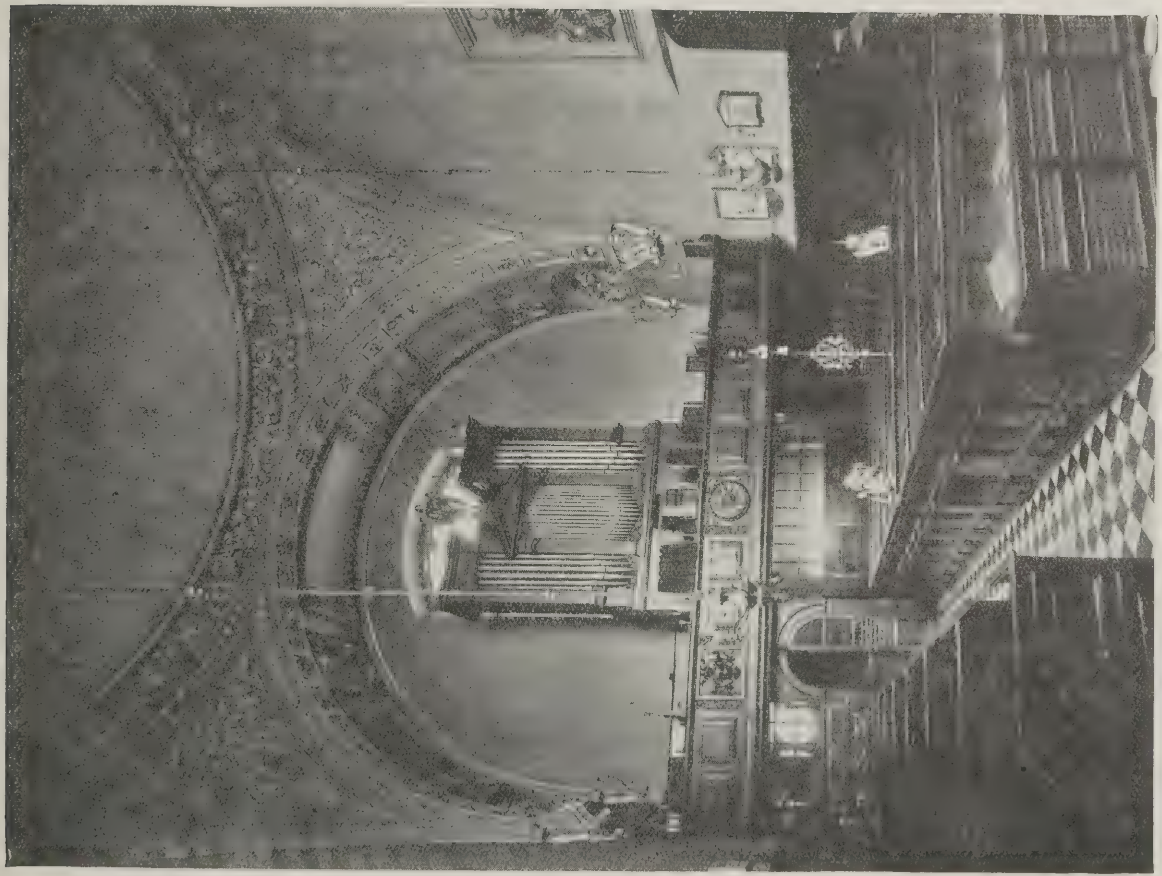
No, although seen from a height, say, from his own monument, these tapering witnesses to so many centres of divine worship appear like stars clustering round an outstanding luminary, it is in their individual beauty, their amazing variety, their perfection of form and proportion, that their chief charm and attraction lies. Whether it be exemplified in those four Gothic examples with which Wren—who seems to have shared to some extent his century's disdain for what he called "saracenic"—crowned the churches of St. Mary Aldermary; St. Michael's, Cornhill; St. Alban's, Wood Street, and St. Dunstan's-in-the-East; or whether it be in that "madrigal in stone," as Henley called the steeple of St. Bride's, or the greatest marvel of all, that wonderful spire which rises from Bow Church, nothing can stale their infinite variety, no familiarity can wholly dull their perennial appeal.

Wren's steeples and spires may be regarded as the swan song of his amazing genius. For nearly all of them arose many years after the churches they glorified had been completed. It was ten years before that of Bow Church was finished; fifteen before St. Bride's received its consummation in those monotonous tiers from which all sense of monotony seems to be banished. In other cases much longer intervals elapsed. But before the old man, laden with glory, literally fell asleep at Hampton, they had all arisen further to attest the greatness of which St. Paul's remains the outstanding proof.

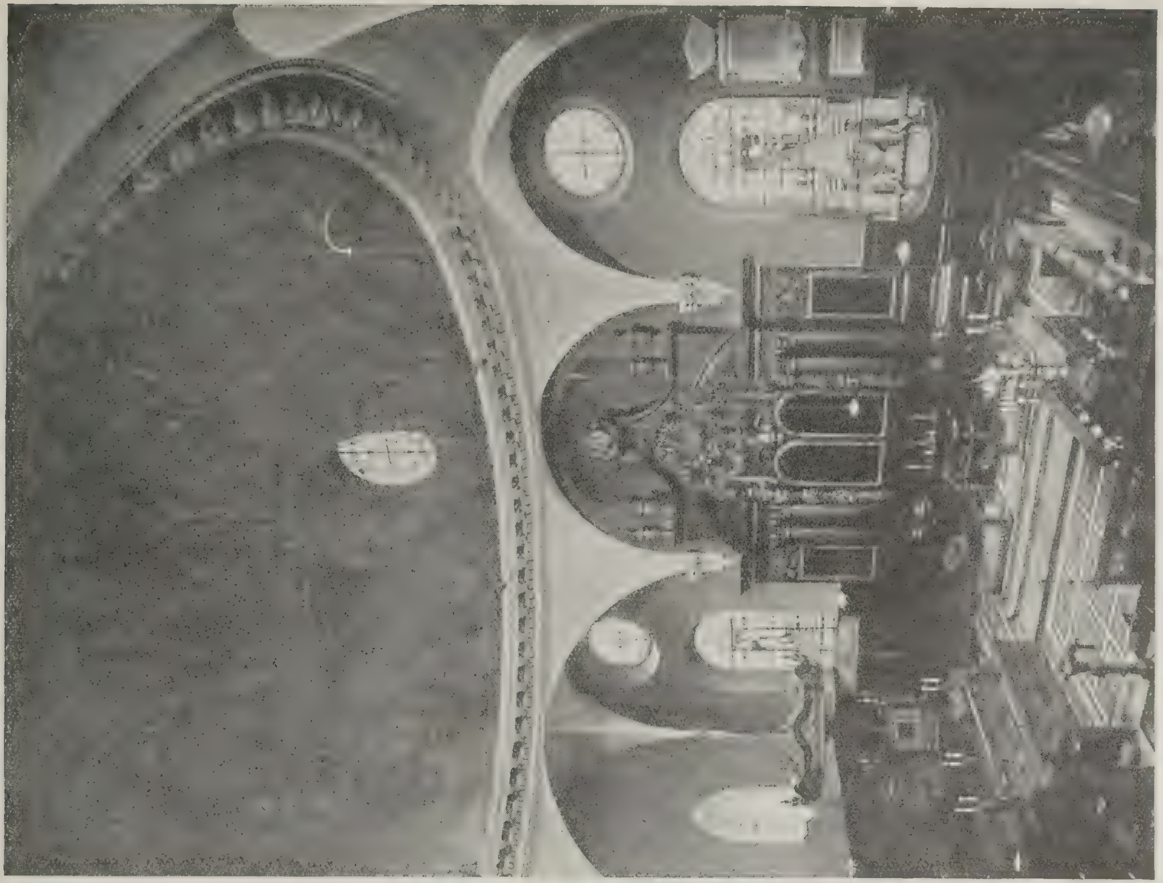


PLAN OF ST. BENET'S, PAUL'S WHARF.

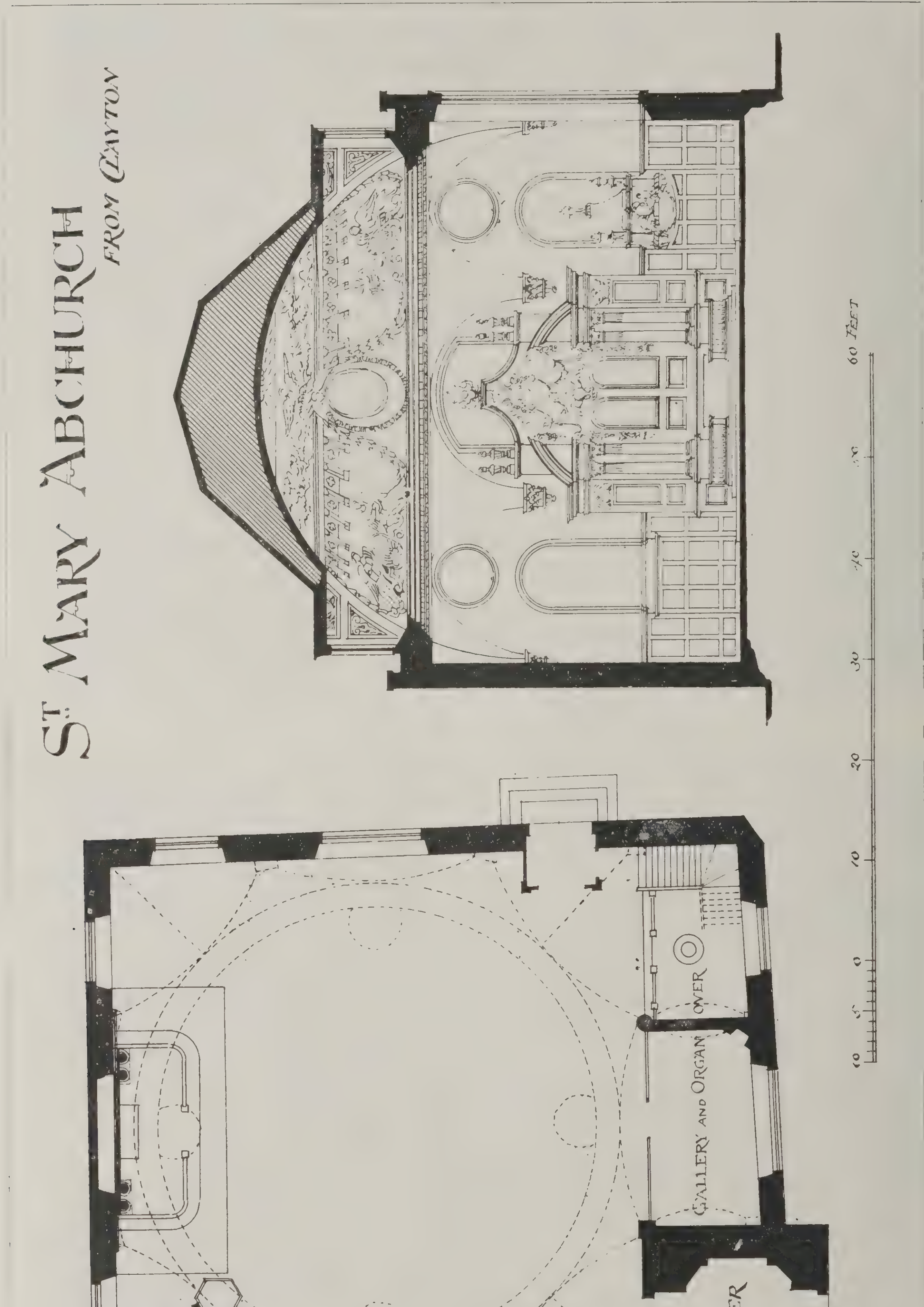
*(Measured and drawn by A. E. Richardson.)*



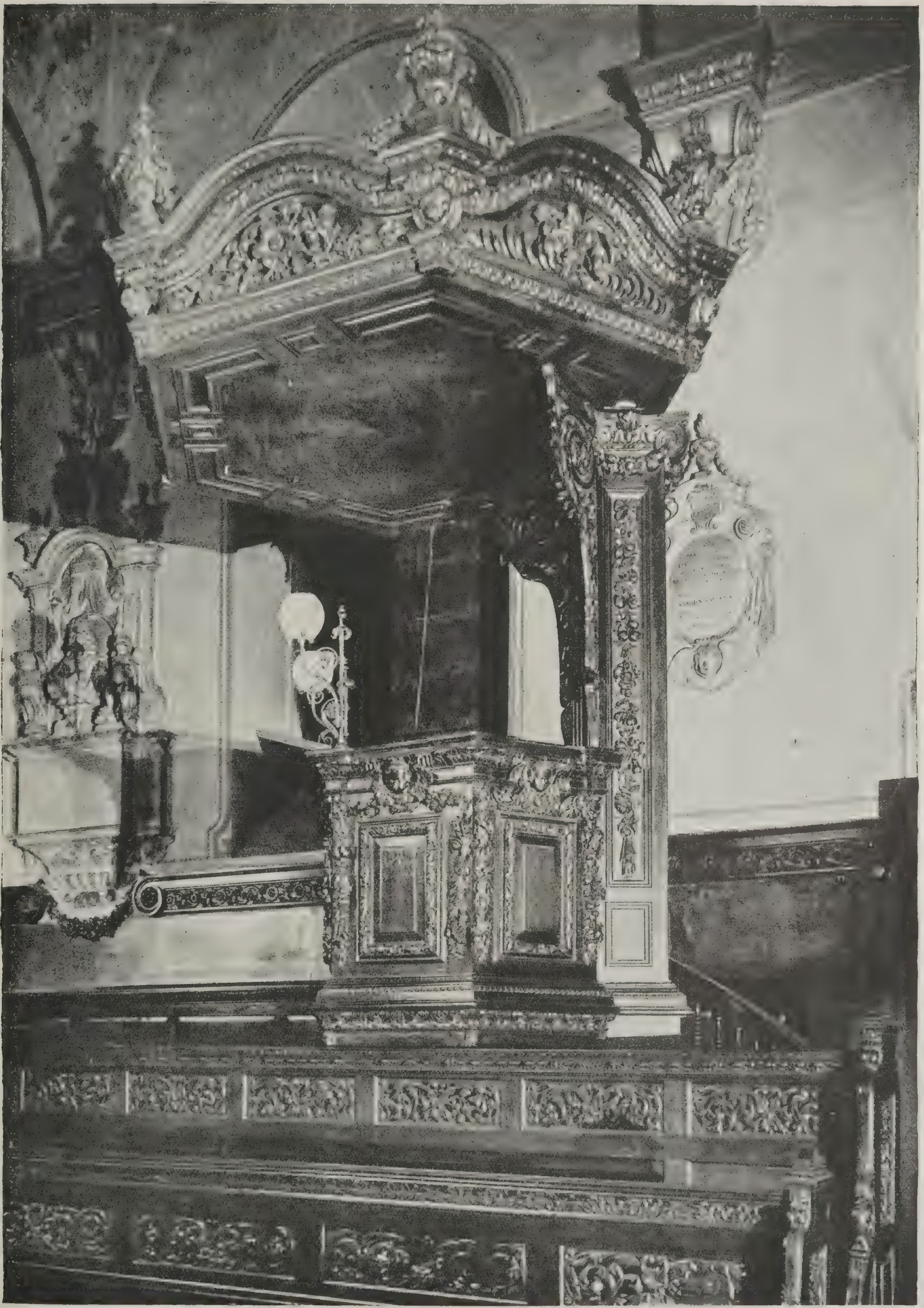
ST. MILDRED'S, BREAD STREET.



ST. MARY ABCHURCH.



PLAN AND SECTION OF ST. MARY ABCHURCH.



THE PULPIT, ALL HALLOWS, LOMBARD STREET.

# The Renovation of St. Paul's

## By MERVYN E. MACARTNEY, F.S.A., F.R.I.B.A.

THE fears of those experts who were of opinion, a few years ago, that a very serious task awaited the repairers of St. Paul's Cathedral have been more than justified; and in particular the south transept has been discovered to be in so shattered a condition that the cement used to strengthen and solidify the walls has found its way out, in several cases into the street and gardens beyond. The present article, however, deals with the completion of the repairs to the south-west pier of the dome, which marks a primary stage in the work of restoration at St. Paul's.

It is now possible for anyone to observe the extent of what has been practically the rebuilding of this vital support of the dome. The whiteness of the substituted stones shows distinctly how the 3,000 cubic feet of new masonry has been inserted. It has only been possible to carry out this work by using the greatest care to avoid disturbance of the enormous weight of 8,000 tons which it is calculated that each pier carries. Any sudden withdrawal of a large extent of support might have involved most serious dislocation of pressure and created an alarming condition of affairs.

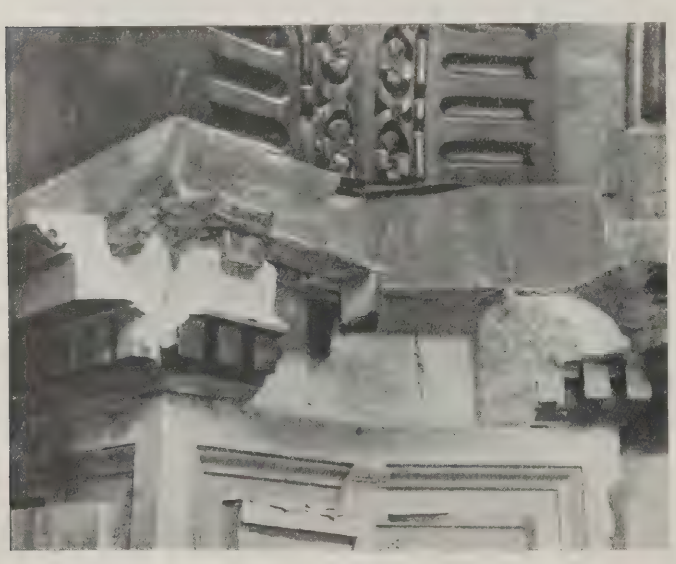
It says a great deal for the care and efficient workmanship of the artificers, contractors, and expert advisers that no perceptible settlement has occurred during the progress of the work. It would be untrue to say that no feelings of alarm have existed while these operations have been proceeding. But, fortunately, so much diligence has been exercised that no untoward accident has marred the steady march of restoration during the years that have elapsed since the work was begun.

### *Work on the S.W. Pier.*

Many interesting facts have come to light, such as that the main stone on which the two arches pitch proved to be a huge block of Burford stone and not Portland which Wren employed in this pier. This stone was cracked right through. We know that great difficulties beset the builders in obtaining large stones, and evidently this block was utilized because there was no other of that scantling available from Portland. Its dimensions were 5 ft. by 6 ft. by 2 ft. 3 in. To replace it being impossible, the shattered portions, weighing 4½ tons, were removed, and as large a piece of Portland inserted as was practicable, which, grouted in cement, has made a sound base at this point.

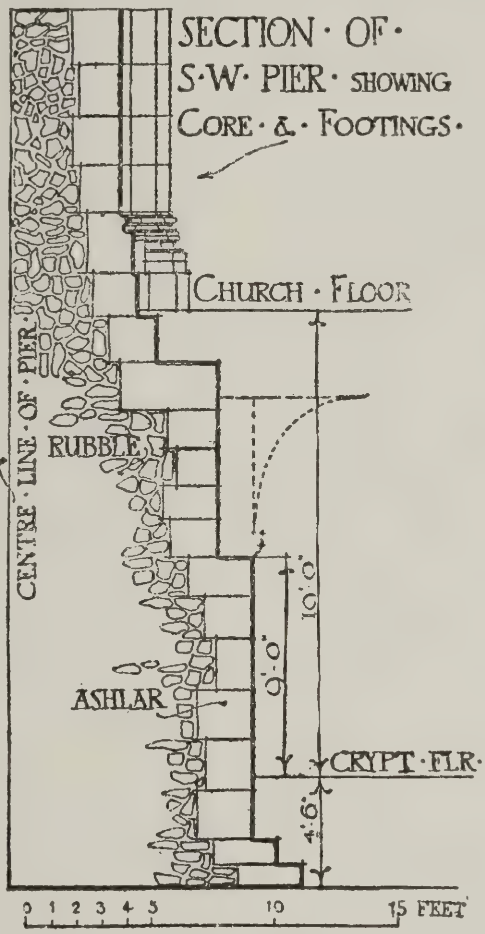
A CAPITAL IN PROCESS OF RESTORATION.

Another discovery was the fact that a great many of the carved capitals were not the originals, but poor copies insecurely fixed to the stone behind them by cramps, dowels, and lead. In many cases so badly had they been fixed that they fell off on the slightest attempt to examine them. Although no positive evidence exists to show when they were executed, we may assume that they were of later date than Wren's building. No work of such a "shoddy" description would have been passed by Wren or Hawksmoor. When the full weight of the dome came on to the piers it caused serious shatterings of the stone walling, and it clearly went on during the first half of the eighteenth century, as the rubble filling of the piers dried and became compressed. The core or rubble filling is not of uniform quality. A great deal of the mortar was made with a lime obtained by burning chalk lime or shells. Had Wren used even a poorly hydraulic



THE SPRINGING OF THE GREAT ARCHES UNDER RESTORATION.

STONEWORK OF CAPITALS CUT AWAY FOR RENEWAL ime he would have had a much more satisfactory agglome-ate. Considering the extraordinary aptitude of his genius or experiments, more particularly in chemistry, one is lost n wonder that he should have used such a poor cement, specially as he was always lauding the "fine Roman nanner" and meant himself to "build for eternity." That e was imposed on by some of the contractors is likely; we now that there were eight or nine, not all of them of the ame excellence as the Strongs. For instance, in the construction of the S.E. pier the work is not nearly so good as hat of the S.W. pier, the mortar is worse and the masonry f a very inferior character. To improve the power of resistance of the filling in the S.W. pier the method was mployed of solidifying by liquid grout. By this means it s believed that in addition to the 2 ft. of reliable stonework n each side of the pier, we have consolidated at least an xtra 6 in. of the core and possibly 1 ft. Taking a mean of in. this means that the reconstituted work on the pier epresents about half of the sectional area of the pier (i.e., ft. on each face=4 ft., and 9 in. of grouted core on each ace=1 ft. 6 in.—total, 5 ft. 6 in. out of 9 ft. 6 in.).


SECTION · OF · S·W· PIER · SHOWING CORE · & · FOOTINGS ·
CHURCH · FLOOR
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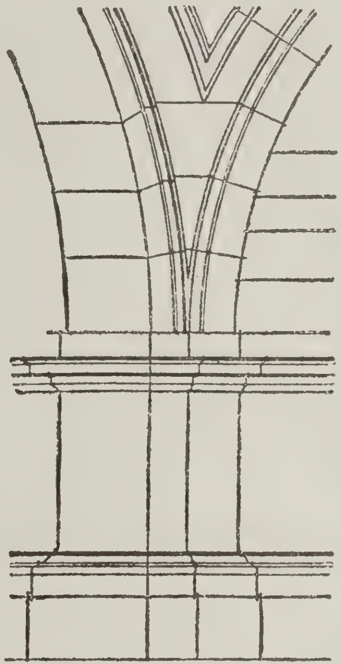
CRYPT · FLR ·
4'·6"
0 1 2 3 4 5 10 15 FEET



SPRINGING OF GREAT·ARCHES
SHOWING· HORIZONTAL· COURSES.

Another discovery was the method of construction of the uilding. The piers were built up with set-offs—that is to ay, the masonry was reduced in area as the work gained eight. The foundations are set on a bed of very hard clay nd consist of two layers of stone each 2 ft. thick and spreading out 4 ft. all round the crypt-piers. The piers in the rypt are set back—i.e., reduced from this to 16 ft. × 22 ft. his size is carried up to the impost or moulding from which he vaulting of the crypt starts. We discovered that at his point—i.e., the level of the impost—the piers were set ack or reduced 2 ft. They then continued perpendicularly ill within 2 ft. of the floor of the church. At that point hey went back to the face of the pier. I am indebted to Mr. Somers Clarke, my predecessor, for the valuable suggestion that on investigation it might be found that the vaulting was inserted subsequently to the main building of the walls and piers.

### *Mylne's Restoration of* 1781.

The Rev. R. S. Mylne, a great-grandson of Robert Mylne, a Surveyor of the Cathedral from 1765 to 1821, and a member of a family of masons for several generations, informed me that he had deposited the accounts, etc., connected with St. Paul's left him by his ancestor in the library at Lambeth Palace.

From these documents, which I was able to inspect through the courtesy of the Archbishop, I gathered much useful information. We learn from them that there had been serious destruction of the stonework, and that it had been covered up in an unsatisfactory way. Owing to the faulty system of repair, it was determined to carry out a complete restoration about 1781 and to close the Cathedral for nearly two years. Mylne seems to have used a large amount of stone veneer in his repairs, and also iron cramps. Owing to the formation of rust some of the masonry has cracked and split in all directions. We have removed every iron cramp and dowel so as to safeguard the public from all danger of falling stone as far as this pier is concerned. These papers of Mylne refer to some of the works carried out, such as the iron bands forged by "ships' anchor smiths" and the "compensation" worked on the mouldings and on the main cornice level to disguise the settlements over the four arches of the transept. Evidences of these works are there to this day.

One more discovery may be noted, though strictly a professional one, and that is that in the construction of the main arches Wren built the voussoirs at the springings of the arches on a level bed with only a short portion of the stone worked to a radius.

The urgently needed reparation, of which the first stage was completed in February 1919, occupied five years of unremitting labour.

We have learnt much as to the condition of this pier, and in particular we have come to realize that a bolder method of procedure than has been hitherto possible would save both time and money. By employing steel centering the work could be materially quickened and expense saved. The difficulties of working so as not to interrupt the services would be enormously lessened and the ever-present fear of failure eliminated. Further funds are required to press on the work, and it is for the public to come to our aid. The cost of labour and of material has practically doubled since this restoration was initiated, and without a substantial response the very necessary repair of the fabric may be considerably delayed. At this great moment in its history St. Paul's may well look for the offerings of many who are grateful both for its own marvellous escape from the perils of war and for the help which it gave to the nation in its time of trial.

[The foregoing article is quoted from "The Times." In connection with the reparation of St. Paul's, it may be mentioned that the bulk of the work has been done by Messrs. Dove Bros., Ltd., of Islington, who have also been responsible for repair work in many of the City churches.]

# The Bi-Centenary Celebrations

TWO exhibitions have been opened in London in connection with the bi-centenary of the death of Wren. One is being held at the R.I.B.A. Galleries, Conduit Street, and the other at the Public Record Office, Chancery Lane.

At the R.I.B.A. there are drawings and photographs, illustrating Wren's work, and books, letters, and other relics. The exhibition is open daily until March 3 from 10 a.m. to 6 p.m. (Saturday 10 a.m. to 1 p.m.). The exhibits include a model of Pembroke College Chapel (which was probably Wren's earliest known work as an architect), original contracts for the stone used for St. Paul's Cathedral and Greenwich Hospital, interleaved copies of the "Parentalia," original drawings of Hampton Court, drawings of Greenwich Hospital believed to be originals by Wren, Wren's measuring-staff, and the flowered waistcoat in possession of the Library of St. Paul's Cathedral. Among those who are lending valuable exhibits are H.M. Office of Works, the Admiralty, the Guildhall Library, St. Paul's Library, the Royal Society, Pembroke College, Cambridge, the Bath and Portland Stone Firms, Ltd., Messrs. B. T. Batsford, Ltd., Miss Lucy Phillimore, the Rt. Hon. John Burns, Hon. F.R.I.B.A., the Dean and Chapter of Westminster, and many others. The exhibition is open to the public without charge.

The exhibition arranged by the Public Record Office is open to the public between 2 p.m. and 4 p.m. (except Saturdays and Sundays). Autograph letters of Wren, original drawings, and other contemporary documents are on view.

## Visits to Buildings

Members of the Selborne and London Societies and the R.I.B.A. have paid a visit to Wren buildings in the City. Canon Alexander met them at Amen Corner, and kindly showed his residence, No. 2, one of the row of canons' houses that were erected when the Royal College of Physicians moved from the site after the Great Fire. Of its origin, he told the story of King Charles II having sent to the Dean and Chapter to borrow £1,000, which, to their unspeakable surprise, the King paid back. They were warned that this could only mean that the Sovereign intended coming again for a larger sum, and they had best get rid of the money in building. The forecast proved true when Charles asked for £5,000, but by that time the canons' houses were rising, and the funds being exhausted thereby, the cathedral body had regretfully to decline the honour of the loan. The house has many charming features.

Sir Banister Fletcher received the company at the Temple, and conducted them to various buildings which, by record or tradition, are associated with Sir Christopher Wren. Notable are those in King's Bench Walk, and he pointed out No. 5, Lord Mansfield's old residence. The entire row, till the late Georgian additions are reached, dates from Wren's time. The cloisters were shown as a piece of Sir Christopher's domestic architecture, and Lamb Building facing, on the topmost floor of which Pendennis had his rooms. Crown Office Row, where Charles Lamb was born, was later, but Restoration houses were seen in Essex Court, New Court, and elsewhere. Finally, opportunity was given to inspect the gateway of Middle Temple, an adornment given to Fleet Street by Wren. Whilst in the City, the party had passing views of a number of houses in Cheapside, Milk Street, and Great Tower Street that have survived from the rebuilding of London after the Great Fire.

## Christopher Wren—the Man

At the R.I.B.A. last week, Mr. Gotch gave the first of the new series of Thursday public lectures, reading "A Note on the Life of Sir Christopher Wren."

Mr. Gotch's lecture was far more than a "Note." It was a singularly charming and intimate revelation of a Wren hitherto unknown, of a very human person possessed of parents and uncles, of a strong-minded sister, of a family of his own.

We catch a glimpse of Wren courting. "Madam, your very affectionate and devoted servant"—and off comes his three-cornered hat with a magnificent flourish. A little man, this Wren, but a person of vast dignity, of grave demeanour and sober speech. We wonder if that marvellous brain of his left much room for heart in his composition. Certain it is that neither of his wives lived long.

Mr. Gotch made it very clear that Wren was before all things, a scientist. Architectural greatness was in a manner thrust upon him. We learn of his inventions: an astronomical instrument at the age of thirteen; an artificial eye, a weather-clock, a pen to write double. This last was pirated, and the protest of the outraged inventor proves that he was, after all, human.

Lastly, there is pathos in the dismissal of the old man in his eighty-seventh year from the post of Surveyor-General, which he had held so long and honourably.

But his work was done, and he had earned a rest.

## Wren Lectures

On March 1 at 5.30 p.m. Mr. A. E. Richardson, Professor of Architecture, will deliver a public lecture, with lantern illustrations, on "The Public Buildings of Sir Christopher Wren" at University College. Tickets may be obtained on application, enclosing stamped addressed envelope, to the Secretary, University College, London (Gower Street, W.C.1).

A University Extension lecture on "Wren and his Works" will be given to-day by Sir Banister Fletcher, F.R.I.B.A. at the Central School of Arts and Crafts, Southampton Row, W.C., at 6 p.m. The lecture will be illustrated by means of plans, photographs, and lantern slides.

## Fancy-Dress Ball

On March 9 the Architectural Students of London will hold a fancy-dress ball and carnival in the Galleries of the R.I.B.A from 9.30 p.m. to 5.30 a.m. The profits will be devoted to the St. Paul's Cathedral Preservation Fund. Tickets, including refreshments, 15s. each, can be obtained from: Mr. F. R. Yerbury (Organizing Secretary), The Architectura Association, 34–35 Bedford Square, W.C. Mr. J. O. B. Hitch, Architectural School Royal Academy; Mr. K. Cheesman Royal College of Art, South Kensington; Miss A. M. Hargroves, School o Architecture, University College, Gower Street, W.C.

## Wren a Member ot the H.A.C

An interesting fact in the life of Sir Christopher Wren was his membership o the Honourable Artillery Company. He joined the Company in the year 1676, and his signature is to be found upon the old vellum roll of members of the regiment In view of Wren's connection with the Company, a detachment of three officers and twenty men in church parade order attended the memorial service at St Paul's on Monday last.

# Architecture and Architects in India

## By H. V. LANCHESTER, F.R.I.B.A.

ADDRESSING a meeting of the R.I.B.A. last week, Mr. Lanchester said : The architect at home n put himself in possession of quite a mprehensive knowledge of the history Indian architecture. The works of erguson, Vincent-Smith, E. Havell, d others, not to speak of the publicaons of the Indian Archæological Dertment, would enable anyone interested form a fair idea of the complex inences under which this art has exessed itself.

I will pass on to a cursory review of the chitecture in general. The two main fluences that have dictated architecral forms are timber construction (inuding bamboo) and the rock-cut chamrs and temples. We must date the rmer as earlier than the latter, as even the rock-cut work there are many dications of wooden construction and e earliest stonework is handled on milar lines.

The rock-cut work initiated a vigorous d strongly characterized type of design ry definitely retaining the effect of ratification, which enabled most comex treatment of decoration to be emoyed without loss of strength and ability in the general effect.

The arch took a place in Indian archicture late in its development; how far was an indigenous development and w far imported is still a matter of gument. While the question is clearly pable of settlement, the scope for vestigation is too wide to be dealt with the moment.

To our taste most Indian buildings are er-enriched, but I would point out at those enrichments all have a meang to the Indian mind, and that they are t barbaric but proportioned and disibuted on a strictly architectonic basis. think you will agree that no style ows a higher standard of skill than the indu architecture up to the seventeenth ntury in the distribution of masses, e proportions of solids and voids, and e surface treatment with a view to conasting the plain and enriched.

We all recognize that the general strucre of a building must be dictated by the quirements it is to fulfil and the marial employed, but this structural heme, though it may not be falsified by s adornment, does not dictate inevitably e exact form in which it shall be exessed architecturally, much of this epending on the feelings and traditions hich obtain in regard to architectural xpression as understood locally or ationally. In many parts of India these aditions are still so strong that I cannot nceive of any course as a right one that eglects or ignores them. At the same me, it is difficult to see how the architect ained on European lines is to remodel is technique so as to base his methods f expression on those with which he is nfamiliar. He can only be expected to e able to do this if he substitutes as his ain objective the study of architectural evelopment in India for that of architecral development in Europe, regarding e latter, which one can hardly advise ould be neglected, as an illustrative commentary on the general history of his art.

I see no inconsistency between Indian architecture and the buildings which are in demand there at the present time. It is so flexible in form that the variations involved in the structure of modern buildings are less rather than more in comparison with those demanded in Europe. It is true that the basis of design in India has always been geometrical rather than arithmetical—how, indeed, could the mistri have memorized complicated plans unless by this method?—but it is all to the good if we can ourselves build up our schemes on such a basis. Many of the best modern designs owe something to such a method, and we have only to look at some of the finest plans of recent times to see this. Perhaps that of the Hotel de Ville, Paris, is one of the most illustrative examples.

I will pass on to the very vital question of the future of architecture in India. In recent years a very small proportion of the larger buildings reach a high standard, and many are far below mediocrity. To such an extent is this the case that those who appreciate architecture for its own sake generally advocate the restoration of the mistri to his position as designer. Now I have indicated the difficulties of adopting such a course, but at the same time I feel it is disastrous that advantage is not taken of the existence of a body of men possessing in such high measure genuinely artistic perception. The trouble has been that those responsibie for building have been incapable of appreciating the essentials of architecture and have framed their methods in such a way as to exclude the collaboration of the mistri. It is true a vernacular treatment is often adopted, but this is done in such a way as to foredoom the design to failure by defining everything on hard-and-fast lines and insisting on these being adhered to by the workmen.

The Englishman goes to India when his training is supposed to be completed, and then gets very little time to familiarize himself with essentials of Indian architecture, while the training of the Indian follows much too closely that of the European. If, instead of this, there were architects who had from the first thought of their work only in terms of the Eastern styles, styles that in India only demand a somewhat further fusion to reach a definite basis that could be considered classic, we should have a body of men who could prepare designs in which the suggestions made by, and the workmanship of, the mistri would fall into their places, the first adding interest to the design generally and the second ensuring beauty in the execution of the detail. The difficulty of employing the non-literate but skilful artist would disappear when the directing mind is sympathetic to his employment.

We find no difficulty at home in engaging artistic craftsmen whose work will, we think, be an enhancement to our designs, but the degree to which the similar man has in India been excluded from all important works would hardly be believed by those who have not looked into this question.

The buildings organized by us have no sculpture, painting or metal work of artistic merit, though all these crafts are among those in which India has for long excelled, with a tradition always linking them up to architecture widely different from our own traditions in this respect, where it is always something of an effort to bring the sister arts into due relationship. The time seems to be approaching when the architect will have a chance of establishing himself in India, as there is a strong feeling against the continuance of departmental control of works in place of such as could be effected by private agency. This feeling is partly due to a justifiable dissatisfaction with the results of departmental efforts and partly to the aspirations of the nationalist party, who believe that the Indian is prejudiced by official methods. Personally, I rather doubt if the Indian will find any immediate monetary gain by the abolition of official methods, as he himself contributes the bulk of the staff and has always been accustomed to this type of organization, but in the long run I think it is unquestionable that the substitution of individual effort for an official routine will be to the advantage of both the European and the Indian in bringing to the front those who are best qualified and spurring them on to do their best instead of smothering initiative under a mass of unintelligent regulations. You will, however, gather from what I have said, that in my view the architect for India should have a distinctive training, and that if this Institute is taking steps to offer membership to those who pursue their studies in India, the qualifications should be considered in the light of Indian conditions.

### *Discussion.*

In proposing a vote of thanks to the lecturer, Mr. James Ransome, F.R.I.B.A., formerly architect to the Government of India, said it was very difficult for Europeans to really understand the architecture of the East, because they saw it from such entirely different points of view.

Mr. Herbert Baker, A.R.A., seconded, and said the lecturer had touched on the question of the services of the mistri and their control of building work. He certainly thought they were successful on the simpler buildings, but when it came to larger work one had to remember that their methods were rather slow. With regard to the future of Indian architecture, that depended upon the political situation and upon the finding of some blend between East and West. He thought there was a great opportunity for architects who would appreciate the situation and start from the elemental and simple forms.

Prof. Beresford Pite said : If they could but enlarge their architectural conceptions to the breadth of the British Empire he ventured to think that their ideas on architectural education would have to be extended too—the sooner the better.

Sir Lionel Jacob, K.C.S.I., and Capt. George S. C. Swinton also spoke.

# Societies and Institutions

### *Birmingham Architectural Association.*

Professor S. D. Adshead, M.A., F.R.I.B.A., in reading a paper before the Birmingham Architectural Association on "The Architect and his Place in Municipal Town Planning," described the powers of local authorities under the Town Planning Acts of 1909 and 1919. The administration of the Acts took place in four stages. Professor Adshead said that the legal and financial aspects had killed the imaginative part of town planning. Mr. R. Savage, F.R.I.B.A., presided at the meeting.

### *Architecture as a Fine Art.*

Mr. R. Langton Cole, F.R.I.B.A., in delivering a lantern lecture on "Architecture as a Fine Art" before the London Institution, called attention to the rising interest in architecture. He said that one might exist without pictures or sculpture, but one must have a building of some kind in which to live and to carry on one's work. He suggested that all architecture might be looked upon as an art, in which the artist sought expression of his idea, just as the painter or sculptor. If this were done, the public would gain greatly by experiencing from a successful design the emotions which the artist intended to produce. He asked his hearers to keep their eyes open, to watch for effects among even the most familiar surroundings, and if they would do so, they would find that good architecture added another pleasure to life.

### *The Institution of Heating and Ventilating Engineers.*

Referring to the education of the engineer at the annual general meeting of the Institution of Heating and Ventilating Engineers, Mr. John Watson, the new president, said he thought they would agree that the facilities now offered were much in advance of anything previously available. He mentioned the recently issued pamphlet "Advice to Intending Students," which set forth the courses of study for each year of a minimum six years' course. He was convinced that, at the age of twenty-one or twenty-two years, any intelligent youth who had followed the prescribed course would be well informed in general knowledge of elementary engineering science, and in the basic facts of heating and ventilation. It was hoped that more and more youths would take advantage of the facilities offered as time went on. Prof. W. E. Garner, M.Sc., read a paper on the combustion of fuel in boiler furnaces.

### *Sheffield Architects at Dinner.*

The annual dinner of the Sheffield, South Yorkshire and District Society of Architects and Surveyors has been held at Sheffield. Mr. J. R. Wigfull, the president, was handed a gold watch on behalf of the members as a mark of appreciation of his services as secretary for many years. At the dinner the society had the privilege of entertaining, as Lord Mayor, one of their own members—Alderman W. C. Fenton.

The presentation to Mr. Wigfull was made by Mr. Paul Waterhouse, the president of the R.I.B.A. He referred to the necessity for friendship and unity between architects, and mentioned how the Royal Institute in London looked to the provinces for advice and help. Making the presentation to the president, Mr. Waterhouse said that Mr. Wigfull was the living embodiment of that unity and good fellowship to which he had referred.

Mr. Wigfull expressed his particular appreciation that the gift should be made to him by Mr. Waterhouse. He mentioned that he had been a member of the Institute for more than thirty years.

Mr. F. E. P. Edwards, the Sheffield City architect, proposing "The Arts and Crafts of Architecture," said they, as architects, frankly acknowledged the debt they owed to the skilled craftsmen who gave effect and being to the designs which would otherwise remain merely castles in the air.

### *The Auctioneers' Institute Registration Bill.*

Speaking at a gathering in London of the Kent, Surrey, and Sussex Branch of the Auctioneers' and Estate Agents' Institute, the president of the Institute (Mr. James S. Motion) said the council had worked very hard on the subject of the Landed Property Practitioners' Registration Bill, and Mr. E. H. Blake, the secretary of the Institute, had rendered most valuable assistance. He was gratified to be able to announce that the Bill had been tabled by Sir Edgar Chatfeild Clarke, M.P., and that in all probability the measure would have its first reading on April 27. A large number of members of Parliament had promised to support the Bill, and he thought it had some prospect of becoming a material fact.

### *The Norfolk and Norwich Association of Architects.*

At the annual meeting of the Norfolk and Norwich Association of Architects held at Norwich, the following officers and members of the council were elected for 1923: Messrs. E. T. Boardman, F.R.I.B.A. (president); G. J. Skipper, F.R.I.B.A., J. W. Cockrill, A.R.I.B.A. (vice-presidents); E. W. B. Scott, A.R.I.B.A. (hon. secretary); E. H. Buckingham, A.R.I.B.A., C. Upcher, S. J. Wearing, A.R.I.B.A. (council members); A. T. Wright (associate member of council); J. O. Bond, Lic.R.I.B.A. (hon. auditor). In addressing the meeting the president, Mr. E. T. Boardman, said that his advice with regard to housing was to get back to the ordinary channels. Housing should be carried out by architects and builders free from State control. He suggested a possibility of the land being bought by the public authority and let very cheaply for housing purposes. The prizes for the competitions for measured drawings and sketches, awarded to C. J. Messent, A. E. Warren, and G. S. Buckingham, were then presented. It was announced that two free public lantern lectures would be given at the Technical Institute on February 16 and March 2 respectively, and that an exhibition of architectural photographs would be held in the spring. The membership now totals sixty-three.

### *An Architects' Assurance Scheme.*

The council of the Architects' Benevolent Society have developed a scheme whereby they hope, with the co-operation of the profession, materially to increase the society's funds, and enable it to grant better assistance to applicants for help. Briefly, the scheme is that the society should act as an agent for life and other assurance, and that the commission obtained should be shared by the society and the insuring architect. Full particulars of the scheme may be obtained from the hon. secretary, 9 Conduit Street, London, W.1. Architects who effect their insurances in this manner will not only act in their own best interests, but will, at the same time, give loyal support to the less fortunate members of the profession. The society is the only philanthropic organization in the United Kingdom solely devoted to the assistance of architects or their widows and orphans, who have fallen on evil days.

### *Leeds and West Yorks Architects at Dinner.*

The annual dinner of the Leeds and West Yorkshire Architectural Society has been held at Leeds under the presidency of Mr. Eric Morley, of Bradford. Among those present were the Lord Mayor of Leeds (Alderman F. Fountain), Mr. Hugh M. Butler, M.P., Mr. Paul Waterhouse (R.I.B.A.), Sir Michael Sadler (vice-chancellor of the University of Leeds), Alderman Charles Lupton, Sir Edwin Airey, Messrs. Francis Jones (president of the Manchester Society of Architects), Charles B. Flockton (past president of the Sheffield Society of Architects), F. L. Charlton (hon. secretary of the Society), Sidney D. Kitson, the Rev. D'Arcy Rudd, and Messrs. H. S. Chorley, W. H. Thorp, and A. Copson-Peake (president of the Law Society).

The toast of the "Houses of Parliament" was proposed by the Lord Mayor, and responded to by Mr. H. M. Butler, M.P. The toast of the R.I.B.A. (to which Mr. Paul Waterhouse responded) was proposed by Sir Michael Sadler, who observed that architecture was history, and a record of each passing phase of civilization. Like teachers, architects had to be loyal to the past, and at the same time ready to accept new ideas.

The toast of the Leeds and West Yorkshire Architectural Society was proposed by Alderman Lupton, who referred to the work of the Leeds Improvement Committee. Mr. Eric Morley (the president, Leeds and West Yorkshire Architectural Society) responded. The "Allied Societies" was given by Mr. T. Butler Wilson (a past president), and responded to by Mr. Francis Jones (president of the Manchester Society of Architects), who suggested a chair of architecture at Leeds University. Mr. H. S. Chorley (advisory architect of the Leeds Housing Schemes), proposing "The Guests," declared that in spite of complaints, new houses had been put up in Leeds, which would vie with those in any other town. Mr. A. Copson Peake replied.

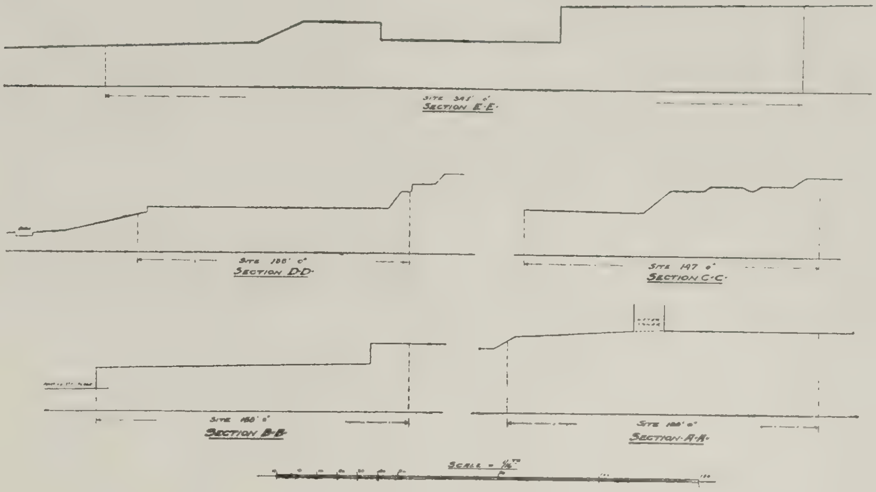
# Competition News

## he New Bournemouth Pavilion

The accompanying drawings show the e and the levels of the ground upon iich it is proposed to erect the new ›urnemouth pavilion. Sir Edwin oper, F.R.I.B.A., is the assessor. Par- ulars of the premiums, etc., are pub- hed in the "List of Competitions ›en" on page 421.

The pavilion is proposed to be erected the Westover Gardens and on the site the Belle Vue Hotel, between the estover Road and the Pier Approach. ie main entrance will be from the for- er, and the lower floor entrance from the ter. A small pumping station and iter tower on the ground may be in the iy of the proposed building; in this case ovision must be made by incorporating em in the building.

The building is to be of a substantial aracter and of stone, brick, concrete, d steel, or other equally permanent aracter, the design and treatment, how- er, being indicative of the purposes for iich the building is intended. Com- titors should keep in mind the fact that e view is seaward to the south and ith-west over the Pier Approach, and stward over the Pleasure Gardens and e Bourne stream, and that the main trance is north-eastward to Westover Road. These elevations are, therefore, of importance. All refreshment rooms should be planned so far as possible on these sea and garden fronts. The cost of the scheme must not exceed £100,000, including plaster, marble, or other decorations. If competitors should consider the sum inadequate, they must state so in their report, and indicate by one colour upon the plans what portion they can erect for the sum of £100,000.



LEVELS OF SITE.

The drawings required are as follows:—

Plans of each floor, two sections and all elevations to 1-16th in. scale (and perspective from the south-west corner), and a block plan of the site with any suggested development of the ground and approaches that the competitor may care to propose. This plan to be to the same scale as block plan supplied to competitors.

The drawings must be finished in black and white, sectional parts being blacked in, but all arrangements must be clearly indicated, including the seating. The perspective drawing is to be rendered in black and white, the building in the drawing measuring not more than 18 in. long.

The sizes of the rooms and corridors must be clearly figured, also the heights on sections.

Each drawing is to be mounted on a strainer without margins, and no identification mark, motto, or name to be attached thereto.

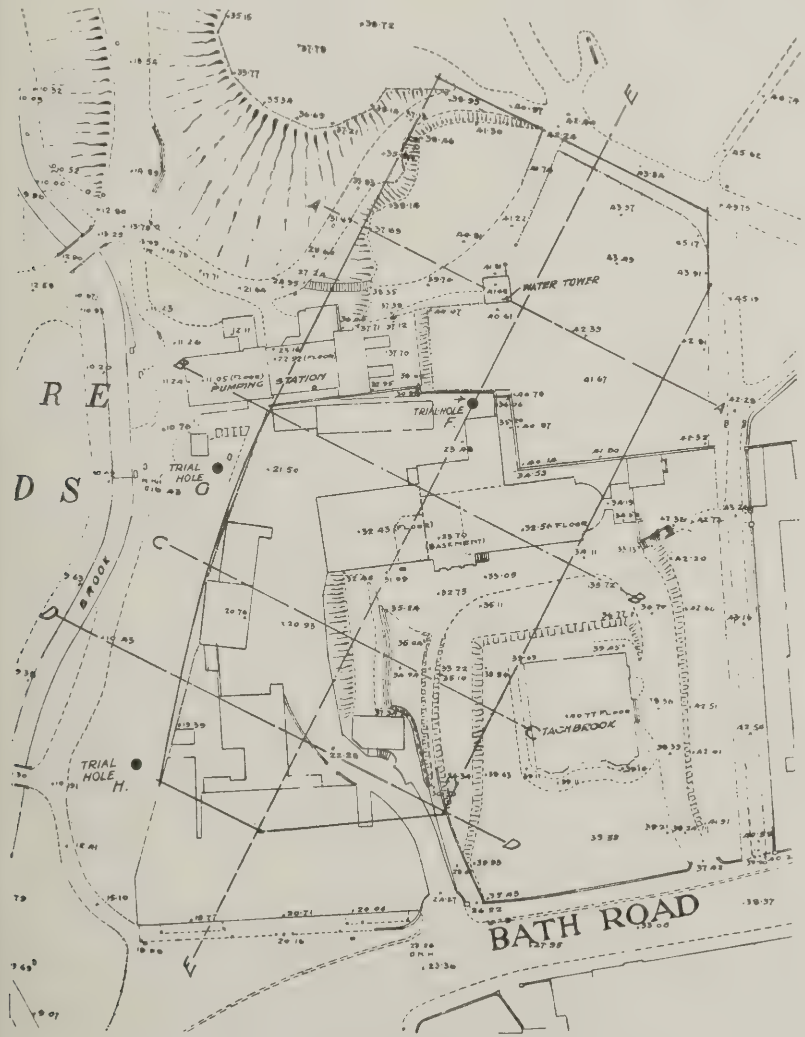
Accompanying the drawings there must be a short report stating the kind of material proposed to be used, particulars of the accommodation, and the cubical contents of the building given in three items, viz. : lower floor, concert hall, rest of the building, and the rates per foot cube at which these several parts could be erected, and the total cost of the building. The cubing is to be calculated from the top of concrete foundation to half-way up sloping roofs.

Following is the suggested accommodation drawn up for the general guidance of competitors :—

Lower Ground or Pier Approach level: large refreshment room (licensed—dispense counter only); service rooms; kitchens (luncheons and teas); lavatories —extensive; store rooms and cellars; three offices and as much store and workshop accommodation for the beach undertaking as can be provided economically in planning; heating chamber; administrative staircase only to floors above; separate public staircase from pier approach to main floor.

Messanine floor : green room and dressing rooms for hall; scenery and chair stores; toilet for staff and artistes; music store and band room; tea balcony round lower ground floor refreshment room with service.

Main floor (Westover Road level) : Concert hall with gallery, to seat 2,000, and with stage to accommodate first class



PLAN OF SITE.

orchestral, operatic, and dramatic performances, with such necessary dressing rooms, etc., as are not provided elsewhere, and provision for a bioscope operator's box. Provision must be made for the getting in and taking out of stage scenery and a sunk orchestra should be arranged in front of the stage for dramatic or operatic performances that can be covered over when not required for that purpose, forming additional floor area. In the hall provision must be made for an organ to be played from consoles. Careful consideration must be given to the acoustic properties of the hall. Three offices should be provided near the main entrance for administration purposes, together with small bureau of information. Turnstiles are to be arranged between the concert hall and other parts, so that each can be worked independently. Grand entrance vestibule from Westover Road, and cloak and adequate lavatory accommodation; billiard room (3 tables); reading room; lounge with balcony, having sea and garden view, to accommodate 250 persons. Tea and refreshment room on sea front with such service, dispense and kitchen not otherwise provided, and extensive balconies enclosed with glazed sashes on sea and garden fronts. (These rooms and balconies to seat about 500.) The floor of the main room is to be of hardwood, suitable for dancing. Messrs. Broad, Babbs and Dockerill, F.S.I., of London, and Bournemouth, have been appointed quantity surveyors.

The levels of the three Trial Holes marked F G and H on the block plan are as follows :—

| | Surface Level. | Bottom Level. |
|---|---|---|
| Trial Hole F .. | 24.19 | 20.20 |
| ,, G .. | 20.44 | 11.77 |
| ,, H .. | 18.98 | 9.55 |

## Cork Municipal Buildings

Each design in this competition (particulars of which are given in the List of Competitions Open) must be illustrated by the following drawings :—

(*a*) Block plan to a scale of 88 ft. to 1 in.; (*b*) a plan of each floor of the entire scheme; (*c*) not less than two elevations, to a scale of 16 ft. to 1 in.; (*d*) sufficient sections to illustrate the buildings; (*e*) a detail of a portion of the front to ½ in. scale.

The successful author will be required to prepare a perspective view at his own cost. The drawings are to be in black and white only, and may be either in pencil or ink. The floor areas in the plans to have a grey wash and the walls and sectional parts in both plans and sections to be a darker tint of grey or black. The elevations and detail may be shaded in wash if desired. The dimensions and floor areas of all rooms to be figured on the plans and the heights on the sections. No drains need be shown. All drawings are to be mounted on strainers without margins.

Following is the schedule of accommodation. Unless otherwise stated the figures given in parentheses are to be taken as about the area required in sq. ft. :—

A. Council Chamber, Committee Rooms, etc.—1. Council chamber, seating accommodation for fifty-six members, eight officials, six reporters, and general public (fifty seats); 2. Members room adjoining (400); 3. Room for deputations, interviews, conferences, etc. (300); 4. Lord Mayor's private parlour (500); 5. Office for Lord Mayor's typist and administrative work (300); 6. Committee room (800); 7. Committee room (450); 8. Committee room (450); 9. Kitchen for use in connection with committee rooms (350); 10. Lavatories (for use of members only). (The whole of the above accommodation is desirable on the first floor, with the exception of No. 9, which may be on the second floor. Nos. 6 and 7 should be so arranged that they may be thrown into one for receptions, conferences, etc.)

B. Town Clerk's Department.—1. General office to accommodate three assistants with counter and screen for inquiries (450); 2. Ante-room between town clerk's and Lord Mayor's room (300); 3. Town clerk's private room (450); 4. Spare room (200); 5. Small store and book room (150). (The whole of the above accommodation is desirable on the first floor.)

C. Secretary of Committees.—1. General office to accommodate a staff of three with inquiry counter and screen (400); 2. Secretary's private room (300); 3. Spare room for records, stationery, files, etc. (150). (The whole of the above accommodation is desirable on the first floor.)

D. City Engineer's Department: City Engineer's Offices.—1. General office to accommodate five clerical assistants with counter and screen (500); 2. Engineer's private room (300); 3. Drawing office with inquiry counter (500); 4. Room for plans, files, samples, catalogues, engineering instruments, etc. (250); 5. Spare room for stationery, records, and possible increase of staff (250). Highways' Department: 6. General office to accommodate staff of eight with inquiry counter and screen (400); 7. Outdoor inspectors (250); 8. Superintendent's private room (240); 9. Spare room for records, books, stationery, etc. (180). Waterworks Department: 10. General office to accommodate three assistants with inquiry counter and screen (350); 11. Office for six water inspectors with compartment screened off for their superintendent (250); 12. Spare room for stores, stationery, tools, and implements (200); 13. Service men and pipe layers (twelve on staff) (250). Outdoor inspectors: 14. Building inspector's office, 150; building inspector's clerk, 150; foreman of sewers, 150 (450); 15. One spare room for gangers, implements, etc. (200); 16. Hackney car inspector, 150; street inspector, 150 (300); 17. Foreman of lighting (150); 18. Room for staff of nineteen lamplighters (350); 19. Store room for oils, mantles, fittings, and implements (150). (Nos. 1 to 9 inclusive may be on the second floor, Nos. 10 to 12 inclusive may be on the second or ground floor, Nos. 13 to 19 inclusive to be on the ground floor, No. 14 to be one room partitioned, No. 16 to be one room partitioned.)

E. City Treasurer's Department. — 1. General office to accommodate a staff of nine assistants with counter and screen for inquiries (700); 2. Treasurer's private room (300); 3. Strong room for current records and documents (150); 4. Spare room for possible increase in staff (300); 5. Store room for stationery, documents etc. (150). (The above accommodatio may be provided on the first or secon floor.)

F. Rates Department.—1. Chief rat collector and deputy (300); 2. Genera staff office for a staff of five, with a inquiry counter and screen (500); 3 Room for two collectors (250); 4. Stron room (120); 5. Spare room for franchis work (200). (The above accommodatio may be provided on any floor. If place on the ground floor a separate entranc would be desirable.)

G. Public Health Department. — 1 General office for clerical staff of fiv assistants with inquiry screen and counte and with compartment for lady inspecto screened off (400); 2. Office for a staf of nine sanitary sub-officers (outdoo inspection staff) (550); 3. Private roo of executive sanitary officer (300); 4 Medical officer of health (300); 5. Offic for: (*a*) outdoor superintendents; (*b* shop inspector; (*c*) meat inspector; (*d* drain tester (300); 6. Room for two superintendents of domestic refuse collectio (250); 7. Spare room for stationery records, filing, etc. (150); 8. Store fo samples of food and drugs, utensils, etc (150). (The above accommodation ma be placed on the second floor. No. 5 t be in one room sub-divided into compartments for *a*, *b*, *c*, and *d*.)

H. City Analyst's Department.— 1. One principal room (600); 2. On room (350); 3. Office with inquiry counter and screen (200); 4. General stor room (700); 5. One spare room (150) (The above accommodation may be place on the ground floor.)

I. Gas Testing Department.—1. Offic with inquiry counter and screen (150) 2. Meter testing room with suitabl entrance for delivery of meters from carts etc. (500); 3. Room for photomete calorimeter for testing quality of ga (750); 4. Small office for records (200) 5. Bacteriological laboratory with inquiry counter and screen (400). (Th above accommodation may be placed o the ground floor.)

J. Weights and Measures Department.—1. One room for testing instruments with suitable entrance for th delivery of weights, measures, and scale out of carts (750); 2. Office for superintendent (150); 3. Special room for saf keeping of standard weights and measures etc. (150). (The above accommodatio may be placed on the ground floor.)

K. School Attendance Department.— 1. General office for staff of five wit inquiry counter and screen (450); 2. Committee room (300). (The above accommodation may be placed on the groun floor.)

L. Strong Rooms, etc.—1. Tow clerk (250); 2. City treasurer (250) 3. Rates department (250); 4. Publi health (200); 5. Secretary of committe (200); 6. City engineer (150); 7. Wate works (150); 8. General muniment roo (500). (The above accommodation, together with some space for genera storage, to be provided on the groun floor.)

M. Public Assembly Hall for Concert Lectures, Meetings, etc.—1. Auditoriu with gallery to seat an audience of 1,8 persons; 2. A platform for concerts, lectures, meetings, etc., to accommoda 150 persons; 3. Dressing rooms and lavatories for both sexes communicating wit platform; 4. Kitchen, etc.; 5. Meetin m for bazaar, concert and other organ- ıg committees (500); 6. Cloak rooms l lavatories for the public.

V. General.—Caretaker's apartments: consist of living room, sitting- m, kitchen, etc., and three bedrooms, ich may be arranged wherever most venient, but must have a separate rance from the street. Hall porter, : A small porter's room and telephone m to be provided. Lavatories should provided on each floor for male staffs l heads of departments, and a retiring m for females with lavatory to be vided on first and second floors. Open places are desirable in offices of heads lepartments, living rooms, etc. Other ms may be heated from a central tem. A passenger lift should be pro- ed.

## st of Competitions Open

| te of very. | Competition. |
|---|---|
| ch 31 | War Memorial in Crow Nest Park, Dewsbury. Assessor, Professor C. H. Reilly, O.B.E., M.A., F.R.I.B.A. A copy of the conditions together with plans of the site may be obtained on application to Mr. H. Dearden, A.R.I.B.A., Borough Surveyor, Town Hall, Dewsbury, on payment of one shilling. |
| 15 | Buildings for the Polytechnic Institute, Reval. Premiums 200,000 marks, 150,000 marks, 100,000 marks. Apply Office National du Commerce Exterieur, 22 Avenue Victor Emmanuel III, Paris. (8e) The competition is an International one. |
| 1 | New Municipal Buildings and Town Hall, Cork. Total cost not to exceed £120,000, Assessor Mr. Lucius O'Callaghan. F.R.I.A.I., A.R.H.A. The successful competitor will be appointed to carry out the work. Second and third premiums £200 and £100 respectively. Apply Mr. William Hegarty, Town Clerk, Cork. The competition is limited to architects living and practising in Ireland. |
| 30 | Bridge over Nygaardsstrommen in Bergen. Apply Department of Overseas Trade (Room 50), 35 Old Queen Street, Westminster, S.W. 1. |
| ate | Concert Pavilion, Bournemouth, to seat 2,000. Estimated cost £100,000. Assessor, Sir Edwin Cooper, F.R.I.B.A. Premiums: £300, £200, and £100. Apply Town Clerk, Municipal Offices, Bournemouth. Deposit £2 2s. (cheque). |
| ate | The Crown Agents for the Colonies, acting on behalf of the Government of the Straits Settlements, invite competitive designs for the reinforced concrete work required in connection with the construction of a new general post office at Singapore. Tentative designs, for which no fees will be paid, are required in the first instance, from which it is proposed to select a design and specify its adoption in the contract for the construction of the building. The firm whose design is so adopted will be subsequently engaged to prepare full detail plans, specification, quantities, &c., for an approved fee. Drawings can be seen and further details of the competition obtained from the Crown Agents for the Colonies, 4 Millbank, Westminster, S.W. 1, quoting Z/Straits Settlements 5664. |
| ate | Five shops for the Prestwich Co-operative and Industrial Society. Premium 75 guineas. Apply General Manager of the Society, Warwick Street, Bury New Road, Prestwich, Lancs. |
| ate | The following prizes are offered in connection with the Manchester Building Trades Exhibition to architectural students: Measured drawings—first prize, £40; second prize, £30. Architectural sketches—first prize, £20; second prize, £10. Sketches submitted may be in any medium, and must not exceed twenty. The Exhibition will be held in the City Hall, from March 6 to March 17. |

## Parliamentary Notes

Y OUR SPECIAL REPRESENTATIVE.

### *Housing Bills.*

hree Housing Bills have already been ɔduced into the House of Commons. first seeks to amend the enactments relating to the housing of the working-classes and the acquisition of small dwellings; the second to prolong the duration of, amend and restrict the operation of certain provisions of the Increase of Rent and Mortgage Interest (Restrictions) Act, 1920, and any enactment amending that Act; and the third to amend the latter Act, with respect to the notices to increase rent given thereunder.

### *Housing Policy.*

During a debate, Mr. Ramsay Macdonald, the leader of the Opposition, criticized the Government's housing policy, and expressed the hope that the recommendations of the Majority Report of the Departmental Committee on Rent Restriction would not be followed. The only solution of the problem, he said, lay in building more houses.

Sir Douglas Newton raised the question of housing as affecting the rural dweller, and urged that the present procedure should be simpler. "We do not want a lot of architects," he said. "We do not want elaborate plans. We have bodies like the building committees of the county councils, who are quite qualified to deal with plans and can look at a plan from the point of view of safety and sanitation and the other requirements of country districts, and if only some means could be devised by which the dole could be given in return for some building service, house rent could be reduced to the cost of the material used in building the houses, plus, perhaps, the labour employed in excess of the dole."

### *State-aided Schemes.*

At question time, Sir W. Joynson-Hicks informed Mr. T. Thomson that the late Government's assisted housing scheme was limited to 176,000 houses. All these had now been allocated, and there was not at present any margin available for redistribution.

Replying to Mr. Trevelyan, Sir W. Joynson-Hicks said that the number of houses erected or in course of erection under the State-assisted scheme and under the private builders' grant was as follows:—

| | |
|---|---|
| By local authorities and public utility societies .. .. | 176,000 |
| By private builders .. .. | 39,161 |
| By conversion of huts and hostels .. .. .. .. | 3,056 |
| | 218,217 |

## Town Planning Schemes

To afford practical help to local authorities with regard to town planning the Minister of Health has issued a set of suggestions in the form of model clauses for incorporation in the schemes. The clauses show that it is not intended that the details of estate development should be fixed and stereotyped in the scheme itself. The latter settles only the main outlines of development, i.e., the most important roads and the building lines on them and open spaces, and the allocation of areas to their main uses, industrial or residential, as the case may be. Site-planning and estate development are recognized as matters in which the initiative should rest largely with the owners, subject to reasonable control and guidance on the part of the local authority, and not be settled beforehand for them. The clauses only indicate the general form which schemes should take, and do not in any way relieve local authorities of the duty of fully consulting owners and other interests concerned in determining the actual features—roads, building lines, density standards, etc.—to be included in a scheme.

## Law Reports

### Ancient Light Dispute

*Brisley* v. *Vandersteen.*

Feb. 2. Chancery Division.
Before Mr. Justice Eve.

This was an action by Mr. Geo. Brisley, the owner of premises situate at High Street, Dover, against Mr. Albert Vandersteen, the owner of premises situate at 109 High Street, Dover, to restrain him from erecting at the rear of his premises any building or addition to his premises so as to constitute a nuisance to the plaintiff or to interfere with the access of light to the plaintiff's house or his furniture show rooms.

Mr. Gover, K.C., for plaintiff, said his client claimed ancient lights with respect to his parlour, kitchen, and show room.

Mr. Wm. J. Jennings, architect and surveyor, of Canterbury, gave evidence in support of plaintiff's case.

For the defence Mr. F. E. Hayward, of Dover, and Mr. Wm. Woodward, of Woodward and Sons, London, gave evidence to the effect that there would be no appreciable diminution of light to plaintiff's premises as the result of the erection of the buildings.

His Lordship said he had to decide whether, if the defendant was allowed to proceed in the way he proposed to do, he would obstruct the light from the plaintiff's premises so as to leave him no less light than he had the right to in the ordinary enjoyment of his kitchen. He was quite satisfied that so far as the kitchen was concerned there would be a material interference with the access of light, and that plaintiff was entitled to an injunction. With regard to the parlour, he had also come to the conclusion that there would be such interference with the access of light as to give plaintiff a good cause for action. His Lordship said he regretted that on the occasion when Mr. Hayward and Mr. Woodward attended on the premises to make their experiments an invitation to be present was not extended to Mr. Jennings and plaintiff's solicitors, as it might have led to some mutual arrangement to obviate the injury which plaintiff alleged defendant was bound to inflict upon him. That course, unfortunately, was not taken, and the experiments that were made did not therefore affect his Lordship's mind to the extent they ought to have done. He would grant an injunction restraining the defendant from erecting, continuing to erect, or permitting to remain erected, any part of what had been called the first-floor story of his building, so as to darken, injure, or obstruct the access of light to the plaintiff's kitchen and parlour windows so as to thereby cause a nuisance to the plaintiff. Defendant would pay the costs of the action, and there would be liberty to apply as to a mandatory injunction in respect of the building as at present erected. His Lordship said that on this point a meeting between Mr. Hayward and Mr. Jennings might be of assistance.

# The Water-colours of the Late Sir Ernest George

An exhibition of the water-colour drawings of the late Sir Ernest George, R.A., has been opened at the Fine Art Society Ltd., 148 New Bond Street, London. It contains about 150 water-colours depicting all parts of the British Isles, the Continent, India, Egypt, and other countries, and a series of sketch-book albums. Sir Ernest George was a great traveller, and seems to have made water-colour drawings of nearly all the places he visited. Some of the earlier work shown dates back to the "seventies." The sketch-books are of exceptional interest. Each one is devoted to one country and contains about fifty drawings. The exhibition will remain open for about three weeks.

Mr. E. Guy Dawber, F.R.I.B.A., has written the following appreciation :—

Ernest George will always be known as one of the most eminent architects of the Victorian era, although to a more limited public his name will be associated with his water-colour drawings and sketches. Here he occupied a position pre-eminently his own, and in his way was without a rival, and may justly be ranked amongst the best architectural draughtsmen of his time. The picturesque and romantic always appealed strongly to him, and for more than half a century, generally twice a year, he wandered abroad to sketch amongst the old cities of Europe. His output was prodigious, and his energy extraordinary, working before breakfast and most of the day filling his sketch-books and doing his beautiful drawings, a relaxation to him from an equally arduous life in London as an architect with a large and varied practice.

His naturally bright and cheerful temperament is reflected in his work, which is always clean, direct, and without the least affectation. He was a brilliant draughtsman, with a wonderfu gift of selection of subject and a powe of elimination of everything that detracted from his picture, and though h was a rapid worker, yet none of his drawings are hurried, and his slightest sketc shows that he carried through and completed his scheme of composition.

To sit beside him, as I have, and watc him put on paper with marvellou rapidity and precision a difficult and complicated subject, always selecting an grouping it with intuitive knowledge o what made a picture, was a useful, i depressing experience, though he wa always ready with kindly suggestion t help in one's own difficulties.

Perhaps his most fully develope period was between 1880 and 1900, whe he had gained from years of experience great facility of expression and breadt of colour, and during these years he pro duced his most characteristic work.

# The Acoustics of the Auditorium

## By G. A. SUTHERLAND

For his second lecture at University College, London, on The Acoustics of the Auditorium, Mr. G. A. Sutherland took as his subject "Good Acoustics and the Structural Conditions Necessary for their Attainment." He discussed the problem in so far as the size of the auditorium and the materials used in its construction were concerned. In the course of the lecture he said : Reflection ensures adequate loudness everywhere in a room with no dimension very great, and where the speaker faces the whole audience. At the same time it produces reverberation or slow decay of the sound. If this decay lasts for three seconds for a word spoken in an ordinary tone of voice nine syllables will be heard simultaneously and the result will be indistinctness. For speech reverberation should be reduced to the minimum consistent with adequate loudness. In a small room there is no difficulty here, and the reverberation should lie between half and one second. In a larger room a longer period of about 1·8 is tolerable, probably because in a large room a speaker expects to have to speak more slowly.

In music the case is slightly different, some prolongation and blending of the notes being desirable and giving what is known as fullness of tone. For chamber music 1·1 seconds, and for orchestral music 2·3 seconds are satisfactory. In concert halls complaints from musicians are more often on the score of inadequate than of excessive reverberation.

Besides loudness and reverberation, reflection may in larger rooms produce an echo, a defect that occurs when the reflecting wall is more than 37 ft. away. In this case the direct and reflected sounds succeed each other at an interval of more than one-fifteenth of a second and are heard as separate sounds. Even when the wall distance is 30 ft. there will be confusion, though not a discrete echo. In the case of a curved wall sound foci are produced, and there will be points of undue intensification and of comparative silence. Echoes are inconsistent with distinctness, and sound foci, even when not combined with echoes, are inconsistent with uniform loudness. For satisfactory results echoes and sound foci must be eliminated as completely as possible.

The general principle underlying the cure of reverberation is the introduction of material that will absorb the sound. The reverberation in an empty house is well known, as also is the improvement that can be effected by introducing porous hangings and wall coverings.

Exhaustive experiments in America have examined the relative absorbing powers of different materials used in building, and a formula has been developed which enables the reverberation period for a sound of given intensity to be calculated in advance of construction. If T is the time of reverberation, A the total absorbing power of the room and contents, and V the volume of the room,

$T = {\cdot}05\ V/A$ if the measurements are in feet,
or $T = 164\ V/A$ if the measurements are in metres.

The value of A is calculated by multiplying the different surface areas and units in the room by their appropriate coefficients, some of which are given below.

| | |
|---|---|
| Open window .. .. .. | 1·000 |
| Glass .. .. .. .. | 0·027 |
| Brick wall in cement .. | 0·032 |
| Brick wall painted two coats | 0·017 |
| Plaster on lath .. .. | 0·034 |
| Plaster on tile .. .. | 0·025 |
| Wood sheathing .. .. | 0·104 |
| Felt 6.6 cm. thick .. .. | 0·75 |
| Audience per square metre .. | 0·94 |

These coefficients are ratios and are the same whether feet or metres are used. In the case of units the following are some of the values (the figures given first are for feet and the second for metres).

| | | |
|---|---|---|
| Audience, per person .. | 6·34 | 0·44 |
| Ash chairs, per chair .. | 0·016 | 0·01 |
| Cloth cushion, per seat .. | 1·95 | 0·13 |

The first building to which the calcul tion was applied before construction w the new Boston Music Hall, which in th way, although seating 1,000 more pe sons, was designed to give the same reve beration period, viz., 2·3 seconds, as t Leipzig Gewandthaus, famous for its go acoustics. It is interesting to note th if the Gewandthaus had been reproduc in the same materials but on an enlarg scale the reverberation period would ha been 3·0 seconds and would have be considered excessive. Thus a scale co is not necessarily an acoustic copy.

As the absorbing power of a substan is found to vary for different notes, d tortion of complex musical tones m be produced by introducing absorbe material. The balance to be struck in case of this sort must be determined musicians, and it would be useful to ha the judgment of musical authorities this point collected in a suitable form

The prevention of excessive reverbe tion by the introduction of suita material has been successfully acco plished amongst other places in the Lit Theatre in New York, and in St. Pau Cathedral in Detroit, the difference this respect between the original desig and the final corrected ones being sho by reverberation curves. The meth adopted was illustrated by lantern slid Similar illustration was given of one many cures after construction in the ca of the House of Representatives in t Rhode Island State Capitol in Providen

The apparently incompatible deman of speech and music as regards reverbe tion in a hall that is to be used for bo can be met by the use of resonant mater such as wood panelling in the neighbo hood of the orchestra. This gives fulln of tone without excessive reverberati The effects of resonance have, howev not been adequately studied in a sci tific manner.

# Correspondence

## Loading of Office Buildings

SIRS,—With reference to Mr. Percy J.
aldram's letter and other correspondence
at you have published bearing upon
e relationship of architect and builder,
e former wide division between the
ofession and its executants no longer
ists. This must be recognized by all who
e in touch with modern building move-
ents. To give but one recent instance;
contract with which I am concerned
ntained some intricate joinery construc-
n. The architect—a man of wide
perience—handed us a skeleton detail
th the remark, "I should like to have
e opinion of your technical staff as to
e detail of this construction." This
inion was given with pleasure.

In the old days it was rare for the
hitect to consult the builder. The
cepted relationship was simply, "The
ilder was there to do as he was told."
e movement of to-day is for the builder
be looked upon as an expert in con-
uction, and the architect is more and
re inclined to consult the builder
er technical problems. This should
vays be possible provided the builder
es not presume and exaggerate his
oper function.

Touching upon the remarks made as to
he opportunities of young architects
ning into physical contact with those
ces which they are supposed to con-
l," I may say that builders are from
ne to time honoured by visits to their
rks and jobs in course of construc-
n by the students of the architectural
ools. In the view of many these visits,
m the student's point of view, are too
requent.

The vast amount of construction now
course of progress in central London is
mful of interest to the student. It
uld seem that on free Saturdays he
uld be well employed in taking the op-
rtunity for inspecting, not only the actual
ilding, but the materials in course of
nstruction in the works. W. M. HILL.

## Registration

SIRS,—With reference to Mr. Perks'
ter in your issue for February 21,
. Perks must surely be labouring under
elusion about the interview I had with
drafting committee.

It seems to be Mr. Perks' intention to
nvey the impression that the Society
Architects were fully conversant with
details of the Registration Bill from
rt to finish.

Personally I cannot see that any useful
rpose can be served by mentioning my
me at all, and although I was at the
neral meeting and heard him say the
ne thing there, I thought the matter
s too trivial to justify taking up the
ne of the meeting in contradicting the
tement, but now that it is repeated in
Press, and is likely to create a wrong
pression not only amongst the members
the Society of Architects themselves,
t also amongst our other friends who,
hough not actually on the Society's
ister, approve and morally support the
ciety's activities, I feel I ought not to
ow inaccurate statements to go un-
llenged.

Towards the end of July, 1922, I received a communication from the R.I.B.A. that a sub-committee had been formed for the purpose of drafting a Registration Bill, and then were desirous of having an "informal" chat with me in my capacity as Mr. Sadgrove, and NOT as the "President of the Society."

In due course an appointment was made, and I met the following gentlemen: Messrs. Perks, Cross, Hubbard, Shepherd, Flockton, Gilbee Scott, and McAlister at 3.30 in the afternoon of August 10, 1922. Very little indeed was said about the Bill. Three resolutions only were mentioned to me, and these were not fully debated for the simple reason that the subject was turned to a dissertation on the relationship between the R.I.B.A. and its Allied Societies. I happened to be aware at that time of certain restlessness, etc., in that department, and suggested it would be better that they should first of all put their own house in order—of course, it was not exactly in those words, but that was the effect of it.

Mr. Perks, at that meeting, asked Mr. McAlister whether what I had said was correct, and Mr. McAlister replied in the affirmative.

It was arranged that the three resolutions above referred to should be sent to me for consideration. In due time I brought the matter before the "Society," and I believe Mr. Butler, the secretary, wrote to the Institute to the effect that the Society had not got enough information before it to enable it to express any helpful views, but were ready and willing to consider any draft Bill which might be submitted.

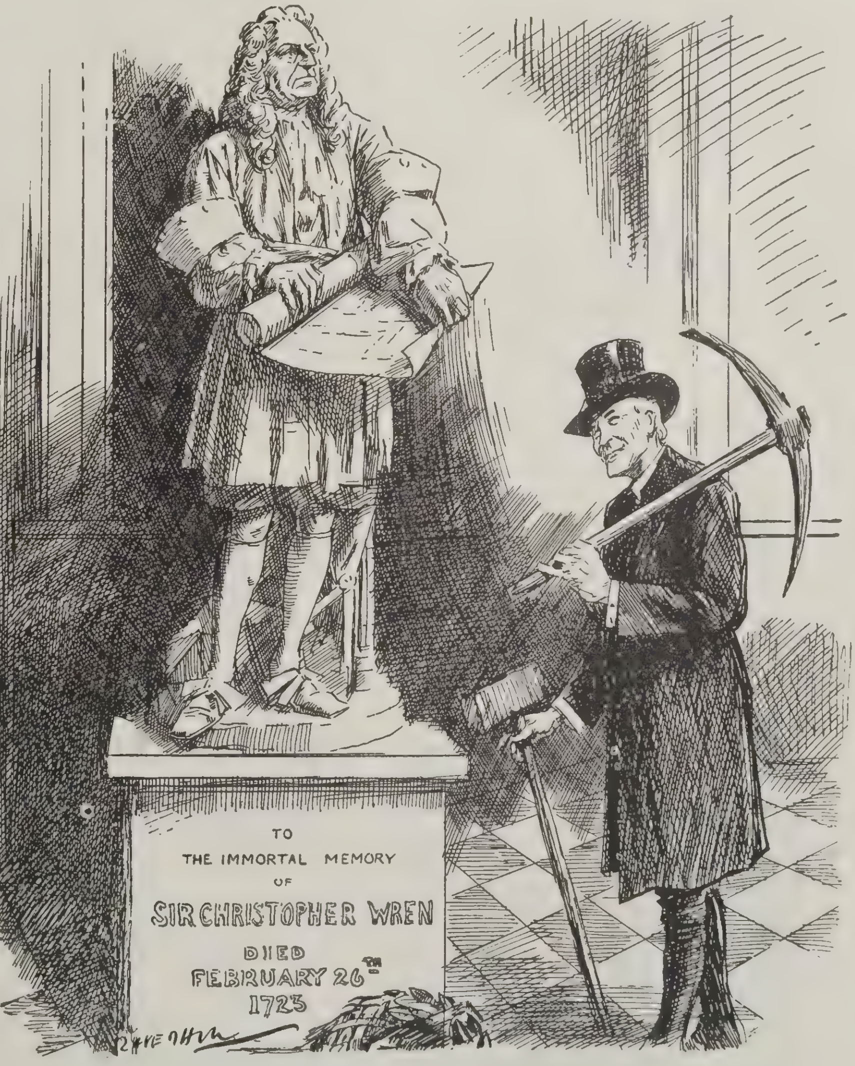
No answer was received to that, no draft Bill was ever sent, and the first time the Society knew anything of the clauses of the Bill was when it appeared in print in the R.I.B.A. "Journal."

In short, the Society knew absolutely nothing of the contents of the Bill, and it is consequently very misleading when Mr. Perks or other members of his committee make statements or convey inferences to the contrary.

Even there is exaggeration in Mr. Perks' remark about the "very friendly afternoon" which he says they had in Mr. Sadgrove's company. I arrived at 3.30, and was away again before 4.0, and I did not stay to tea. Of course, it was a friendly afternoon—what there was of it. Why not? I know every member of the committee personally, and they are all exceedingly nice men.

I am not annoyed because Mr. Perks has happened to make a misleading statement: he has forgotten, that is all, and what is more, I feel convinced he will receive my correction in the same good spirit as that in which it is made.

EDWIN J. SADGROVE.



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HAPPY THOUGHT.

The Bishop of London: "Ah! Wren! Great man! What can we do to honour his Bi-Centenary? I know. Knock some of his churches down!"

## Liberty's New Premises

Everyone walking along Regent Street will be attracted by the new contractor's board erected on the scaffolding for Messrs. Liberty's new premises, Tudor House. We give an illustration of it below, because the usual contractor's board is not a thing of beauty, and also we believe this to be one of the ways of making a new building of real interest to the public. Incidentally, it is an excellent advertisement both for the firm of contractors and their clients, and we congratulate them on this fact.

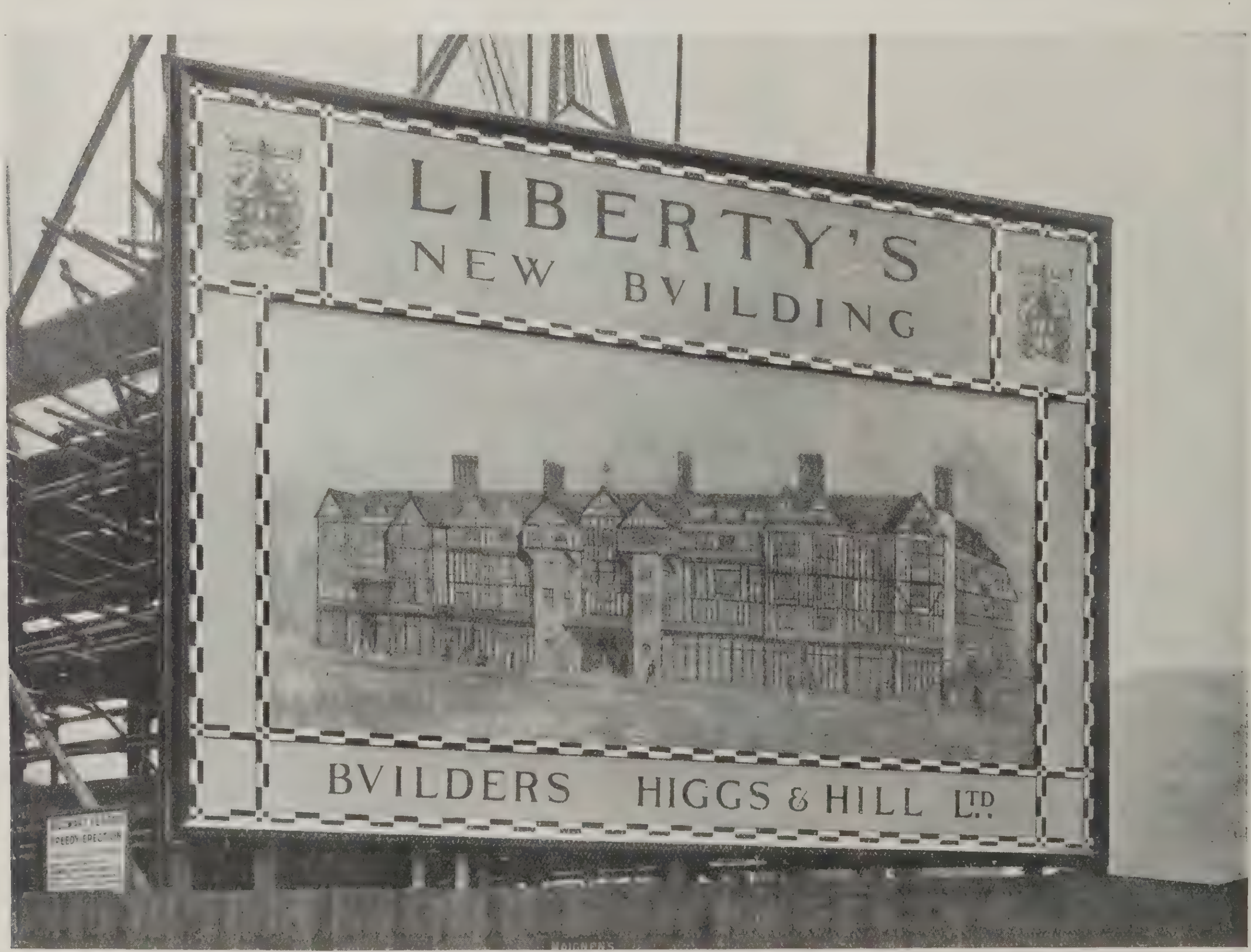
Like many other large business concerns to-day, Messrs. Liberty seem aware that there is far more real interest obtained, and therefore far more advertising value gained, by a well-designed and finely executed announcement than a display that is simply composed of huge lettering. Moreover, by showing a cleverly conceived rendering in somewhat romantic form of their new building they are taking the public into their confidence from the beginning of their enterprising departure, and they are creating the type of interest that will bring people flocking into their new building the moment it is opened. We are informed that the huge picture cost over £200, and it is money well spent.

## Electric Fittings and Appliances

In the new Birmingham premises of the Metropolitan-Vickers Electrical Co., Ltd. —Daimler House, 33-34 Paradise Street— the firm have brought together the general engineering office, the supply department offices, and the showroom and stores. The main showroom, on the ground floor, contains a comprehensive display of the electric fittings manufactured at the Birmingham Fittings Works, Harcourts, Limited, a subsidiary of the Metropolitan-Vickers Company. A large number of these fittings show the highest possible artistic merit. The designing staff are at the disposal of the architect, and all those interested in illumination in drawing up special schemes and evolving special designs to meet particular requirements. In this room are also shown heating and cooking apparatus together with other domestic appliances, the manufactures of the Metropolitan-Vickers "Cosmos" factory at Brimsdown. A portion of the showroom at the rear is laid out as an electric kitchen for the purpose of demonstration. Prominence is also given to the Radiophone sets manufactured by the company at Trafford Park. The general offices are adjacent to the showroom, and the basement provides ample storage accommodation for the large stocks of fittings and accessories which the company make it a practice to carry, in order to be able to give the best possible service. There is access from the main lobby of the building to a trade counter department in the basement, where the whole of the wants of the electrical trade in accessories are catered for. Here also is a second showroom in which the more industrial applications of electricity are displayed. An attractive exhibition is made of fractional horsepower motors, a representative selection of control gear, and a complete range of fittings for workshop, factory, and street lighting. The Glo-clad system of wiring, a product of Messrs. W. T. Glover & Co., Ltd., an associate company, is also adequately displayed. At Daimler House the Metropolitan-Vickers Electrical Co., Ltd., are in a position to meet every requirement of the electrical industry.

## Wren Period Mouldings

One of the foremost firms to carry on the tradition of the woodwork of the Wren period in this country is Messrs. Samuel Elliott and Sons (Reading), Ltd. Plates have been compiled by this company from authentic sources to delineate the wood mouldings of all the best periods, and the firm have now reproduced these mouldings for the benefit of their customers. In the Wren period there are mantelshelves, skirtings, dados, architraves, cornices, modillions, and panelling and other mouldings from such important buildings as Chelsea Hospital, No. 3 Clifford's Inn, Trinity and University College Chapels, Oxford, the Old House, Birmingham, St. Alfage, Greenwich, and other sources. The selection has been made with great care, and the sections have been accurately measured. The contours of the mouldings are correct in outline, though in a few cases modifications have been necessary at the backs of the mouldings to adapt them to modern constructional requirements. Other mouldings reproduced in a similar manner are of the Elizabethan, Jacobean, Georgian, Adam, and Louis Seize periods. A portfolio of the plates entitled "Authentic Mouldings" may be obtained from the company at Reading. In a foreword Mr. H. Austen Hall, F.R.I.B.A., writes: Architects will welcome a work of reference that provides a sound basis for design and encourages a closer adherence to some of the models of the masters of the past.



THE CONTRACTOR'S BOARD ON MESSRS. LIBERTY'S NEW PREMISES, IN REGENT STREET, LONDON.

# Book Reviews

### *An Electrical Pocket Book.*

To the larger section of the public the
ost notable advance in electricity has
een with regard to "wireless," but the
ther branches, although perhaps not so
opular, have also made great headway.
n the pocket book under review many
dditions have been made to bring the
hole of the information in line with
e latest requirements. Thus the trac-
r section has been completed by a
escription of the application of electric
ower to railways, the wireless telegra-
hy and telephony section has been re-
ritten by an expert; and the chemical
gineering section has been revised by
r. W. R. Cooper, M.A., M.I.E.E. The
ctifier section has been amplified to
clude the recent advances in high-
ower rectifiers, and the electric welding
ction to include progress in art welding.
he other sections have also been re-
ised and extended. This year has been
notable one in the history of the book
that it has passed from the hands of
s founders into new direction and con-
ol. The book is one of the most useful
at has come to our notice, and it is to
e hoped that its reputation will be main-
ined under the new control. The pocket
ok is edited by Mr. Conrad Arnold,
.M.I.E.E., and contains in addition to
diary, a buyers' guide and technical
ctionaries in French, Spanish, and
ussian.

"The Practical Engineer Electrical Pocket Book and
ary for 1923." Edited by Conrad Arnold, A.M.I.E.E.
enry Frowde and Hodder and Stoughton, 1 Bedford
ree, Strand, W.C.2.

### "*The Construction of a House.*"

Ever since the war, periodically the
ewspapers have given us accounts of
ow Mr. X has built his own house.
ometimes, even, it was a Mrs. X—or
en a Miss. And certainly these houses
ave stood up long enough at least for
em to have their photos taken, and,
rhaps, more was never required. But
the young builder is ambitious, and the
ouse is intended for living in rather than
r sale, we would ask him to study one of
e recognized building construction text-
ooks—finishing up, say, with Mr. Charles
ourlay's "The Construction of a House,"
which work Messrs. Batsford, Ltd.,
ave just published a second edition.

And no time will have been wasted, for
only fourteen pages of text and forty
ates of details and plans, Mr. Gourlay
ts the whole subject. And had the
thor set out to describe the construc-
on of a cottage, instead of a small man-
on with study, conservatory, tower,
lliard room, etc., the number of pages
ight have been halved.

Mr. Gourlay defines his purpose as
the presentation of a complete set of
refully designed plans and working
awings of an entire building, the
neral intention being that the student
ould prepare a similar set of drawings
r a building of his own design," and
so doing obtain a more complete
owledge of all the varied processes
ich are involved in the construction
buildings than if he were to attempt
attain this end by the study of de-
ched portions which do not form one
mplete design.

The author hopes that architects and
ntractors connected with any of the
ilding crafts will find this work useful for reference, and especially for assisting them to explain details connected with the art of building to young men under their charge.

During the twelve years which have elapsed since the publication of its first edition, we feel sure that Mr. Gourlay's hopes have been fulfilled.

H. J.

"The Construction of a House." By Charles Gourlay, B.Sc., F.R.I.B.A. London: B. T. Batsford, Ltd., 94 High Holborn, W.C.1.

### *The Decorators' Diary.*

Some important alterations and additions have been made in the twenty-first annual volume of "The Decorators' Diary and Trade Year Book." One of the most important is an exhaustive article on decorators' book-keeping, and specimens of the various account books which a decorator and builder should keep.

The list of painters' specialities has always been a very useful feature of this Year book, as decorators are not infrequently called upon to estimate on work described in a specification which calls for the use of a certain speciality with which they are not acquainted, and the name and address of the manufacturer is in each case given as a result of careful enquiry from every manufacturer of paints, oils, varnishes and kindred products in the country. The list may, therefore, be considered as quite up-to-date and comprehensive. The telegraphic addresses and telephone numbers have in a like manner been corrected.

The lists of painters' prices were calculated at 2s. 3d. per hour, the rate current when the 1922 volume was sent to press. Since that time the rates of wages for painters have decreased considerably, and they now vary from about 1s. to 1s. 8d., with a strong likelihood of their being changed again in the next few months. Under these circumstances, it has been deemed advisable to let the old prices stand, and to provide a table by means of which the price of any piece of work can be adjusted according to the rate of wages paid. This will render the price list adaptable for every place in the country. The diary is published by "The Decorator," 326 Bank Chambers, 329 High Holborn, W.C.1. Price 5s. net.

### *The L.C.C. Survey of London.*

The London County Council will shortly publish through Messrs. B. T. Batsford, Ltd., of 94 High Holborn, W.C., the eighth volume of its Survey of London, dealing with the parish of St. Leonard, Shoreditch. The volume will contain a wealth of historical information, fully documented, besides many illustrations of old houses and other buildings, which, by reason of their antiquity, associations, or architectural interest, are deemed worthy of being recorded in permanent form. The earlier volumes of this undertaking, which perhaps are not so well known as they deserve to be, deal with the parishes of Bromley-by-Bow, Chelsea, St. Giles's (including Lincoln's Inn), and Hammersmith.

## Publications Received

"The Express Superficial Cube, and Girthing Reckoner." Price 2s. 6d. Gall and Inglis, Publishers, London and Edinburgh.

"Dublin of the Future: the New Town Plan." By Patrick Abercrombie, M.A., A.R.I.B.A., Sidney Kelly, F.S.I., and Arthur Kelly. Volume I of the Publications of the Civics Institute of Ireland. The University Press of Liverpool, and Hodder and Stoughton, Ltd., London.

"The Liverpool Architectural Society Kalendar and Annual Report of Proceedings, 1921–1922," 13 Harrington Street, Liverpool.

"Suggestions for the Prevention of the Decay of Building Stone." By J. E. Marsh, M.A., F.R.S., Fellow of Merton College, Oxford. Price 1s. 6d. net. Basil Blackwell, Broad Street, Oxford.

"Open Spaces." By G. L. Pepler, F.S.I. From "The Town Planning Review." The University Press of Liverpool, Ltd. Hodder and Stoughton, Ltd., London.

"The Elementary Principles of Lighting and Photometry." By John W. T. Walsh, M.A., M.Sc., F.Inst.P., A.M.I.E.E. Price 10s. 6d. net. Methuen & Co., Ltd., 36 Essex Street, W.C.

"Etching Craft." By W. P. Robins. Price 21s. net. The Bookman's Journal and Print Collector, 173-5 Fleet Street, London, E.C.4.

County Borough of Blackpool: Report on the new Park and Recreation Ground. By Thomas H. Mawson and Son, Landscape Architects, London and Lancaster.

"Structural Design in Theory and Practice." By Henry Adams, M.Inst.C.E., M.I.Mech.E., F.S.I., F.R.San.I., F.S.Arch. Price 10s. 6d. net. Constable & Co., Ltd., 10 Orange Street, Leicester Square, W.C.

"Dry Rot of Wood and Sanitation." By Professor Percy Groom, M.A., D.Sc., F.L.S. Alfred Haworth & Co., Ltd., 84 Leadenhall Street, London, E.C.3.

## Decorative Woodwork at Victoria and Albert Museum

The Victoria and Albert Museum has recently acquired a valuable collection of decorative wood-carving, numbering upwards of 350 examples, which was formed during the course of many years by Sir Charles Allom, and has now been presented by him and by Lady Allom, as a memorial of their son, Lieutenant Cedric Allom, Royal Field Artillery, who died of wounds at Ypres in 1917.

The collection includes a considerable variety of panels and portions of panels, frames of doorways and windows, pilasters, capitals, and other details of decoration, many of them showing indications of the original gold or colour. It ranges in date from the Gothic period to the end of the eighteenth century; and, though the predominant styles are French of the times of Louis XIV and the Regency, later French work is well represented as well as English decoration of the seventeenth and eighteenth centuries.

In many cases, types hitherto unrepresented in the museum collections are now made available; and, as a whole, this generous gift furnishes far more than the nucleus of an index to the study of the art of decorative wood-carving during the periods covered, and, for this reason, will be of the greatest value to students and craftsmen. The collection is exhibited for the present at the west end of the west hall of the museum.

# New Inventions

*Latest Patent Applications.*

553.—Ames, R. Y.—Roofing tiles. January 6.
87.—Chatwood Safe Co., Ltd.—Strong rooms, etc. January 1.
387.—Fyfe, D. H.—Architectural instrument. January 5.
388.—Johnson, W. H.—Constructing walls, etc. January 5.
375.—McLean, D.—Walling, January 5.
553.—Scott, G. G.—Roofing tiles. January 6.
267.—Weber, K. L.—Non-breakable window panes. January 4.
927.—Clements, J.—Concrete shuttering irons. January 11.
1125.—Imray, O. Y.—Building beams and slabs. January 12.
867.—Monnier, J. B.—Bricks. January 10.
568.—Redford, A.—Heating arrangements for dwelling-houses, etc. January 8.
1096.—Rigby, T.—Manufacture of cement. January 12.
948.—Rurade, F. W.—Building-brick. January 11.
646.—Winks, J.—Preparation for disinfecting and restoring surface of stone, etc. January 8.

*Specifications Published.*

190638.—British Everite and Asbestilite Works, Ltd., and Jucker, E. F.—Roofs for buildings.
177543.—Coanda, H.—Floors, walls, roofs, or other structures, and reinforced concrete building elements for use therein.
190680.—Pitou, E. — Suspended scaffolds.
180337.—Charpentier, J. A. — Building blocks.
190803.—Nickson, O., and Ashworth, A.—Construction of walls, buildings, structures, and the like.
190849.—Myles, A. J.—Concrete.
182764.—Zollinger, F.—Means of producing the openings for doors and windows in the walls of buildings from cast material.

*Abstracts Published.*

189038.—Scaffolding.—Pitou, E., 507 Fifth Avenue, New York, U.S.A.—In suspended scaffolds, the attachments for the hoists are flexibly connected to the cross frames and secured against lateral and longitudinal displacement. The hoisting ropes 7 are suspended from cantilevers 6 and are connected to winches 8 on each side of the cradle, the winches being of the hand-operated ratchet type with a ratchet stop 12. Each winch is carried in a U-shaped frame *a*, the lower portion of which passes around a spacing block 16 with two rounded offsets, and is secured between the members 14, 15 of a transverse bearer or put-log. The frames and blocks may be disposed transversely of the cradle, in which case the members of the bearers are close together and the frames enclose the ends of planks, or they may be disposed longitudinally of the cradle, as shown in Fig. 5, but in each case there is a loose fit between the U-bearer and the ends of the spacing block so as to allow of flexibility.

FIG. 1.

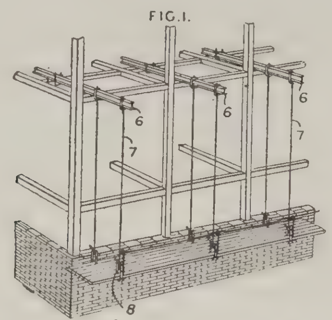


FIG. 5.

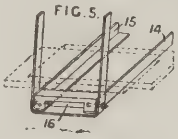
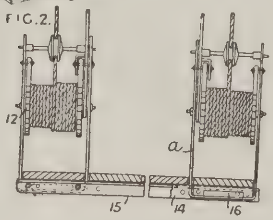


FIG. 2.



189290.—Building blocks.—Thomson, R., 52 Chancery Lane, London.—Relates to hollow building-blocks for walls, and in particular to the bedding-joint thereof. The courses of blocks 1 are erected dry, each block standing on the lower faces 12 of webs 11 in contact with the block beneath, the surfaces 6, 7 being situated so as to permit the insertion of bedding material 18 into the longitudinal channels 8 through the hollow interior 2. Vertical channels 10 are provided to form an end-joint between contiguous blocks while bedding-strips 20, or in the case of corner-blocks, bedding-blocks 24, Fig. 6, may be used.

FIG. 2.

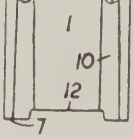


FIG. 5.

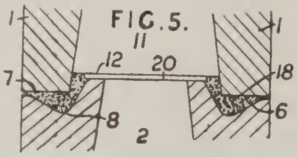
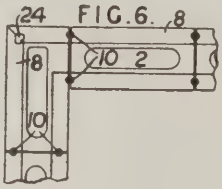


FIG. 6.



The above particulars are specially prepared by Messrs. Rayner & Co., registered patent agents, of 5 Chancery Lane, London, W.C. 2, from whom readers of the Journal may obtain all information free relating to patents, trade marks, and designs. Messrs. Rayner & Co. will obtain printed copies of the published specifications and forward on post free for the official price of 1/- each.

## The British Industries Fair

The British Industries Fair, 1923, organized by the Department of Overseas Trade, has opened at the White City, London. Concurrently with the London Fair a Birmingham section, organized by a special committee drawn from the Birmingham Municipality and the Chamber of Commerce under the auspices and support of the Department of Overseas Trade, is being held at Castle Bromwich. In the catalogue of the London Fair, which has just been issued by the Department, the names of the exhibitors, all of whom are British firms displaying their own manufactures, number nearly 800. The catalogue also includes alphabetical lists of the exhibitors in English, French, Spanish, Italian, Portuguese, Danish, Swedish, and Dutch, and a large amount of information of the greatest value to the visitor. Admission to the Fair is by invitation of the Department only, and is restricted to bona fide buyers for home and overseas markets. A special train and motor-bus service has been arranged for visitors who wish to visit both sections. The Fair is open daily, Sundays excepted, from 10 a.m. to 6 p.m., until March 2.

## Architects and Country House Lighting Sets

(*Contributed.*)

At the present time one of the most important problems encountered by the architect in connection with country houses is that of selecting the system of lighting. The advantages of electric light are obvious, and the initial cost of an electric generating plant is low, but many architects are still strangely unfamiliar with these plants, and depend almost entirely on the advice of their electrical contractor. The number of lighting sets on the market is legion, but in selecting a plant there are some important points which should be considered.

Of the three main types—hand-controlled, semi-automatic, and fully-automatic—it can be said in general that the engineer will always prefer the first because, although it needs most time and attention, every function is under the user's control. But for the small house, where in many cases the plant is being operated by a non-technical owner, the semi-automatic type gives the minimum of trouble and is the most suitable. The set can be started up from a switch—like a car with a self-starter—and when the battery is charged the engine automatically shuts itself down.

Simplicity of control and accessibility of working parts are important. It is better by far to have all the electrical gear on the front of the switchboard, where it can be seen, and where it is easily accessible. With regard to fuel, petrol is clean and avoids the necessity of a separate fuel for starting up and running; but paraffin nearly halves the running cost, and where a really efficient vaporizer is used it is perfectly satisfactory.

These points with regard to general type, drive, simplicity of control and accessibility, and fuel, are all insignificant when compared with those of (1) reliability; (2) running costs; and (3) first cost.

Reliability is a *sine qua non*, and the best way to secure this is to select a maker with a reputation for excellence, and one who is prepared, not merely to sell a set and decline further responsibility, but who is willing to give service, and see that the set is giving the utmost satisfaction after it is installed.

It should be remembered that running costs include not only the price of fuel, but also that of lubricating oil—a point which is often forgotten—and repairs.

In starting up a lighting set by the standard battery charging type of plant, the engine will be required to run only for a few hours once or twice a week on nearly full load.

dnesday, March 7, 1923 Vol. LVII. No. 1470

# THE ARCHITECTS' JOURNAL & Architectural Engineer

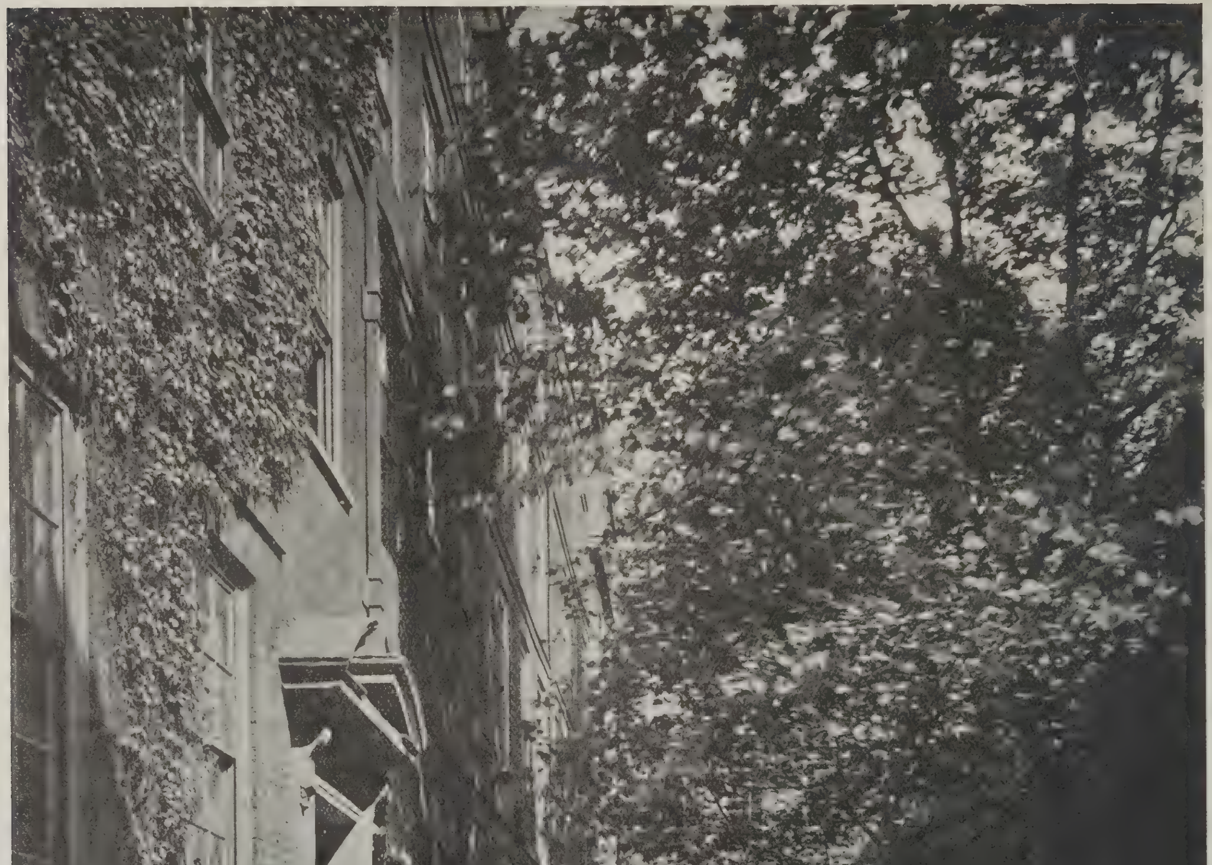
*With which is incorporated "The Builders' Journal."*

HAMPTON COURT PALACE
*Sir Christopher Wren, Architect.*

27-29 Tothill Street, Westminster, S.W.1.

# Architecture of the Eighteenth Century. 20.—Pump Court, The Temple

Sir Christopher Wren, Architect



The mellow, restful beauty of the Temple, with the grave repose of its paved courts, is something Wren seemed to give to everything he touched.

THE

ARCHITECTS' JOURNAL

27-29 Tothill Street, Westminster, S.W.1.

lnesday, March 7, 1923

Volume LVII. No. 1470

# A Test for Town Planning: The Kent Coalfields

THE question as to the extent to which it is possible to preserve tracts of country of particular natural beauty inviolate against industrial developments is a delicate one. It is clear that there be no rule for general application. Industrial enterse cannot be put before all other considerations, neither, the other hand, does it do to take a firm stand on æsthetic, timental, or romantic grounds. Granted the need for ustrial development, and the consequent exploitation natural resources—and those who will not grant this form inority that would completely change the structure of organization, nay, our very ideals and outlook—the stion must be faced on broad national lines. What is t for the nation must be our consideration, and the fare of a nation is built of manifold conditions, of which y access to beautiful, unsullied country is not the least. tract of country may be of such particular beauty that presence of whatsoever natural advantages for indusl exploitation would not justify its destruction. On other hand, where the land in question has not this que distinction, and where there are other ample open ricts, to forbid mining operations or similar activities ld clearly not be in the best national interests. Under conditions, however, should such development be wed to proceed at random and without careful planning. country is full of warnings, the result of past folly, shness, and lack of foresight. The very essence of n planning as a science and as a branch of the humani- is to protect us against such things. To take an analogy n international politics, just as we should rightly say t the League of Nations had failed if it ever permitted ther great war to devastate a continent, so, too, we uld say that town planning as an organized activity failed if it ever permitted the chaos of the midlands to at itself in any part of the country. Neither example, it be understood, is the theory challenged; but its pracl application has failed under a severe test of current irs.

t seems that in Kent there is likely to be afforded such st, failure adequately to deal with which will stultify n planning as a practical help in coping with the daily culties arising naturally from the system of our organiza-. It is no new knowledge that parts of Kent are rich oal, and there has been sporadic exploitation for some . There is now, however, a definite danger that a new chaotic industrial area may grow up. Londoners have ys regarded the *home counties* as an extended recreation nd; as a place of easy access for solace from the mune oppression of the metropolis; but this fact cannot lude development of a particular area in one of them, e governing circumstances are sufficient to justify such elopment.

he first question to be decided, therefore, is whether or no the development is to proceed at all. And this should be considered on the lines suggested at the beginning of this article: Is the district unique for beauty or other reasons? Is it on reasons of communal health, mental or physical, essential that it retain its present rural character? Is the putative richness of its mineral deposits sufficient to justify the spoliation of its beauty? These are the main broad aspects of the matter. We think the verdict would be in favour of development, but were this so, it is quite certain that a rider would be added to the effect that such development must be on pre-arranged and orderly lines. And herein lies the danger. Development has begun on anything but orderly lines.

Most of the activity is in the neighbourhoods of Tilmanstone, between Canterbury and Dover, of Chislet, between Canterbury and Margate, and some of the companies concerned some time ago put forward proposals for the formation of public utility societies, which were to provide a great number of houses. The plans were well considered, the lay-outs of some being on lines used with success in other mining areas whereby the backs of the houses face service roads, and the fronts, with their gardens, are approached by a common footpath. The schemes, however, never matured, and only a few houses have been built, more or less at random. The development of a new industrial area, however, is much more than the mere provision of houses of whatsoever superlative quality. There is only one way by which the matter can be satisfactorily dealt with, and that is by means of a joint scheme prepared by a competent person or persons who will take into consideration all the various factors which synthesize an industrial area.

A conference should be convened at which the various local authorities, the colliery owners, and all interested parties are represented; a committee should then be formed and the services of a town-planning expert retained. A joint scheme should then be drawn up, which would regulate both the immediate and the future development of the area on broad and comprehensive lines. We have already seen by the report of the Doncaster committee how thorough such a survey can be made, and although conditions are not the same, for Doncaster itself with its railway works formed a nucleus which is lacking in Kent, the Doncaster report is a valuable guide.

If no action is taken by the authorities and parties concerned, it is sincerely to be hoped that the Ministry of Health will move in the matter. Under section 47 of the 1919 Act the Ministry has power to compel an authority to prepare a town-planning scheme. Surely this is an occasion when such power might with ample justification be employed. The matter is urgent, and calls for immediate action. These are days of quick development, and in a short time decisive steps are taken which can only be altered at great cost. The opportunity has then been lost, and the development, instead of being confined to certain pre-ordained districts breaks out like a virulent pox all over the countryside. And if this happens there is nowhere that the blame can be laid. Each colliery may be developed on the best lines for its immediate requirements and expectations, and with due consideration for its employees, and at present it is difficult to expect private enterprise to do more. Unless there is one local authority of sufficient importance or whose interests are sufficiently affected to induce it to convene a conference, disaster and chaos lie ahead.

Londoners (perhaps thereby typifying the nation) are notoriously apathetic, and it is they most of all who will bemoan the promiscuous industrializing of Kent. They, therefore, more perhaps than those in the immediately threatened neighbourhoods, must raise their voices in protest. They must agitate through the columns of the Press and through Parliament. Even if the danger is not so imminent as we imagine it to be, the district still calls for a regional survey and a regional plan, for if, as experts assure us, the district is rich in minerals, development cannot be indefinitely delayed. Safe in the knowledge of the existence of a finely-conceived, comprehensive scheme, which confines industrialism within reasonable bounds, and of the determination to enforce it when the time comes, we can await such development with equanimity. Failing this, we fear the worst.

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## The Wren Banquet

The Wren Commemoration Banquet at the Hotel Victoria was one of those epic events that linger long in the memory. It was entirely pervaded by the spirit of Wren, whose pallid bust occupied a pedestal in the middle of one side of the chamber. Mr. Waterhouse had committed formal words to paper (and very eloquent words they are), but he was indubitably right in disregarding them and speaking, as he himself said, “from the heart.” Both Sir Reginald Blomfield and Mr. Mervyn Macartney followed this admirable lead. What the addresses may have lost in literary precision they undoubtedly gained in spontaneity and freshness. Freedom from the shackles of the written text enabled Mr. Waterhouse to bring in many effective incidental touches. For example, quoting the metrical criticism :—

“Would God that Wren's immortal hand
And more than mortal brains
Had built St. Mary's in the Strand
And not St. Clement Danes,”

Mr. Waterhouse commented drily that there was more Wren than Gibbs in St. Mary's. His description of the Warrant Design as one of Wren's sly jests was another illuminating touch. Nor was the speech lacking in the dramatic note, as when Mr. Waterhouse declared his belief, “as a Christian and an architect,” that Wren knew of the homage being done him that night. Masterly in its appraisement of Wren and his work, the speech had the true ring of oratory. It was worthy of the greatness of the occasion.

## Wren's Plan and a Critic

A distinguished architectural acquaintance recently observed to us that it was a fortunate thing for London that Wren's plan was never carried out. His reasons for this remarkable and somewhat reactionary view were : (1) That the continuity of London's arterial tradition would have been broken; (2) that Wren's plan has much of the gridiron monotony that makes the typical American city so uninteresting; and (3) that the genius of the British people expresses itself most naturally in makeshift, improvisation, and compromise. That these arguments have a certain amount of truth in them cannot be denied; but they are not entirely convincing. It may be said in reply to (1) that, although many of the mediæval characteristics of London's plan still remain, street widenings, new thoroughfares, and minor remodellings have entirely changed th general aspect of the City's face; in reply to (2) that convenience and good circulation are desirable principles o town-planning, and should not be sacrificed to picturesqueness; and in reply to (3) that if Wren's plan had bee adopted, later generations would not have had to expen millions of pounds on improvement schemes. A ba past is no excuse for a bad future. We must learn t learn from experience, even at the sacrifice of some of ou cherished national prejudices. We still feel regretful tha Wren's plan remains only on paper.

## The Architecture Club's Exhibition

The Architecture Club is to be heartily congratulated o its first exhibition, which is now being held at Grosveno House. Here is a first-rate show of photographs of moder architecture. Though primarily intended for the enlightenment of the general public (hence the absence of plans an drawings), it is full of interest for architects, who are hereb strongly urged to go and see it. The exhibition shows a least three things : (1) That English architects are stil supreme in domestic design; (2) that there is a marke improvement in what, for convenience, may be calle “monumental” work; and (3) that we are not behind an other nation in the photographic representation of architecture. In our opinion, this show is quite up to the hig standard of the exhibition of American architecture whic created such a stir here a few months ago. (Let it be said incidentally, that Burlington House could pick up quite few tips from Grosvenor.) For the guidance of those wh are not too well up in the topography of Mayfair, may w say that Grosvenor House is in Upper Grosvenor Street within a stone's throw of Park Lane.

## A Dangerous Client

Clients, no doubt, are of all sorts and conditions, but the may be roughly classified under the familiar headings o good, bad, and indifferent. The good client, of course places himself unreservedly in the hands of the architec and never interferes. But he is rare; we greatly fear tha the bad predominate, with a small leavening of the indifferent. But a bad client is not necessarily dangerous *Au contraire,* he or she may be distinctly entertaining There is the story of the lady who, dissatisfied with th designs of her architect, took a hand herself, and gave th builder some plans of her own. It is recorded that when th builder found that the chimney flues of the ground floo had no connection with those of the first, that the staircas had been left out, and that the only way to include th bath room was to hang it out of a window on chains, h went behind a tree and wept like a child. Then there is th well-authenticated episode of the country architect an his lady client who, after some disagreement about roofin materials, became involved in a heated argument; the lady unsettled by the menacing demeanour of the architect ultimately beating a hurried retreat down the High Stree crying nervously, “Slate!” with the architect followin behind frantically waving a pantile in the air and shoutin vehemently, “Tile!” About such clients there is nothin particularly dangerous. They either amuse or annoy yo —as you happen to be a disinterested spectator or th outraged architect himself. It has been left to Mr. St. Joh Ervine, the distinguished dramatic critic of “The Observer, to hold the threat of murder over the head of the luckles architect. Mr. Ervine would like to build a theatre—a ideal theatre—and he sets forth his views in detail, concluding : “The whole business of acoustics and heating wi be scientifically discussed before the theatre is built, and the architect fails to design a theatre in which it is possib to hear without strain and to sit without being half suffocated, or frozen, or blown out of one's seat by the draugh I will personally wring his neck for him.” Mr. St. Joh Ervine would be a dangerous client.

# The Architecture Club

## An Exhibition of Contemporary Architecture

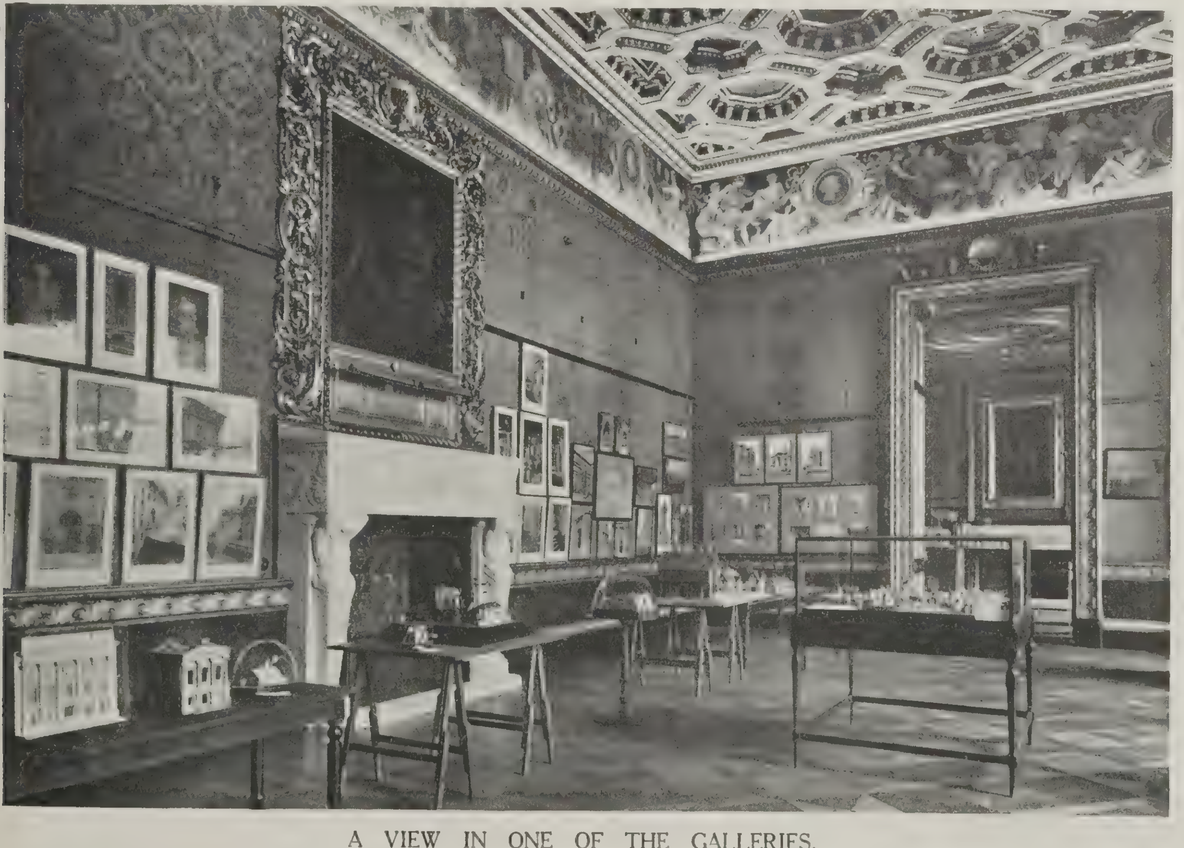
N an interview, published in "The Observer" of February 25, Mr. J. C. Squire, the President of the Architecture Club, explained the main objects of the promoters of this exhibition. "We think," he said, at if the public come to see it, as they ought, interest the best work being done will be greatly stimulated; t persons about to erect buildings will realize better n they have ever done in the past the importance of ploying the best available talent, as well as the fact that most conveniently designed buildings are usually the st beautiful; and that architects themselves will be isted to realize more precisely along what lines the ditions of the art are developing. It is obviously more ortant than ever to put up good new buildings at a e when there seems to be a mass attack of vandals on good old ones."

here can be no doubt that this exhibition will be a rked success and will have great educational value, not y for the general public, but for architects themselves, it is to be hoped that in future years the Architecture b will hold similar exhibitions of this and of other ds, for what is most needed in architecture at the sent moment is publicity, and the right sort of pub- ty. We want to make architecture a subject of general versation. That is the very first pre-requisite for the e prosperity of our art. It was therefore a good idea the part of the committee to institute lantern demon- tions every day during the exhibition, and if, after se demonstrations, the lecturer encourages the members is audience to ask questions, even welcoming any signs rgumentativeness on their part, he will be performing a y valuable service.

he Duke of Westminster has kindly lent the ground r of Grosvenor House for the exhibition, and the hand- e rooms form an admirable setting for the photographs models. Before making a detailed reference to the dern work which is here shown, it may be well to mention the historical section, which consists of a collection of models (some collected by Lady Constance Hatch and Lady Murray) of mediæval taverns and houses, complete representations of old towns, and several admirable Tudor and Queen Anne specimens.

With regard to the general arrangement of the photographs, it is clear that the committee must have had a difficult task, for they were faced with an old dilemma, with which every organizer of an exhibition of pictures must be familiar. Ought the photographs to be arranged by subject, that is to say, ought all the domestic work to be grouped in one place, the shops in a second place, the public buildings in a third, and so on; or is it better to arrange the designs by the artists' names, so that we can compare the work of Mr. Smith with that of Mr. Jones or of Mr. Robinson? Both methods of classification are instructive, but, unfortunately, they cannot be simultaneously adopted. At Grosvenor House there is a happy compromise in that the second method of portrayal has determined the general arrangement, but as in many instances the architects specialized in one type of work it has been found possible to have a certain amount of grouping by subjects also.

In my commentary upon the individual exhibits I propose to treat of the domestic work first, and shall make no apology for beginning with Sir Edwin Lutyens, for he is the only living domestic architect of whom it can be said that he has founded a school. Some of the houses here shown must be familiar to all who are acquainted with Sir Lawrence Weaver's book on Lutyens. Two of them, "High Wall, Gullane," and "Little Court, Tavistock," have always seemed to me the most charming houses that Sir Edwin Lutyens ever did, his simplest and most effective compositions with their plain fronts and massed chimneys on either side. Among notable designs worthy of close inspection I may mention Messrs. Detmar Blow and Ferdinand Billeray's "Wilsford Manor," and several



A VIEW IN ONE OF THE GALLERIES.

others by this firm of architects. "Drakestone, Stinchcombe, Gloucestershire," by Messrs. Milne and Phipps, is an admirable design in which the stone wallage of a large but rural house is beautifully treated. "Sherfield Court, Hants," by Gerald Wellesley, shows how thatched roofs are not necessarily associated with cottage work, but upon occasion can be fittingly employed in large houses treated in an almost formal manner. Two exquisite designs by the late Captain Winter Rose, M.C., are sure to attract attention. "Wolmar House, Marlow Common," is one of those long, symmetrical façades with low-pitched roof which lend themselves to quiet and dignified treatment, while his interior at Upton House, Cambridge, with its white walls and large simple panels shows an admirable taste of a kind which is thoroughly English in character. Mr. Philip Tilden has had full scope for his opulent talent at Port Lympne, where Sir Philip Sassoon has given him great opportunities, and his charming colonnaded interior court, the octagonal library with central table, and the spacious bathing pool in a formal setting are good examples of his style. Messrs. Baillie Scott and Beresford's "House near Windsor," shown by a model, is a most satisfactory design in the Georgian manner, and is interesting as an example of the gradual conversion to classic ideals which during the last twenty years has occurred in the minds of many English architects who started practice apparently with the intention of disregarding such ideals as completely as possible. "St. Anselm's Vicarage, Kennington," by Messrs. Adshead and Ramsey, with its broad, low front, and row of seven windows with green shutters, is a delightful composition; and the quadrangular block of "Old People's Dwellings, Duchy of Cornwall," by the same architects, shown in photographs and also in a beautifully executed plaster model, has an exactly appropriate character. We now come to that part of the exhibition which treats of "The Housing of the Working Classes," and it must be immediately admitted that the examples are extremely well chosen. Foremost among them is Messrs. Adshead and Ramsey's "Courtney Square, Kennington," one of the very few designs of outstanding merit which owe their origin to the urgency of "the housing problem." Here we have *urban* cottage architecture, in contradistinction to the extremely *rural* types which have been scattered all over the country in such profusion even in localities which were urban in character. No project of "slum reconstruction" should take place without reference to Courtney Square, which should be an important factor in reconstituting the right tradition of cottage building in our towns. At Dormanstown Messrs. Adshead and Ramsey show simple groupings of cottages distinguished by long roof ridges and a total absence of gables facing the roads. The resulting effect of reticence is most pleasing. Messrs. Hennal and James, on the Swanpool Estate, show an appreciation of the values of street architecture in the ordered composition of houses. Mr. Louis de Soisson's quadrangular group is quite one of the best things in Welwyn Garden City, and proves that admirable effects can be obtained from the simplest architectural motifs when these are skilfully handled.

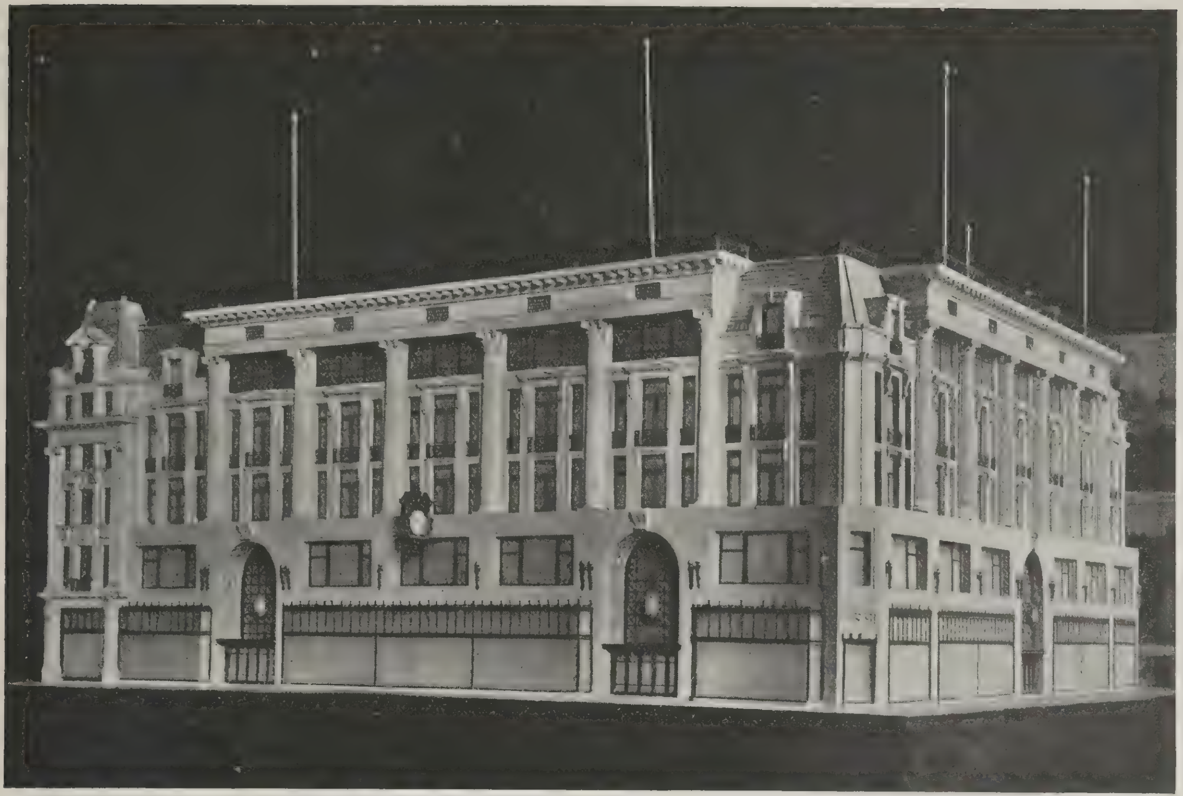
Those who are interested in shops will probably first turn their attention to the striking model of Messrs. Peter Robinson's corner block at Oxford Circus, which is to be built from designs by Messrs. T. P. Clarkson and Austen Hall. This is a particularly interesting model because it shows four sides of a building, all of which required separate treatment, and far better than a drawing could do it enables us to appreciate the skill with which the different elevations have been made to harmonize with each other. Here the ever-recurring problem of the shop-front has been given special consideration, and Messrs. Clarkson and Austen Hall have arrived at an original solution of it whereby the shopkeeper's demand for a wide expanse of glass has been satisfied without any sacrifice of constructional proprieties. In the front on Oxford Street, which may be considered the principal one, the shop window is advanced about a foot in front of the façade, and extends over the whole centre part, leaving solid abutments as supports at each side, which are united by the mezzanine story abov a plane, rectangular piece of wallage punctuated by win dows, and this whole mezzanine story can be regarded a an immense transverse beam supporting the superstructur When this factor of stability had once been established th architects were free to adopt a columnar treatment for th upper stories. The unsatisfactory effect which would hav resulted if the columns had rested almost immediatel above a large sheet of glass can easily be imagine Students of the modern shop-front will also find much t interest them in Messrs. Richardson and Gill's notabl example in Leadenhall Street, here shown in photograp and also in Messrs. Heal and Son's premises, Tottenha Court Road.

Among office buildings the chief place in this exhib tion is taken by Mr. Corbett's Bush Terminal Buildin Aldwych, shown in an exquisite model which must attrac a great deal of interest, for it is sure to excite both admira tion and criticism. It will be admired on account of th remarkable elegance of its composition in which the element of an enormous fabric have been admirably harmonize It will evoke criticism on account of the audacity wit which a merely commercial structure presumes entirel to overbear one of the most beautiful and famous London churches and raises to the skies a massiv cupola which in this country, where civic values are sti respected, would normally be preserved for some publ building of exceptionally great importance.

The Clive Building, Calcutta, by Mr. Goodhart-Rende has already earned the reputation of being one of the be buildings in that city. Mr. Edward Maufe, in his Lloyd Bank, St. Albans, has preserved the character of bank This is easier to accomplish in a small bank than in a b one, as Messrs. Mewès and Davis's Parrs Bank, which also illustrated here, shows very clearly. When the ma offices of the bank are surmounted by many other storie in which, of course, the solidity of the ground stor cannot be maintained, a certain loss of character is inevi able. The ideal has only one main floor, like the old Bar of England. Shell Corner, Kingsway, and Astor Hous Aldwych, by Messrs. Trehearne and Norman, are interestin examples of modern office blocks. Three attractive mode are illustrative of public buildings. Messrs. Lanchester ar the late A. E. Rickards's "Westminster Hall" shows t design as originally conceived with the two cupolas whi the Middlesex Hospital vetoed, using their privileges in t matter of ancient lights. Sir John Burnet's extension to t British Museum is, perhaps, the most beautiful model at t exhibition, and shows the long row of Ionic columns to gre advantage, although it provokes the reflection, as does t original, that the treatment of the three doors is not sat factory, the central one especially appearing to be an aft thought, for it is inserted in the interval under the two centr members of the colonnade which ignores this central entran entirely. Mr. Austen Hall's Metropolitan Water Boa building is a most successful composition and has just t appropriate character. Australia House, by Mr. Marsh Mackenzie, has been invested with the architectural digni to which its subject entitles it. The New Parliament Buil ings, Winnipeg, by Mr. Frank Simon, a big, domed buil ing in the American tradition, is an imposing design. university buildings only one is shown, Professor Reill Students' Union, Liverpool, in which the refinement Greek detail is displayed to great advantage. And a pho graph of the elegant war memorial at Accrington by t same author will attract attention among the other memor designs which are hung in the long gallery to the right the entrance hall.

The visitors to this exhibition will find a great deal admire, but very little to criticize, for the Selection Co mittee of the Architecture Club has performed its ta extraordinarily well. For, granted that the volume of go contemporary work is too large to be shown in its entir at Grosvenor House, there must be remarkably few exhib which even a most exacting critic would wish to exclude

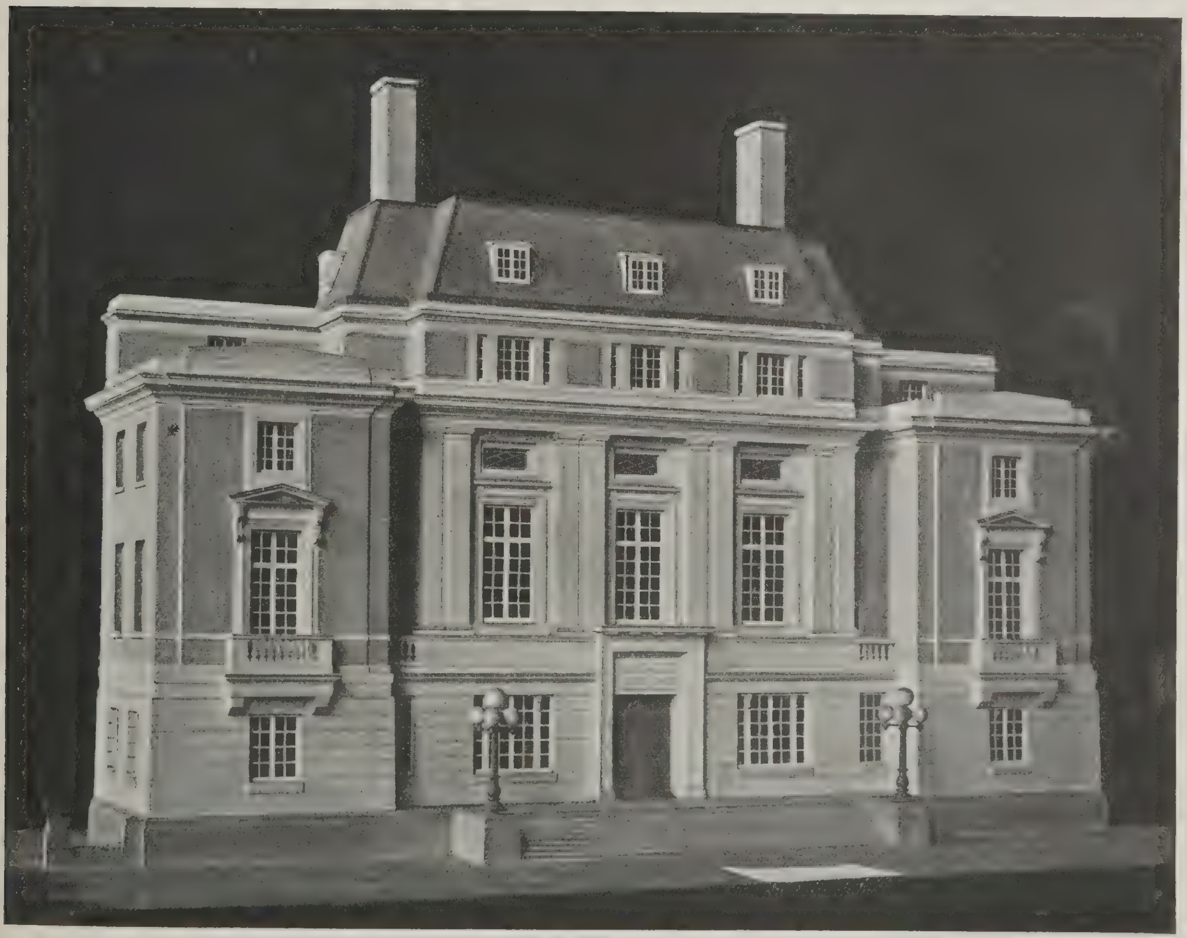
A. TRYSTAN EDWARDS



PETER ROBINSON'S NEW BUILDING, OXFORD STREET.

T. P. AND E. S. CLARKSON, AND H. AUSTEN HALL, ARCHITECTS.

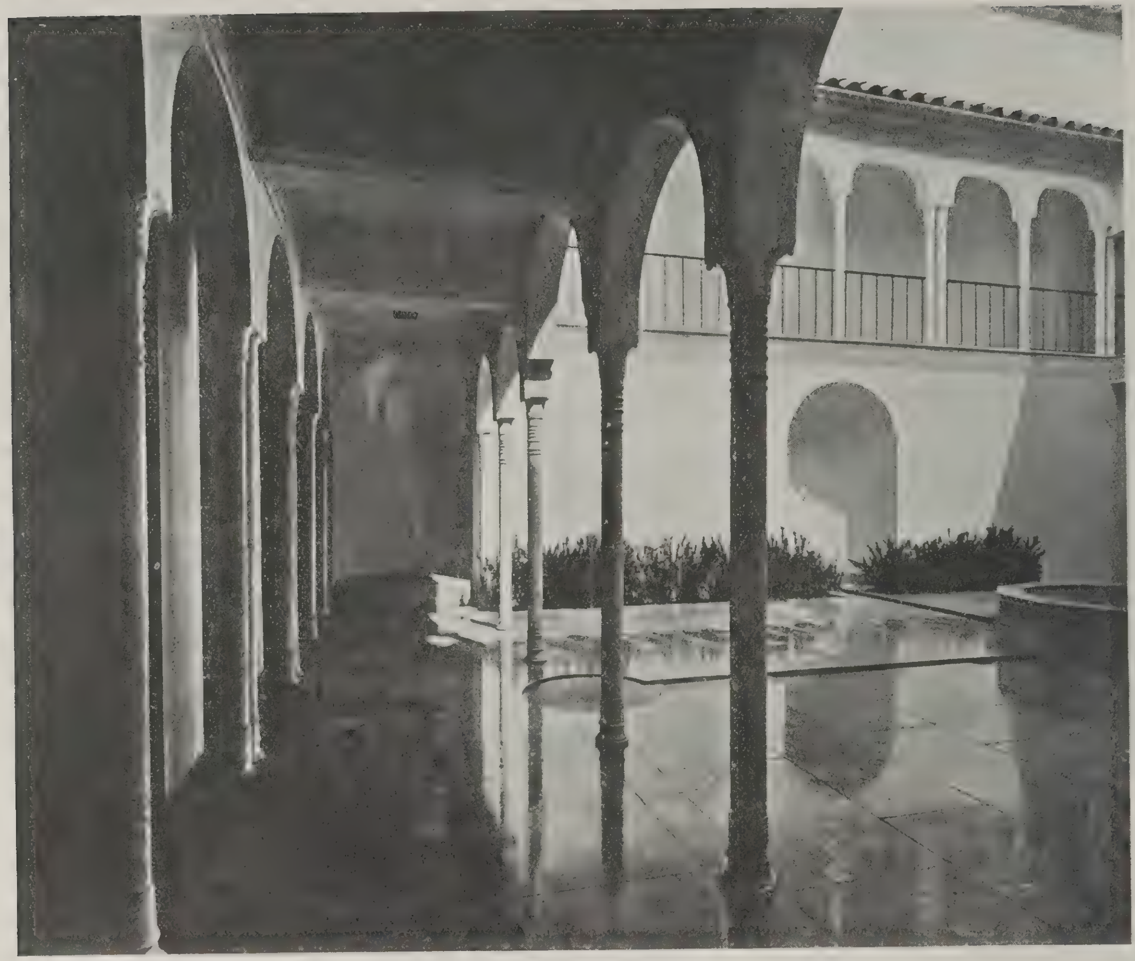
(The elevation of the block in Regent Street, with the first bay in Oxford Street—shown on the extreme left of the model—is by Messrs. Henry Tanner.)



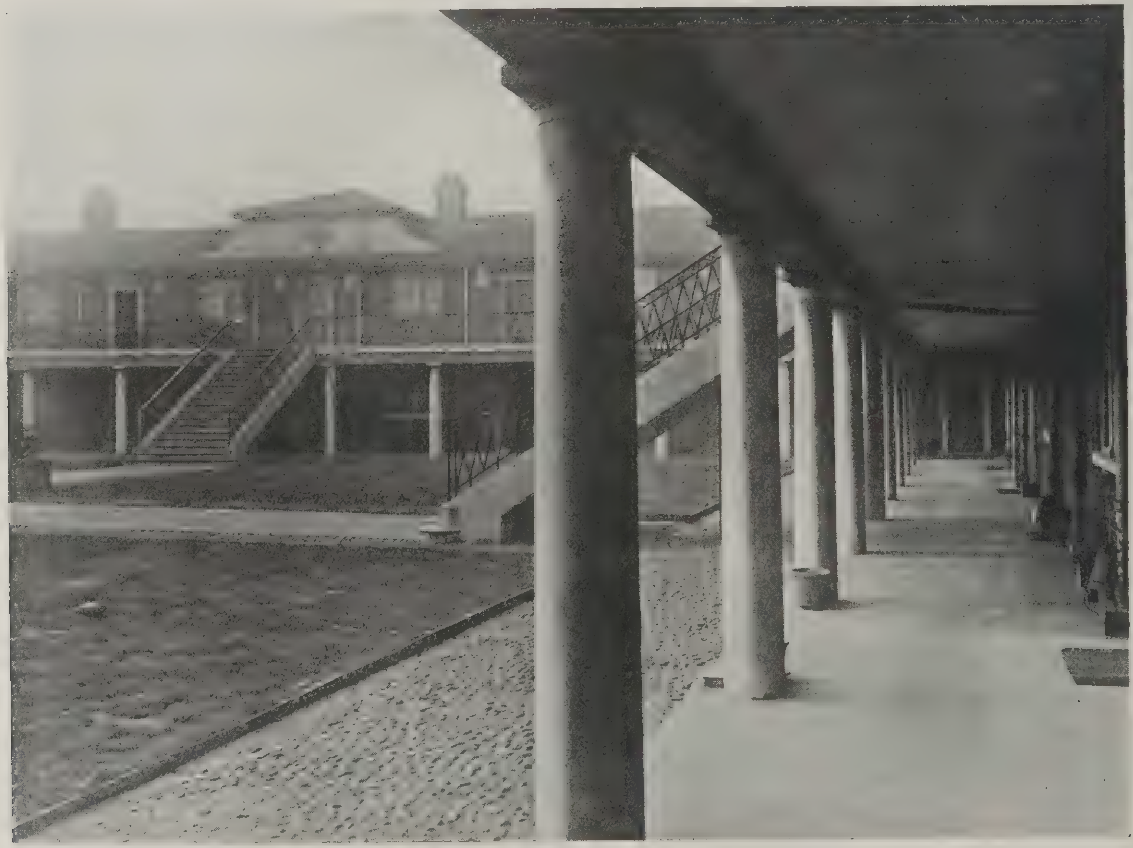
NEW OFFICES FOR THE METROPOLITAN WATER BOARD, LONDON.

H. AUSTEN HALL, F.R.I.B.A., ARCHITECT.

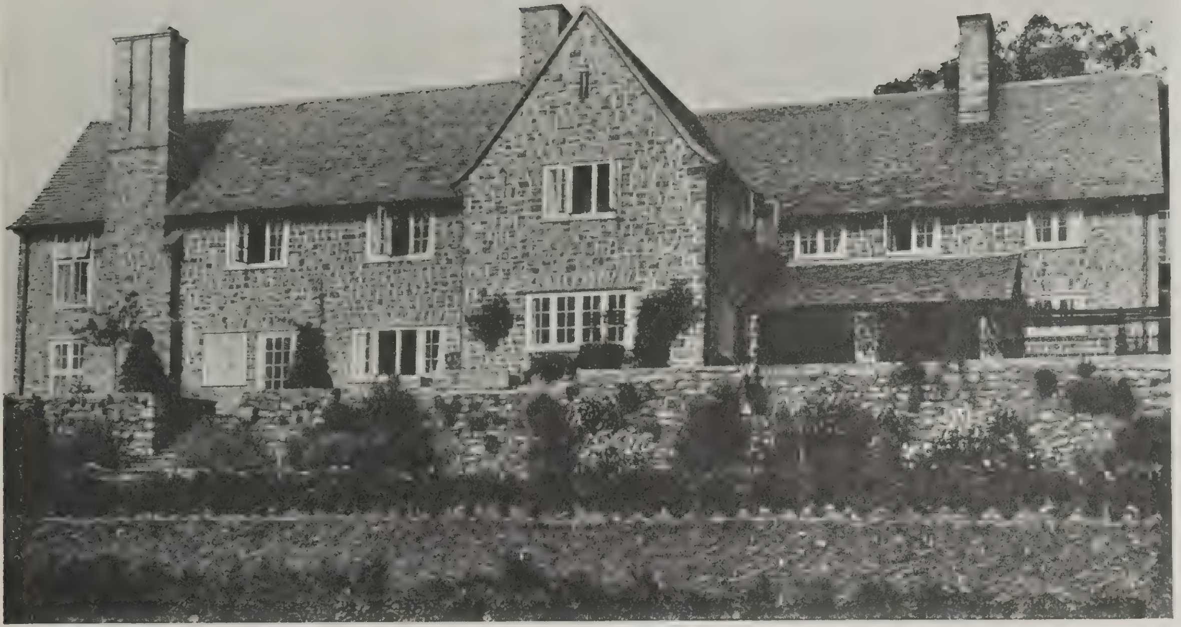
*(Two Models at the Architecture Club Exhibition.)*



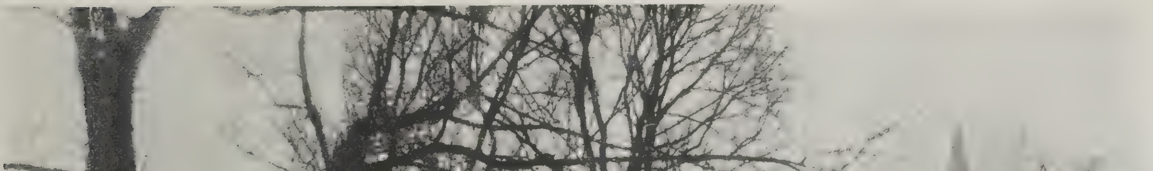
ARCADE IN PATIO AT PORT LYMPNE, NEAR FOLKESTONE.
PHILIP TILDEN, ARCHITECT.



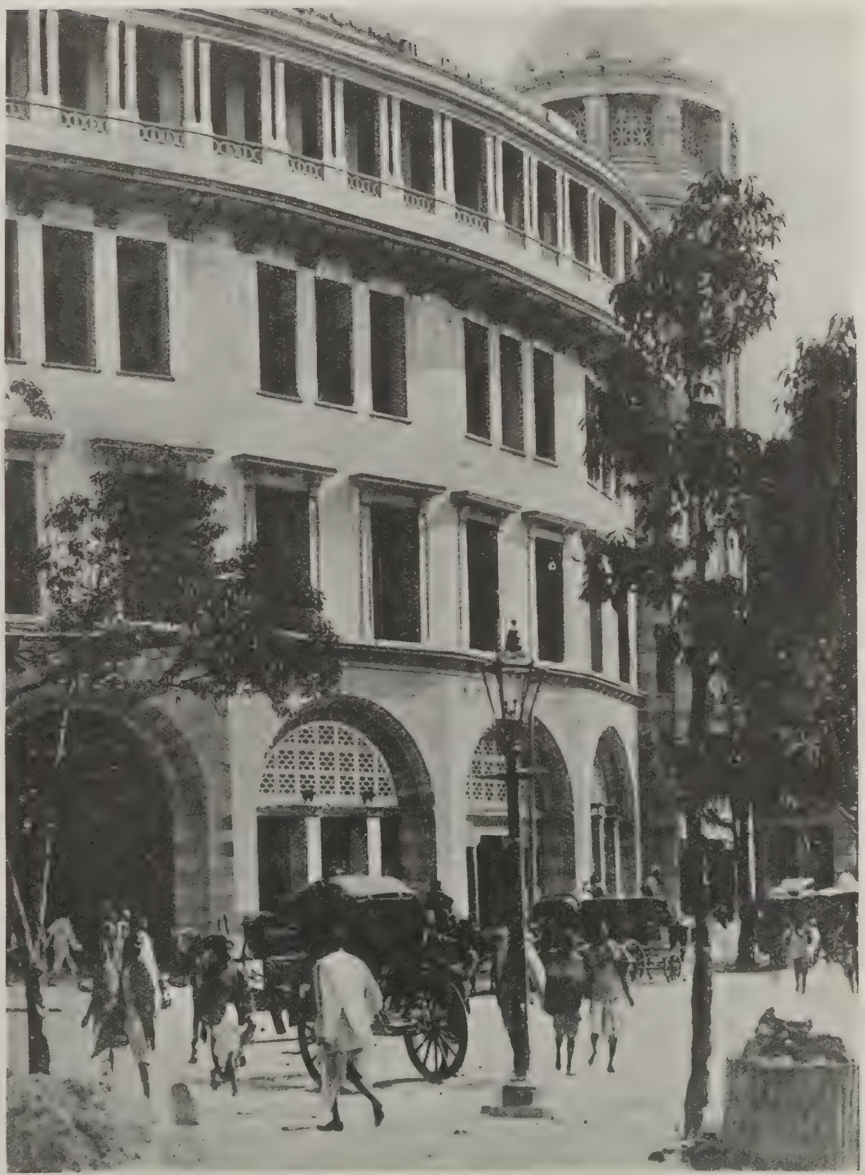
DUCHY OF CORNWALL TENANTS ESTATE, KENNINGTON: THE OLD TENANTS HOSTEL COURTYARD.
ADSHEAD AND RAMSEY FF.R.I.B.A., ARCHITECTS.
*(From the Architecture Club Exhibition.)*



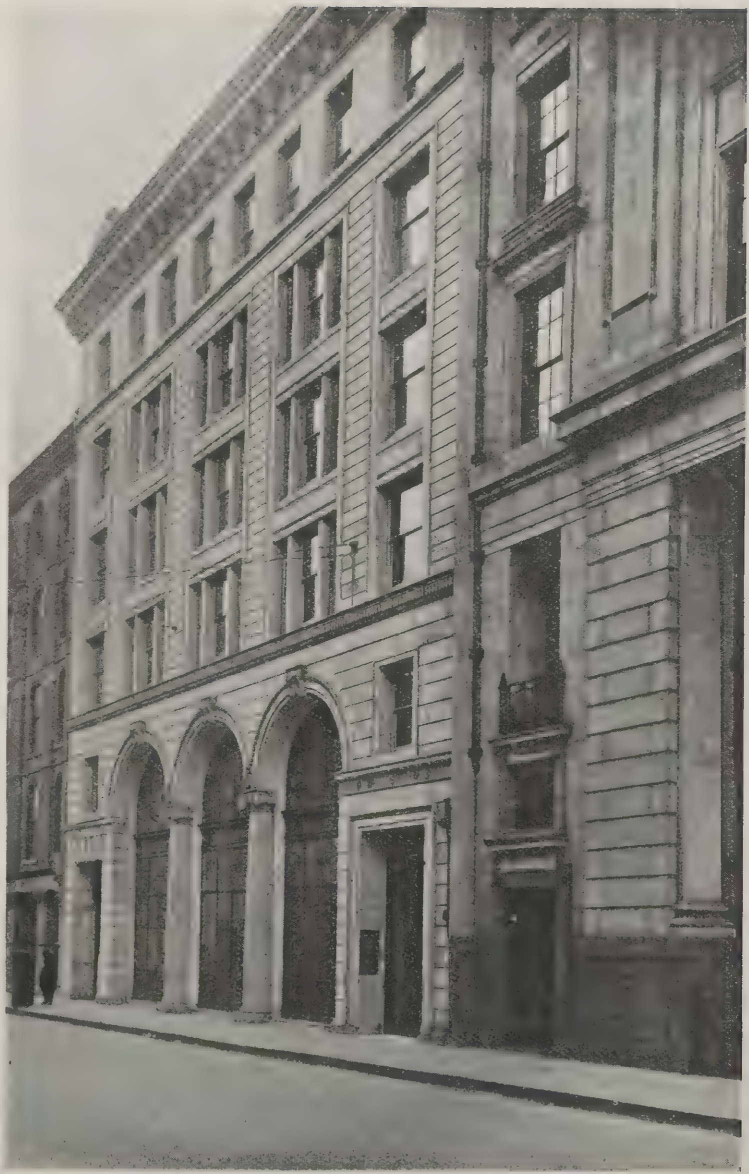
DRAKESTONE, STINCHCOMBE, GLOUCESTER: THE GARDEN FRONT.
OSWALD P. MILNE AND PAUL PHIPPS, FF.R.I.B.A., ARCHITECTS.



SHERFIELD COURT, HANTS.
GERALD WELLESLEY AND TRENWITH WILLS, ARCHITECTS.
*(From the Architecture Club Exhibition.)*



CLIVE BUILDING, CALCUTTA.
H. S. GOODHART-RENDEL, ARCHITECT



SCOTTISH HOUSE, LEADENHALL STREET, LONDON.
RICHARDSON & GILL, FF.R.I.B.A., ARCHITECTS

*(From the Architecture Club Exhibition.)*

# The Bi-Centenary Banquet

## Architects of To-day Pay Tribute to Wren

ELOQUENT tributes were paid to the genius of Sir Christopher Wren at the bi-centenary celebration dinner held by the R.I.B.A. at Hotel Victoria, Northumberland Avenue, on nday, last week. It was stated that messages had n received from many distinguished societies, including Architectural League of New York and the Fine Arts deration of New York. Immediately after the Royal sts addresses were given "in honour of the immortal mory of Sir Christopher Wren." The President gave ome observations" on his character and genius, Sir ginald Blomfield, R.A., spoke on "Wren, the Artist and Man," and Mr. Mervyn Macartney referred to "Recent vestigations at St. Paul's Cathedral."

## Mr. Paul Waterhouse on Wren's Character and Genius

In the days of our great grandfathers' grandparents longer ago and no less, there lived and died in s England of ours a man so rich in the double thright of aptitude and industry that he surpassed level even of his cultured fellows in at least three ections. Each of these directions was in itself no simple th of knowledge.

He was a man, moreover, blessed by the heaven which d so endowed him with those three further gifts by ich alone man can hope to win in battle against the itations of time. He was granted not only longevity mind—a treasure far greater than mere length of days—t only an early ripening which it would be irreverent d untrue to call precocity, but also, and above all, portunity.

The three directions, or three roads of energy, were: ssic knowledge—the humaner letters, science in the se of universal physiology, and, for a crown of great ry, architecture.

I suppose that no greater nor more humbling honour uld fall to any man of my craft in my day than to be sen, by whatever accidents of time and circumstance, lead his brother craftsmen in an act of homage to the er-flowering memory of that more than great man—ren, Sir Christopher.

But in fact the honour has been added to, for our grimage of architects, its numbers swollen by the usands who were with us this afternoon in thought, not in body, was graciously increased by the presence distinguished men whose mission and desire it was to resent the great universities of Oxford and Cambridge, Royal Society, and younger bodies, which, if they nnot claim to have been spectators of Wren's life and rticipators in his activities, at least offer their thanks d praise on lines of entirely kindred sympathy. Specially lcome was the spontaneous and almost impromptu resentation of those trans-Atlantic brethren, the chitectural League of New York, between whose soul art and ours no ocean rolls.

I have been driven by a logical process, as convincing it is incorrect, to the conclusion that to-day's hero, man whom to-day we celebrate, was just four times as at as the men to whom we normally ascribe greatness. expose my process, for though I have discarded its in of reasoning as vicious, I am entirely confident of virtue of its result.

t begins by generously sacrificing one of the three mains into which I have partitioned the mental activities Sir Christopher. I cast his brilliant and fascinating tinity into the same scale as his architecture. Both, after all, are but the modes of an expression. The same study, the same play of brain which empowered him to master the syntax, etymology and orthography of architecture, give him the force to make his own the orders and elevational composition of Roman speech.

Against this I array his mastery of the universe of science, his pre-eminence as an astronomer, his acknowledged leadership in the realms of physics, mechanics, meteorology and chemistry.

In acknowledging these powers we find him to be not merely a man of two-sided knowledge—that, indeed, is rare enough—but of double superiority. He outran his companions on both courses.

We must go further. True as it is that no success in adventure exists without skill in discovery—or, rather, that creation does not thrive without nourishment—it is a fact known to all scientists and to most artists that successful and industrious research is not always accompanied by successful invention. Nor does archæology necessarily lead to art.

Here, however, was a man in whom the deepest powers of absorption went hand in hand with the brightest faculties of production.

*Ex nihilo nihil fit*, how true. But nothing, alas! can come out of something, too. *Parturiunt montes*, well and good; but, however, the answer to kind enquiries is simply *Mus*.

The mountains, for all the hidden ore that swells their depths of knowledge, have sometimes but a ridiculous monosyllable as their contribution to the world's progress.

Wren in his architecture and his science was a very Janus. One countenance faced the past with the sure smile of a conqueror; the other, Alexander-like, shot its glance of expected victory on the world of posterity. It matters not that his methods of learning in architecture were apparently miraculous, that no pen has recorded, perhaps no eye saw, his days of study; the past was his sure captive, and we, the posterity towards which his keen old eyes were strained, are his happy captives, too.

No need for me to interpret these metaphors into history, for indeed the history is before you all, and most of my hearers know it better than I do; but it is clear, is it not, that no man's architecture was ever more truly based on acute knowledge of the language of the past—a Latin or Romance past if you will—and it is certain that only by profound study of the work of his predecessors in the worlds of scientific discovery could any natural philosopher have illuminated his age with such brilliant original and inventive work.

I judge, then, that had Wren, by loss of early maturity, loss of opportunity, or by early death, so limited his energies that he could put forward one only of his four claims he would have won his niche among the great—if he had merely been an archæologist, an architect, an inventor, or a man of research.

On these grounds I hail him as a fourfold champion. But, brother architects, there is another road to our conclusion; and those of this distinguished company who have won their merited distinctions on other battlefields than ours will forgive us if for a few brief minutes we claim the whole gamut of Wren's "harp of diverse tones" as integral parts of his amazing victory-chant in architecture.

This may seem presumptuous on our part. That it should so seem is contrary to reason. Believe me, my non-architectural friends, what we claim for architecture we do not, we dare not, claim for architects. No architect worthy of the name would ever deem himself wholly worthy. All of us know that the mountain we climb is a Parnassus with a cloud-capped brow. Its summit is beyond our eyesight, and the path thereto is at its highest untreadable.

Far be it from me to suggest that Wren's corn-sowing drill, his apparatus for producing fresh water at sea, his disinfectant fumigator, his barometer, his self-registering thermometer or his rain-gauge were necessary adjuncts to his output as an architect, though I have little doubt that his diplographic pen found a place on his specification desk, while his special level and his cure for smoky chimneys were definitely what we should hail as boons to the office.

But emphatically I do say that the mind which was so equipped as to be able to devise such things, and still more the mind that mastered those deeper mathematical, geometrical and astronomic themes, which I do no more than mention here, was a mind which could make the highest flights of such a scientific brain ancillary to the mistress art of architecture.

Wren was a prince, an emperor, among constructors. Very few pocket-books of formulæ can have been of any use to him, for he was above and beyond them. We marvel at his daring, but it was a daring inspired and fortified by knowledge. The work he did—even if it be proved by other speakers to-night that he was over-bold—was not the work of foolhardiness, but of hardiness in scientific bravery. And it is certain that we are wrong in attributing merely to the skill of his undoubtedly skilful operatives the marvellous success of his genius in surmounting difficulties of gravitation, durability and span.

In the presence of certain notable scholars may I venture to come back for a moment to my association of Wren's Latinity with his architecture. We are a generation, probably the last generation in this country, of which some can remember the writing of Latin verse. There are some here who can recall that performance with pleasure, and they will remember how very close as an exercise of the brain that pursuit lies to the practice of architecture on traditional or classical lines.

There is necessary for its performance a good knowledge of the medium and a reasonably full vocabulary. These are acquisitions which a young schoolboy seldom has in generous measure. The Inges, the Ronald Knoxes, the Pembers are rare.

But given these—I may explain that they were not given to me—the game is a glorious game. There is an idea to be expressed, to be expressed if possible with dignity, and to be expressed, moreover, in symbols, counters, words of fixed significance and of fixed metrical value. Their disposition as sentences is governed by the strictest of rules. Moreover, though there is generally an umpire at hand, no rule of this game can be bent to suit the writer's difficulties, for the committee that framed them was dead and buried in or about the year zero A.D. A solecism is the writer's bankruptcy, a false quantity or a false concord is his death.

I would not say that the rules of architecture are as harsh as that, for our language, ancient as it is, is a living tongue; and we can breathe into it such little changes of syntax, such little shiftings of accent, and (but very sparingly) such timid inventions of new words, or of new meanings for old words, as make the difference between a Shakespeare and a Tennyson. But this small privilege of licence—a licence which must never quench the recognizable melody of the old and ever-ageing tongue—can never obliterate the astonishing likeness between the literary and the architectural arts, both of which have to achieve their expression in the language of our forefathers.

That Wren should have been a good Latinist is, I admit, less remarkable than that he should have been a much more than good architect.

Dr. Busby, though but at the beginning of his long career, was no doubt already an expert with that instrument on which he became a world-famous soloist. In any case, Westminster stood for good Latin, and young Christopher left, at the age of fourteen, with a Latin equipment far better than that of a good second year Oxonian of our day.

In architecture, it is true, Wren had personal advantages. His father, Dean though he was, and a very manifold incumbent, was no mean amateur in architecture, and no inconsiderable patron. A seeming paucity of first-rate professionals, and a very high level of knowledge in the standard of that acquaintance with architecture which was the adornment of many a non-professional connoisseur, made it comparatively easy for a gentleman of Wren's superlative culture to glide—almost to drift—into what we should call practice. And so, though Wren's earliest openings were surveyor-like, in our limited sense of this word, it is scarcely with surprise that we find him embarking under his father's patronage on the Pembroke Chapel at Cambridge, and under that of his own University, the Sheldonian Theatre. Scarcely, again with surprise, do we find these two buildings to be, if tentative, at least scholarly. None, however, of these explanations will annul the marvel of so rich a maturity of architectural knowledge in a mind whose energies had been spent—one had thought absorbed—in the career of an accomplished leader of scientists and *literati*. Mark how at this stage that Providence which seemed ever ruling his destiny towards completeness came to his aid. The Plague sent him to Paris, no bad school of architecture, in almost divine preparation for that fuller life of architecture into which he was to be flung by fire. And if we admit here an intervention which seems superhuman, may we not acknowledge also that it was the Divinity which shaped his end that kept him from the realization in stone of the warrant design for St. Paul's?

And now, having praised his perfection, may I ask you to glory also in his imperfection?

You will have experienced, if you are an acute student of architecture, one, two, or perhaps three disappointments in connection with Wren's work. There will be a building, or perhaps part of a building, which seems to you not indeed a blot on Wren's fame, but a slight dimness in his brightness. Your first thought on feeling the pain of this discovery will have been a very proper stab of self-reproof.

I am not sure that such an attitude is not the right one, for of Wren it may nearly be said that

> "The very errors of his master mind
> Were greater than the virtues of mankind."

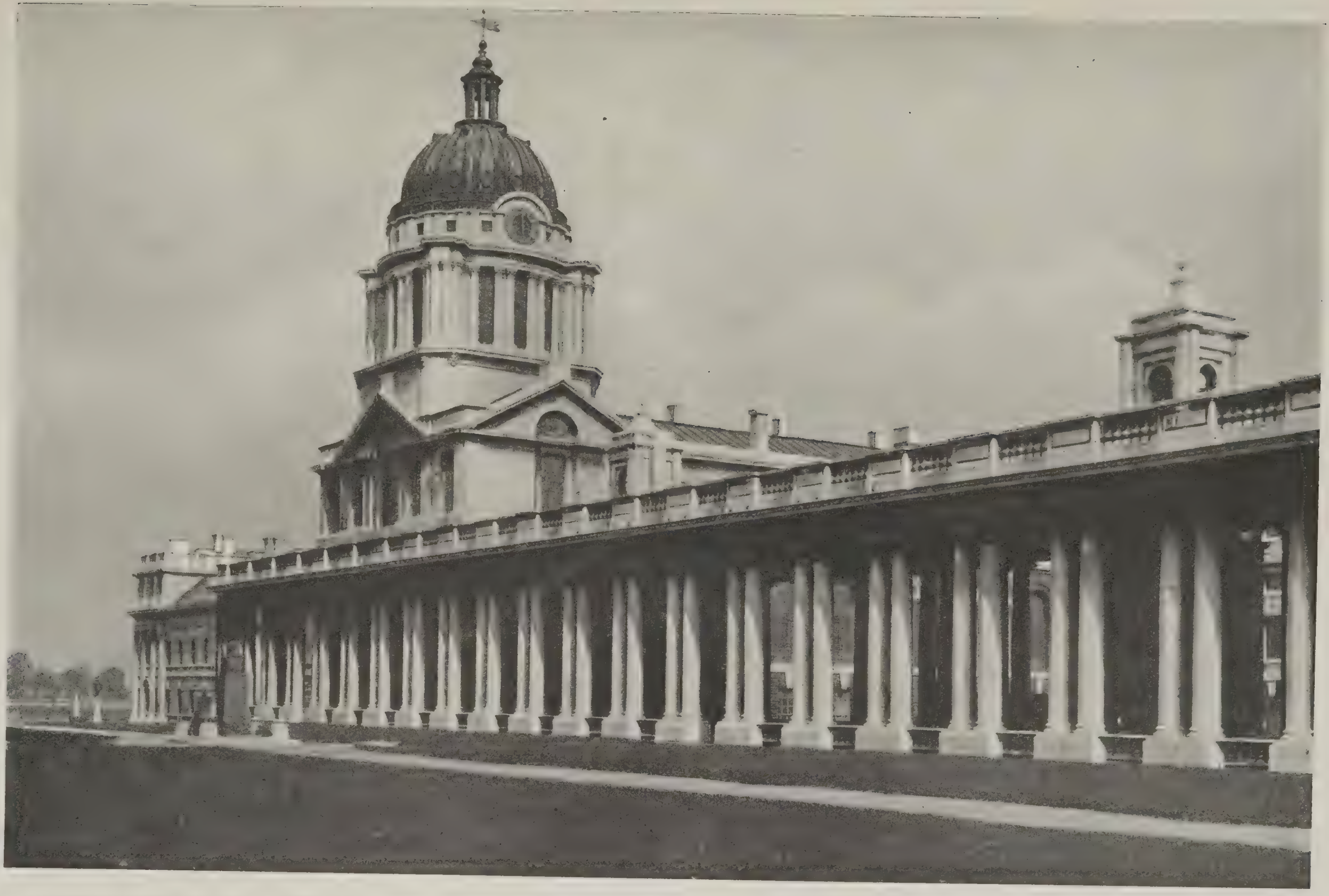
But there is a happier way. Had any lesser mind than Wren's been forced to make performance follow so close on the heels of learning, what, think you, would have been the number of his trespasses? And Wren, whose great knowledge was for ever getting greater, what think you was his judgment on the things that trouble you? Depend upon it, brother architects, that grand old man in his latter days could have taken you round London and shown you in his own work more errors than eve you or I should find. So when we see these things, these very few, and pride ourselves, however regretfully, on the keenness of our critical vision, let us cast aside that pride and those regrets, let us leave our judgment unspoken among our fellows, and let us, without smothering ou opinion—for opinions are always worth forming—let u keep the matter as a secret between ourselves and Wren. In such secrets held close with great minds of the past there is strange happiness.

I end with what I believe to be the thought of us all. We to-day pay reverent homage to a man so dowered wit the gifts of genius and with the spirit of industry that his leadership in the field of natural science found no equal save in his supremacy as an architect; one, moreover, whose culture in classic literature was balanced by character so gentle and alluring as to win this outburst from a contemporary:—

"It was doubtful whether he was most to be commended for the divine felicity of his genius or for th sweet humanity of his disposition."

# Monumental Architecture. 8.—Greenwich Hospital

Sir Christopher Wren, Architect



Greenwich Hospital is, perhaps, Wren's most stately work. At Greenwich Wren had to incorporate the buildings erected by his predecessors, but he quickly grasped the magnificent opportunity presented by the site, and in the scheme which he devised, and which was subsequently carried out, he reached the highest degree of breadth and largeness of design.

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# Sir Reginald Blomfield, R.A., on "Wren : The Artist and the Man"

I have been asked to make a few remarks on Wren, and the first thing that occurs to me is the eccentric methods that have been adopted to celebrate the bi-centenary of his death. The Bishop of London, advised by one noble lord and urged on with some truculence by another, proposed to celebrate the occasion by demolishing some nineteen or twenty of Wren's City churches; thus reversing the Hebrew custom of first stoning your prophet and then building a shrine to his memory, and saving us from the necessity of further burdening our memory with the work of the past. Our methods here, at any rate, are more genial; following, apparently, the precedent of Guy Fawkes, we are celebrating the bi-centenary of Wren's death with festivities, this excellent dinner to be followed, I am told, by a dance somewhere else: a little unusual, perhaps, yet there can be no doubt what we mean by it. It is a mark of our admiration and affection for the memory of one of the greatest artists England has ever had.

Wren's career, in a way, was an amazing anomaly; I doubt if any other architect has ever been placed in a position of first-rate responsibility on such an absolute minimum of technical training. It is a remarkable fact that, out of the six leading architects of the seventeenth century, two (Wren and Perrault) started as amateurs, and the third was a sculptor who prided himself on translating sculpture into terms of painting and treated architecture as so much modelling clay. Wren himself was born in a good position, highly educated in the Humanities, which then included science. He was regarded as a prodigy of learning and ability while still an undergraduate. From Wadham he proceeded to a fellowship at All Souls. He was appointed Gresham Professor of Astronomy in London before he was twenty-four, and Savilian Professor at Oxford very soon afterwards. By the age of thirty he was recognized as one of the leading scientific minds of the day by John Evelyn and all the intelligentsia of the time.

With the Restoration came his chance. The fortification of Tangier had to be considered. Poor old John Webb, an able and experienced architect and the last representative of the Inigo Jones tradition, was forgotten; and the work was offered to Wren, who declined it, but was promised the reversion of the office of Surveyor-General, and in fact succeeded to it a few months later—a job even more flagrant than that by which Jules Hardouin Mansart superseded Lepautre at Clagny, for here was Wren placed at the head of all the architects of the time in England and entrusted with most important duties, though all the architecture that he had done so far was an unimportant college chapel at Cambridge. So far, in fact, he had received no systematic training in architecture at all, yet instead of beginning at the foot of the ladder he started on the topmost rung.

A man of less confidence in his own consummate ability would have been daunted; not so Wren. He wrestled with Serlio and Fréart, both very inaccurate writers, and in 1665 set off for his famous six months' stay in Paris, armed with excellent introductions, and fully determined to pick the brains of all the best French artists. This was the time when Bernini was struggling in vain to make headway against the well-organized opposition of the French architects, and Wren caught a glimpse of his designs, but it was a glimpse only. Wren also visited all the famous houses in and about Paris, but it is to be noted that the work he saw belonged to the older generation, soon to be superseded by Colbert's young men, and the brilliant staff of Louis XIV. Wren wrote to a friend that he was bringing home "all France on paper"; but "all France" could have been little more than the houses round Paris, as shown in the drawings of Silvestre and the elder Marot, and perhaps those interminable designs for ornament by Jean Lepautre; not much of a training for a first-rate architect, nothing approaching that of the French architects, or of Wren's great predecessor, Inigo Jones, who paid two visits to Italy, studying on the spot and making most careful critical and analytical notes on the architecture of the Romans, on Palladio and others.

The result of Inigo Jones's studies was that, at the age of forty, he was a most accomplished architect and was able to produce that little masterpiece of Neo-Classic, the Queen's House at Greenwich; whereas Wren, at the age of thirty-five, could do no better than the shapeless lump of the Sheldonian at Oxford, which in its technical incompetence and absence of feeling for beauty of line, of proportion, of composition, is perhaps the worst building erected in Oxford prior to the Gothic Revival. I need only call your attention to the south façade, facing to the schools, an ambitious attempt at a grandiose design by a very ingenious but most imperfectly trained young man. And in referring to this let me say at once that great artists are not to be judged by the experiments of their youth, but by the high water mark of their attainment; and I have called attention to this weakness of technique in Wren's earlier work because it makes the extraordinary mastery of his art that he gained in his mature days all the more remarkable. Moreover, technique, highly important as it is, is not the final criterion of Art. There have been artists who have made it so—the archæological classicists at the end of the eighteenth century, Ingres among painters and others; but technique is not an end in itself but a means to an end, the expression of the artist's ideas, ideals, and visions. One has to consider, further, the complexity of the problem that the architect has to solve. In the Parthenon, for instance, one finds the idea and its expression in perfect harmony, flawless and unimpeachable. But the Parthenon, based as it was on a long and well-understood tradition, was a simpler building to design than, let us say, the Thermæ of Rome, or St. Paul's Cathedral.

One may admit that Wren had not the perfect instinct for form and proportion of Inigo Jones, of François Mansart, of Jacques Ange-Gabriel; but he possessed, in a higher degree than any of them, inexhaustible invention and resource. His mind, of great natural acuteness, was trained to a fine razor-edge and went straight to the heart of matters. Consider, for instance, his scheme for the laying out of London. He may not have mastered the technique of architecture in his six months' stay in Paris, but no Frenchman could have helped him to that masterly scheme, in which he anticipated most of the theories of our modern town planners, the linking-up of buildings, the axis line and the radial treatment, the conception of the City as a whole and not as a collection of details. Consider, for example, his streets, ninety feet wide for the main thoroughfares, sixty for the secondary ones, and thirty for minor roadways.

Nearly a hundred years later, when the great competition for the improvement of Paris was held, the French architects had not got beyond 36 ft. as a maximum, and except in Portland Place we have not yet reached 90 ft. One finds the same versatility and quick grasp of conditions in the City churches. Wren had to design them under most difficult conditions of site, time, and money, yet how admirable they are! The great French churches of the seventeenth century are fine in their way, but there is a deadly monotony about them; as one French writer puts it, the Jesuit church rears the same implacable façade in every land and under every sky. They had lost the secret of the Parish Church, their churches were useless as models for Wren; and all he found in England of recent church building consisted of the Caroline churches in which degenerate Gothic struggled with bastard Classic. Wren had to find his own way. He took as his data the strictly practical conditions of the churches, and these he translated into forms characteristically English, availing himself of the full paraphernalia of Neo-Classic, yet weaving into it reminiscences of earlier work, so that these towers and steeples were not exotics, but spoke at once to the English people in a language that they recognized as their own, and they preserved that individuality and that kindly character which in England is of the essence of a Parish Church.

I have pointed out the inadequate training that Wren received in architecture; he was under no master: indeed, he himself was his own master. Few men have had his opportunities of learning the art of building from their actual design and execution, but few, if any, have ever made such an amazing use of their opportunities as Wren did. Not only was Wren's a master mind, but he possessed the modesty of the true artist, who thinks of his work before he thinks of himself. He probably realized his own mistakes long before anybody else, and the rapidity of his development was due to his incessant criticism and analysis of his own work, learning from his own mistakes, accumulating vast stores of knowledge from his actual experience on the scaffolding of his buildings. Where other men have advanced by slow and laborious stages, Wren advanced *per saltum*, and the most extraordinary instance of this is St. Paul's Cathedral. Wren appears to have made several designs. There was his own favourite one, rejected by the clergy with some justice, inasmuch as though pleasantly reminiscent of some of the projects for St. Peter's, it was quite unsuitable for the purpose of the Cathedral. Then there was the utterly preposterous Warrant design, that nightmare conception of a huge dome, truncated half-way up, on which was to be reared a drum and another dome, which again was to have its top cut off and to be continued in a telescope steeple in six stages. This was the design " pitched upon," as the Royal Warrant put it, as " very artificiall, proper, and usefull." And my impression is that the authorities, being wholly ignorant of architecture, tossed up as to which of the designs they should select. Yet it was from this most unpromising start that Wren began and carried through to completion the glorious building of St. Paul's Cathedral as we now see it.

It was the same with nearly all Wren's buildings, they are so much finer in execution than as shown in his draft designs; and the reason is that Wren's splendid genius was constantly at work, playing round his building, criticizing and correcting. St. Paul's has been treated with contempt by a famous poet, whose criticisms of architecture were inspired less by any knowledge of the art than by anxiety to prove certain theories of political society. I have the greatest admiration for that poet in other regards, but when he came to deal with architecture he seems to me to have parted company with common sense and the facts of history. If ever there was an architect who thought in terms of building, that man was Wren.

One or two reflections occur to me as the result of my meditations on Wren's career. The first is in regard to the training of an architect. It is the custom generally to start the technical training of students early, either directly in an architectural school, or in a modified and rather more generalized form at one or other of our universities; the inevitable result is that general education has to be cut short, and this omission can never be made good in later life, because the aim of good education is not to cram in knowledge, but to train and discipline the mind while it is still malleable. Wren is the most conspicuous example of an architect who did not take up the technical study of architecture till he had completed an unusually thorough course of general education; and he supplies the most convincing evidence in favour of the gymnastic theory of education. It may be said that Wren was exceptional. To that I would say, this only proves the folly of the prevalent theory that anybody with sufficient training can become an architect, and that all you have to do is to supply the crude material to our costly State-aided and other machines, turn the handle often enough, and out comes the architect.

I would say, on the other hand, that the natural endowment necessary for an architect is rarely found, and that it was the existence of this in Wren that was the other factor in his amazing skill. The other thought that occurs to me is that of the man behind the architect. We are too apt to believe the fanatics who impress on us that modern architecture is a mechanical affair without a soul of its own. I do not believe it. An architect can express himself in his art; indeed, he can give himself away. And one finds the meticulous man meticulous in his work, the small man small, and the great man great: and this is where Wren was so splendid. In all his mature work one finds the quality of the man reflected, not only in his resourcefulness and invention, but in a certain fine balance of intellect. His was a cheerful, sunny nature, friendly, companionable, and humorous, and it is this that endears his work to all of us as something peculiarly and intimately English. One does not think of him as one does of Jules Hardouin Mansart, elbowing his way to the front, flattering the great, trampling on the weak, and ending up with a marquisate and £30,000 a year, and the contempt of most of his contemporaries. One thinks of Wren in his dignified old age, visiting his masterpiece once a year, " as well pleased to die in the shade as in the light," and showing in misfortune the same dignity as he had at the height of his career, a man who in his life had enjoyed the affection and admiration of all the best men of his time; and to whom in his death one might apply those famous words of Pericles, " The whole earth is a shrine to the memory of illustrious men."

## Mr. Macartney on " Recent Investigations at St. Paul's "

Mr. Mervyn E. Macartney, F.S.A., F.R.I.B.A., Surveyo to the Fabric, gave an interesting account of the " Recen Investigations at St. Paul's Cathedral." He first calle attention to the foundations, which were very shallow Soon after the building there was a slight settlement, bu he did not think it had increased much since. Recentl they had been down to expose the foundations, but so fa as they could judge there was no great settlement. The found what they did not expect—that large stones place there belonged to Inigo Jones's portico, as they had classic mouldings. They found that the layer of clay was mois The eight piers of the dome tilted towards the dome are very much like a man standing on tip-toe. There was als a slight inclination of all these piers towards the sout and the river, and they found that all through the Cath dral. It was not very much. The next thing they foun was a distinct tilt of the dome towards the south-wes He believed that it started very early and that they trie to compensate it afterwards, because it was only 1½ in. the level of the Whispering Gallery, and 96 ft. off the flo of the Cathedral. They also found that the dome was n circular, but it was a very fine ellipse, and was 6 in. wid from north to south than from east to west. Consequent there was a slight break in the dome at each end. He d not know how to explain it, except that he thought th the pressure of the dome was equal all round, but t supports of the nave and of the choir were heavier th those of the north and south.

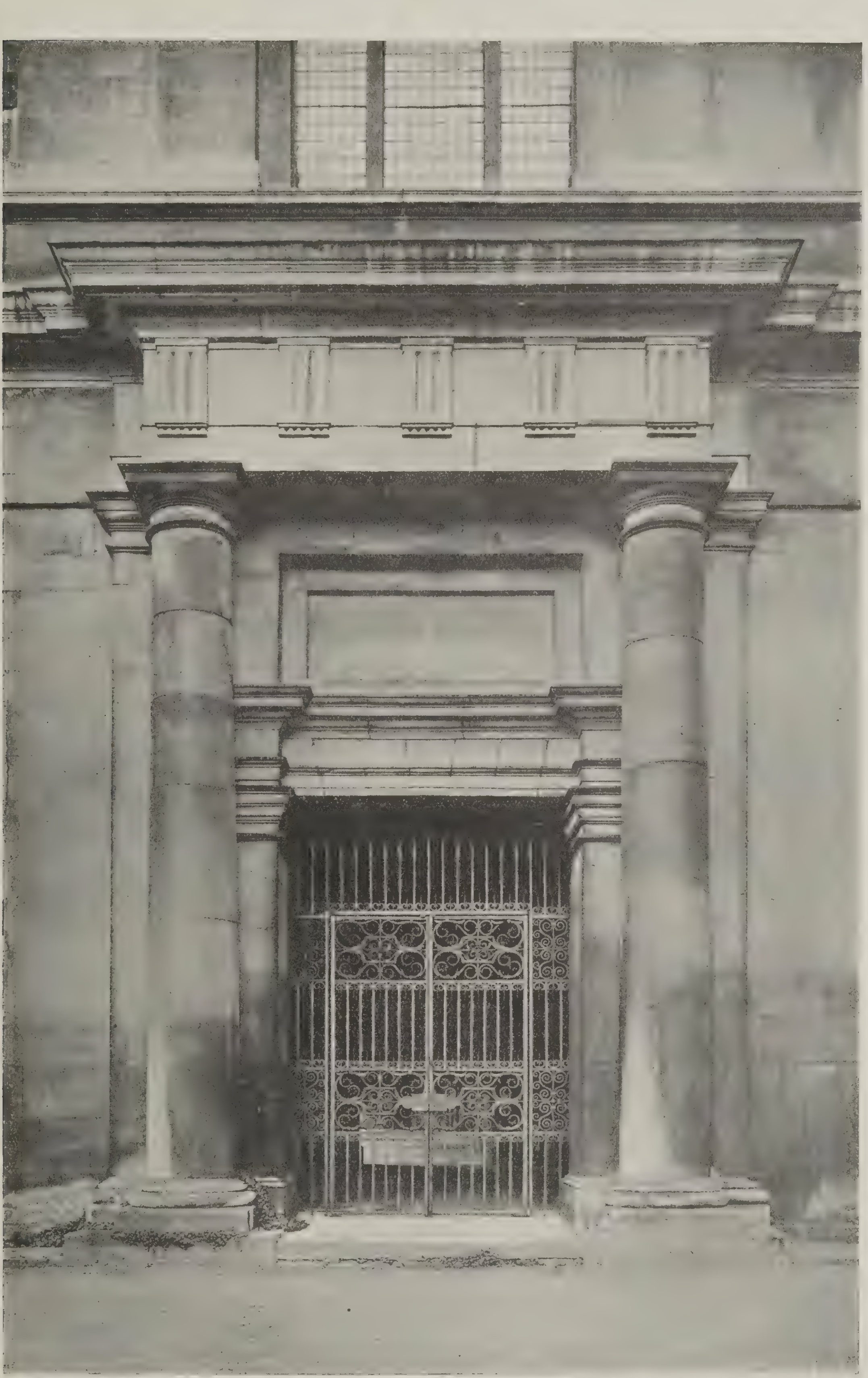
There was a good deal of veneer in the building—som of it in very bad condition—fastened on by iron cramp which had rusted through. During the years 1807-9-1 while Wren was still in charge of the work, it was estimat that as much as 18,000 ft. super of stone was used up repairs. Strong was the builder at that time.

The stonework of the lantern was also in very b condition. The vases upon it, which were hollow, we found to have perished 1 in. on each surface. The ster of the vases were consequently very frail. Wren apparent did not reckon upon the wasting of the material. T vases had now been tied up to prevent their falling abo the heads of the public.

In his introductory remarks Mr. Waterhouse ackno ledged the debt of the Institute to Mr. H. M. Fletcher

# Architectural Details. 44.—Doorway of Trinity College Library, Cambridge

Sir Christopher Wren, Architect



Wren's own words concerning the details of Trinity College Library are worthy of note here: "Wee are scrupulous in small matters and you must pardon us; the architects are as great pedants as Criticks or Heralds."

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connection with the bi-centenary arrangements. He also spoke of the splendid way in which the allied societies had rallied around them. Speaking in French, he referred in graceful terms to the presence of M. de Saint-Maurice, Membre du Conseil de la Société des Architectes Diplomés par le Gouvernement, and of M. Augustin Rey, Société Centrale des Architectes Français. M. de Saint-Maurice replied.

Lord Balfour then proposed the health of the President, which was toasted with much enthusiasm.

## The Guests at the Banquet

Following is a list of those who were present at the banquet :—

Adams, Mr. Maurice B.
Adshead, Prof. S. D.
Alexander, Canon S. A.
Allardyce, Mr. H. W.
Anderton, Mr. F. R.
Ansell, Mr. W. H.
Archbishop of Canterbury, His Grace the.
Armitage. Mr. Edgar
Ashley, Mr. H. V.
Askwith, The Rt. Hon. Lord.

Baker, Mr. F. G.
Baker, Mr. Herbert.
Balfour, The Rt. Hon. the Earl of.
Beaumont, Mr. E. C.
Beaumont, Mr. E. E.
Beck, Mr. F. Adams.
Bennett, Mr. T. P.
Bentinck, Mr. F. Cavendish.
Bentley, Mr. Arthur.
Bessant, Mr. J. A.
Binns, Mr. A. L.
Blackstone, Dr. W. A.
Blanco-White, Mr. G. R.
Blomfield, Sir Reginald.
Booth, Mr. H. Cecil.
Bowlby, Sir A. A.
Brittan, Mr. H. W.
Buckland, Mr. H. T.
Burnet, Sir John J.
Burrows, Mr. G. C.
Burrows, Mr. R. A.
Butler, Mr. C. McArthur.

ameron, Mr. D. Y.
ash, Mr. Wm.
ave, Mr. Walter.
hallen, Mr. Harold B.
haundler, Mr. J. H.
lack, Mr. John.
lark, Mr. C. F.
lark, Mr. C. S.
larke, Mr. Arthur.
larke, Mr. Max.
lay, Mr. Cecil.
ockrill, Mr. G. Scott.
oleman, Mr. E. P.
ollard, Mr. A. O.
ollard, Mr. John.
ollins, Mr. A. F.
ollins, Mr. E. Stone
ollins, Mr. L. H. C.
ook, The Rt. Hon. Sir Joseph.
ope, Sir Arthur S.
orderoy, Mr. George.
orlette, Major Hubert C.
ornford, Mr. L. Cope.
rawford, The Rt. Hon. the Earl of.
ross, Mr. A. G.
ross, Mr. Alfred W. S.
row, Mr. Arthur.
ulliford, Mr. L. A.

avey, Mr. Harold.
avidge, Mr. W. R.
avison, Mr. T. Raffles.
awber, Mr. E. Guy.
awson, Mr. C. F.
awson, Mr. C. J.
awson, Mr. H. H.
awson, Mr. Matthew J.
ick, Mr. Reid.
ickinson, Mr. W. F.
ircks, Mr. Rudolf.
oll, Mr. C. C. T.
oll, Mr. M. H. C.
oll, Mr. C. Fitzroy.
ollar, Mr. Harry.
rewitt, Dr. F. G. Dawtrey.

pps, Mr. Walter M.
tchells, Mr. E. Fiander.
vans, Mr. H. Godfrey.

ield, Mr. A. W.
iggis, Mr. T. P.
iggis, Mr. Gordon.
letcher, Sir Banister.
letcher, Mr. H. M.
lockton, Major C. B.
orrest, Mr. G. Topham.
ord, Mr. Walter.
orsyth, Mr. Dudley.
raser, Mr. Percival.
unnell, Mr. H. Denston.

Gibbons, Mr. J. Harold·
Gibbs, Mr. H. B. S.
Gill, Mr. F.
Gill, Mr. C. Lovett.
Gleed, Mr. R. C.
Gleed, Mr. P. F.
Goddard, Mr. A.
Godfrey, Mr. Walter H.
Goldsmith, Mr. F. T. W.
Gotch, Mr. J. Alfred
Gower, Sir George Leveson
Grace, Mr. Lionel U.
Gray, Mr. Arthur.
Green, Mr. A. W.
Gunton, Mr. W. H.

Hale-White, Sir William.
Hall, Mr. Edwin T.
Hall, Mr. E. Stanley.
Hamp, Mr. Stanley.
Handover, Lt.-Col. H. Geo.
Hannen, Mr. Derek.
Hargreaves, Mr. H.
Harrison, Mr. J. Stockdale.
Haynes, Mr. Everard J.
Healey, Mr. A. J.
Heathcote, Mr. Charles H.
Hill, Mr. Joseph.
Hiorns, Mr. F. R.
Horder, Mr. P. Morley.
Horn, Mr. M. L.
Horniman, Mr. E. J.
Hudson, Mr. Edward.

Image, Prof. Selwyn.
Inge, The Very Rev. W.R.

Jackson, Alderman D. T.
Jackson, Mr. F. Ernest.
Jarvis, Sir John.
Jones, Mr. Francis.
Jones, Mr. G. Howard.
Jones, Mr. Ivor P.

Keen, Mr. Arthur.
Kenyon, Alderman H. V.
Killik, Mr. Sheriff.
Knott, Mr. Ralph.

Lamb, Mr. W. R. M.
Lanchester, Mr. H. V.
Lane, Sir W. Arbuthnot.
Law, Mr. Ernest.
Lawrence, Mr. Walter.
Legge, Mr. Herbert A.
Levien, Mr. J. Newburn.
Lindsay-Forbes, Capt. W. J.
Llewellyn, Mr. John.
Lord Mayor of London, The Rt. Hon.
Lorimer, Sir Robert.
Ludlow, Mr. W. H.

MacAlister, Mr. Donald A.
MacAlister, Sir Donald.
MacAlister, Sir John.
MacAlister, Mr. Ian.
Macartney, Mr. Mervyn.
Maufe, Mr. Edward.
May, Mr. Fred.
May, Mr. F. M.
Mayston, Mr. A. R.
McClean, Capt. W. N.
Meredith, Mr. Percy W.
Milburn, Mr. T. R.
Milne, Mr. C. Williamson.
Minns, Dr. Ellis H.
Moira, Mr. Gerald.
Murray. Sir David.
Murray, Mr. John.
Murrey, Mr. John.

Nelson, Mr. W. A.
Newman, Mr. F. Winton.
Newton, Mr. W. G.
Newton, Mr. Harold.
Nicholls, Mr. W. H.
Niven, Mr. D. Barclay.

Oman, Sir Charles.

Pain, Mr. F. G.
Partridge, Mr. E. J.
Paxton, Mr. James.
Peacock, Mr. Walter.
Pember, Dr. F. W.
Perks, Mr, Sydney,

Perring, Mr. Wm. G.
Pite, Prof. A. Beresford.
Plume, Mr. W. T.
Poole, Mr. Henry.
Powell, Mr. R. Sidney.
Powis, Mr. G. P.

Ramsey, Mr. Stanley C.
Raymond, Mr. A. Gordon.
Raymond, Mr. W. Leslie.
Reeves, Mr. Hugh W.
Reid, Mr. J. Campbell.
Reidie, Mr. W. B.
Rey, M. Augustin.
Rigg, Major Richard.
Riley, Mr. W. E.
Rising, Mr. H. Whiteman.
Roberts, Mr. R. L.
Rogers, Mr. Harold S.
Russell, Mr. Frank.
Russell, Mr. H. F.
Rye, Mr. F. G.

Saint-Maurice, M. de.
Saul, Mr. Henry A.
Savage, Mr. Rupert.
Savile, Mr. L. H.
Schuster, Prof. Sir Arthur.
Scott, Mr. C. M. Oldrid.
Scott, Mr. T. G.
Scott, Mr. W. Gillbee.
Scott-Moncrieff, Mr. W.W.
Seager, Mr. S. Hurst.
Searles-Wood, Mr. H. D.
Selby-Bigge, Sir L. A.
Shepherd, Mr. Herbert.
Shepherd, Mr. W. E.
Skipper, Mr. G. J.
Skjold, Mr. Einar.
Smith, Sir Cecil Harcourt.
Spragg, Mr. C. D.
Squire, Mr. J. C.
Steel, Mr. W. P.
Stewart, Mr. William.
Storrs, Mr. J.
Stratton, Mr. Arthur.
Street, Mr. William.
Studd, Mr. Sheriff.

Tait, Mr. T. S.
Tanner, Mr. Lawrence E.
Tapper, Mr. Michael.
Tapper, Mr. Walter J.
Tarring, Mr. Bateman Brown.
Tarring, Mr. F. W.
Tatchell, Mr. Sydney.
Taylor, Mr. Andrew T.
Thomas, Sir A. Brumwell.
Thomas, Mr. Percy.
Townroe, Capt. B. S.
Turner, Prof. H. H.
Turner, Mr. Lawrence A.

Venning, Mr. H. J.

Walcot, Mr. Wm.
Walton, Mr. F. J.
Ward, Mr. W. H.
Waring, Mr. H. J.
Warren, Mr. Edward P.
Warren, Sir Herbert.
Waterhouse, Mr. Paul.
Watson, Mr. Spencer.
Weaver, Sir Lawrence.
Webb, Sir Aston.
Webb, Major Maurice.
Welch, Mr. Herbert A.
Welford, Mr. Arthur.
Wells, Mr. J.
Wilkinson, Mr. Stephen.
Williams, Sir E. Hodder.
Willis, Sir Frederick.
Wills, Mr. F. R. Gould.
Wilson, Mr. T. Butler.
Wilson, Mr. Geoffrey C.
Withers, Mr. George E.
Wood, Mr. John W.
Woodcock, Mr. Edgar H.
Woodward, Mr. Frank.
Woodward, Mr. Wm.

Yerbury, Mr. F. R.
Young, Mr. Clyde.
Young, Mr. H.
Young, Mr. S. M.

## The Service in St. Paul's

The service held in the afternoon in commemoration of Christopher Wren, in his own St. Paul's Cathedral, which, as Dean Inge observed in his address, is "among all his enduring works his chief monument," was attended by a large assemblage of people.

Just before half-past two the processional cross was borne slowly up the nave, preceding the procession in which were the Lord Mayor, with all his retinue, and the Bishop of London, the rectors of some of the City churches, followed by a long procession of architects headed by Mr. Paul Waterhouse, president of the R.I.B.A., carrying a laurel wreath to lay on Wren's tomb. Sir Aston Webb walked beside him. Lord Crawford, First Commissioner of Works in the late Government, was there. The hymn, "Blessed City, Heavenly Salem," was sung as the long procession moved up the nave.

The service was short and simple. A beautiful anthem was sung, the work of Maurice Greene, who was organist at St. Paul's in the early-eighteenth century, when its walls were white and fresh from the masons' hands.

The Dean took his text from the passage from Haggai which had formed the special lesson: "The glory of this latter house shall be greater than the glory of the former, saith the Lord of hosts : and in this place will I give peace, saith the Lord of hosts."

The safety of the Cathedral concerned the national honour, the Dean said. St. Paul's was still the noblest monument of its builder, and Wren himself would say, "Preserve St. Paul's; make it safe for a thousand years, as my memorial, so long as the Church of England, broad, wise, and tolerant, remains the true expression of the English people." In conclusion, the Dean drew a grave warning from the words of his text, "In this place will I give peace." It was only too probable that another European war would see the end of this and of many other memorials of Wren's genius.

The service ended, the procession made its way to the simple tomb wherein Wren lies in the crypt. Its flat stone, bearing his name, rises hardly a foot above the floor, and on the side wall is the famous inscription. Around the tomb the company stood grouped. Mr. Paul Waterhouse first deposited thereon a wreath of laurels bound with violet velvet, and read out the inscription it bore, as follows :—

In thanksgiving to Almighty God
for the talents, industry, and blameless life
of
Christopher Wren,
in reverent homage to that great man's name and memory
and
in profound admiration for his mighty works
we architects of Britain
lay this wreath on his tomb.

On behalf of the Société Centrale de Architectes Français, M. Augustin Rey deposited a bronze palm. Speaking in French, he said: "In the name of the architects of France, I place this palm on the tomb of a great artist, a great citizen, and a great patriot." A wreath from an allied French architectural society, in which white lilies were conspicuous, M. Rey next placed on the stone.

The Architectural League of New York, by the hands of Mr. Candler Cobb, of the American Embassy in London, also paid the devotion of a wreath. It bore the words :—

"In appreciative memory of Sir Christopher Wren, whose work marked so distinct a step in world architecture, and to so large a degree influenced the colonial architecture of America, this wreath is offered in loving memory by the Architectural League of New York, and is placed here by the representative of the American Ambassador, Mr. George Harvey."

[Reports of other celebrations are given on page 456.]

# The Acoustics of Council Chambers

## By HOPE BAGENAL: with an Illustrative Design by R. E. ENTHOVEN

THIS class of auditorium presents special difficulties in practice owing to the fact that as a rule the number of persons present is relatively small in proportion to the air volume of the building. A large council chamber may have an average attendance of 200 persons, whereas a theatre *of the same volume* would seat a thousand nightly or five times as many. Now as the value of A (the total absorbing power of the auditorium) is largely contributed to by the audience this means that in the case of the council chamber the value $\frac{V}{A}$ (where V is the air volume) is relatively large, and the reverberation corresponds to the value $\frac{V}{A}$. This means that large areas of permanent absorbing material (felt or felt substitutes, acoustic plaster or absorbent tiles) must be provided in suitable positions in order to meet the initial difficulties of reverberation and reduce the energy condition of the room to a figure suitable for the speaking voice. This is not easy when a hall of lofty height and therefore of large volume is already built. The volume of the hall, therefore, must be kept as small as possible in the original design.

The acoustic requirements in an auditorium of this class, in order of importance, are as follows. First, members of an English assembly must be able to make themselves heard from every member's seat in the house, because it is the custom to speak from seats and not from a centrally placed rostrum. Second, members of the Press must be able to hear every speaker clearly from whatever seat he may be speaking from in order that they may report speeches and inform the public. Third, the relatively small section of the public present at a debate must be able to hear from the public galleries as well as possible after the first two requirements have been satisfied.

How can these requirements best be met?

In regard to the first, the main difficulty consists in the fact that following the custom of addressing the house from any seat, the relative positions of speaker and audience are being continually changed. This means that it is impossible to design for a fixed source of sound, as can be done for lecture-rooms and assembly halls. Also there must generally be a number of the audience seated behind the back of the speaker. Now the disadvantage in a large hall of having seats behind a speaker is that he is at a loss where to direct his voice, and is liable to turn his head in order to make his points, which causes confusion just when clearness is required. To meet these difficulties, as many useful reflectors as possible should be designed, normal or approximately normal, to every seat in the house. Of these reflectors the ceiling is undoubtedly the most useful and should be of a hard, smooth material. But in order to ensure that the length of any given *reflected* sound path shall not exceed the *direct* sound path by more than 80 ft., the height of the ceiling should not be more than half that figure, that is, 40 ft. (The figure 80 ft. is the distance sound will travel in one-fifteenth of a second, the minimum interval detected by the human ear.) Unfortunately, a monumental height is usually required for this class of auditorium, but a high ceiling not only (as already pointed out) inevitably increases volume and, therefore, reverberation, but in addition will cause long reflected paths of sound and, therefore, redundancy. A practical warning against high ceilings is the case of Sir Charles Barrie's House of Commons. The Commons, after the burning of the old palace of Westminster in 1834, were accommodated in a temporary wooden structure, admirable acoustically and having a comparatively low ceiling. Barrie's houses suffered by comparison. The result of the complaints was that in the case of the Commons a glass ceiling was placed below the elaborate Tudor roof. The ceiling of the Lords remains as originally designed. The House of Commons was greatly benefited by the alteration and is now moderately satisfactory. The Lords remains notoriously bad.

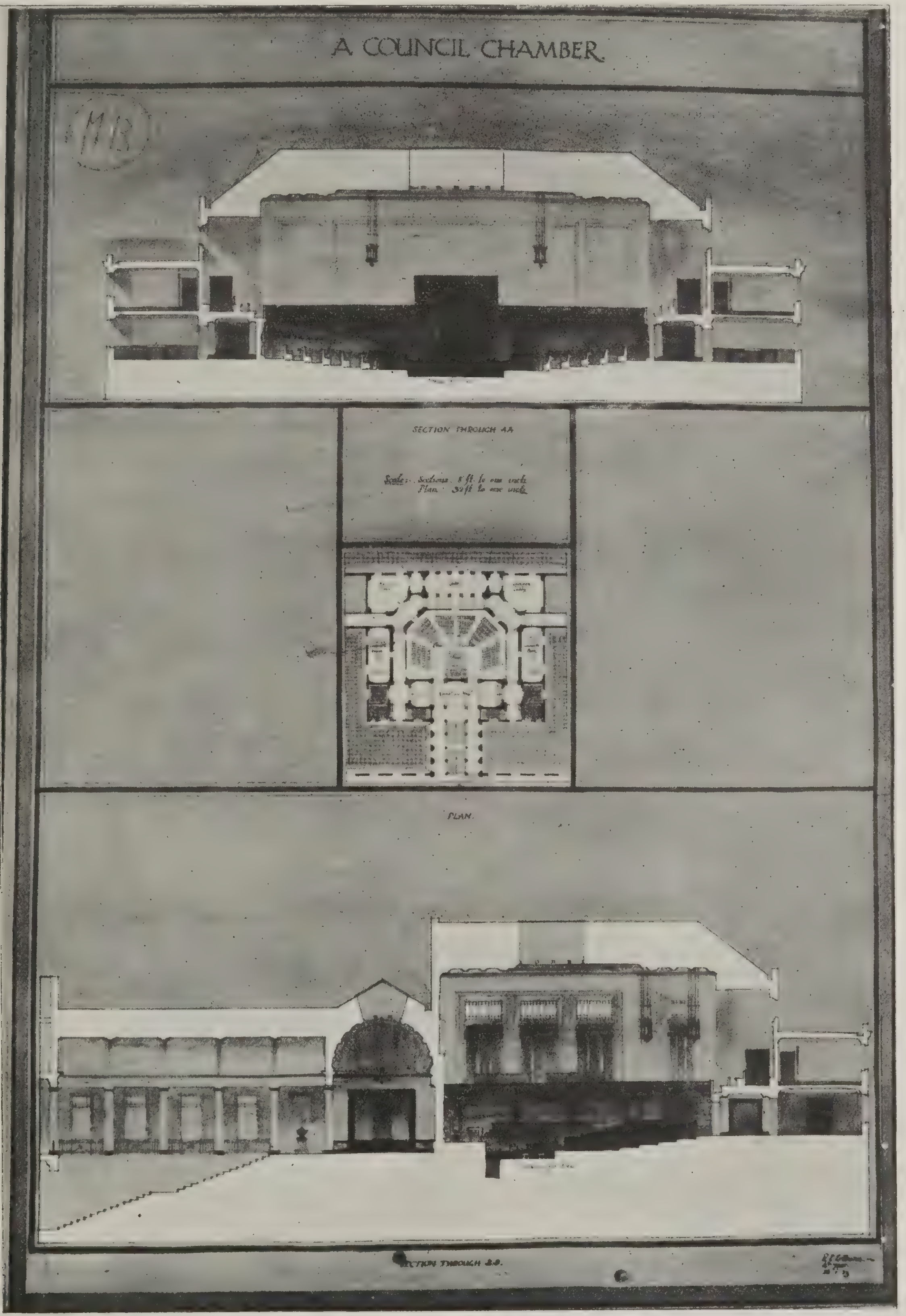
In addition to the ceiling reflecting surfaces can also be arranged on plan. Additional reflected sound paths within the permissible limit of length can be provided by making a reflecting wall or screen surface, to which all front-bench speakers, addressing the president in the ordinary way, could direct their voices. A good position for such a reflector would be the wall along the diameter of a semicircular or semi-octagonal plan behind the president's chair. Where, however, the oblong or committee-room plan is employed, as in the House of Commons, useful reflectors could be designed behind the benches along the side walls. Front-bench speakers of necessity have a larger number of persons seated behind them, and therefore reflections thrown behind them from a wall in front of them are of considerable value. The oblong plan for English practice has much to be said for it acoustically, but will accommodate only two parties conveniently. The advantage of having a rostrum position to which all speakers must come in order to address the house is a twofold one; first, a speaker has all his audience in front of him, and, therefore, useful reflecting surfaces can be designed to right and left of the rostrum position; and, secondly, a single direction is given to his voice, to which he becomes accustomed. The Chamber of Deputies in Paris, the Reichstag in Berlin, and other European parliament houses, all of great height, are acoustically workable mainly because a central rostrum position is used for speaking.

In the design of a council chamber on acoustic principles by the fourth-year students of the A.A. Schools, several excellent schemes were submitted. Mr. Enthoven's is illustrated in this issue. The ceiling has been placed at a height of 38 ft., and from the acoustic diagrams it can be seen that a beam of sound is provided by it to every possible seat for every possible position of a speaker. His plan, semi-octagonal, provides a reflecting surface also along the diameter behind the speaker's chair. This reflecting surface ought not to be at a greater distance than 40 ft. for any speaker, from the same reasoning as applies to the ceiling height. On the short section this is not a danger, but as can be seen on the long section, in a council chamber of large size the reflected paths become greatly in excess of the direct paths for members speaking from back seats. This difficulty can be overcome, as in Mr. Enthoven's design, by tilting forward the panelling, so that reflections are depressed and are not returned upon the speaker.

The second requirement in order of importance, namely, the position of members of the Press, requires a new point of view on the part of designers. It is not sufficient nowadays to allot one of the least satisfactory galleries to reporters. Every member's seat on the floor of the house, as we have said, may become a source of sound, but members of the Press cannot move about to advantageous positions; they should, therefore, be located on the floor of the house in a mean position for good hearing with a door of their own giving rapid access to the lobbies. At the Reichstag in Berlin, the reporters' tables are on the floor of the house in front of the president. A reporter who wants to ask a question of a member in the lobby after a speech should be able to dissociate himself rapidly from the writing tables without disturbing his colleagues. In a loftily situated gallery the members of the Press are too far from the lobbies, and in some cases have inevitably to disturb their colleagues when leaving. In the House of Lords it is well known that hearing in the Press gallery is so bad that it is only possible for reporters to inform the British public of a debate by working together in groups and collecting syllables. In the design illustrated, the Press have been laced on the floor of the house immediately in front of the resident, in an area slightly sunk, surrounded by a brass ail sufficient to mark off the area without screening ound, and are provided with a staircase and access of their wn which should communicate directly with the lobbies.

For the third requirement public galleries should, if ossible, form part of the main cell of the auditorium, as in he House of Commons, and should not be placed in deep ecesses. Where recesses are used they should be wide and hallow and without a screen of columns. A deep gallery vill not only add to the volume of the auditorium and there- ore to the reverberation, but may also provide long reflected paths of sound. A criticism to be made upon the design illustrated is that the gallery seats are within recesses. The recesses, however, have been made broad, they are not screened with columns, and beams of sound from the main ceiling reach the seats situated within them.

The acoustic analysis of Mr. Enthoven's council chamber is set out in table form on his sheet of diagrams; and the figures for the reverberation are given below it. First, the reverberation is calculated for a full attendance of members, but with the walls above the panelling left as plain plaster finished in the ordinary way. Under these conditions the reverberation $t_1$ even for so restricted a



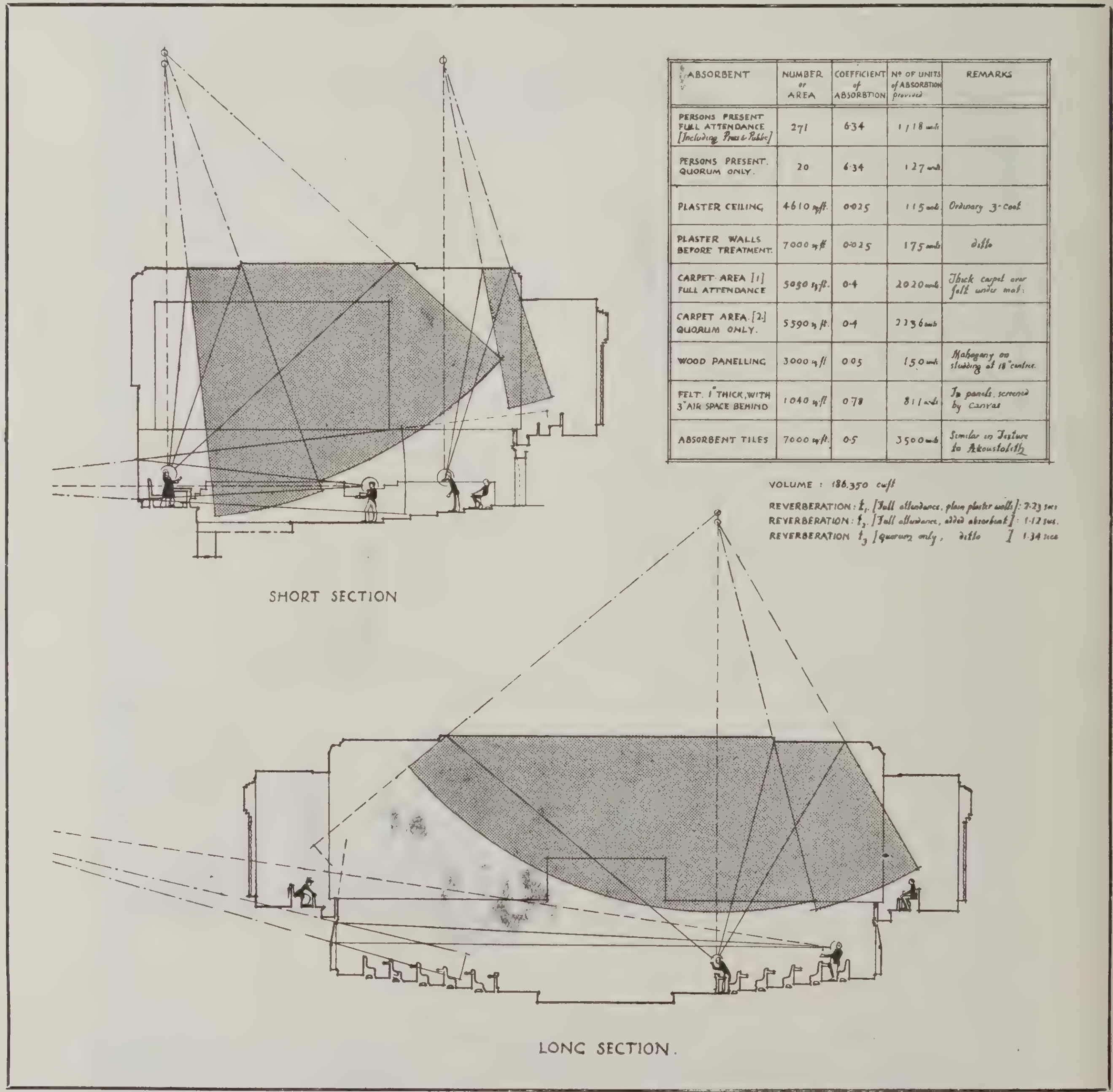
A COUNCIL CHAMBER ACOUSTICALLY DESIGNED.
BY R. E. ENTHOVEN, FOURTH-YEAR STUDENT, ARCHITECTURAL ASSOCIATION SCHOOLS.

volume, is just over two seconds, or about as much as is characteristic of a fair-sized church. This would mean that some eight or ten syllables would be heard simultaneously, and the result would be unsatisfactory for debate. To reduce this, felt screened by canvas in panels is designed at the back of the galleries where it will also have the effect of eliminating long reflected paths. This felt is taken as 1 in. thick on battens 3 in. from the wall, having a coefficient of 0·78; the canvas screen should be as thin as possible. But these panels are found by no means sufficient to reduce the reverberation to the figure suitable for debate. The large panel on the wall above the chairman might have been felted, but instead the entire wall surface above the wood panelling has been taken out in an absorbent masonry tile similar to the American akoustolith tile, having a coefficient of absorption in the register of the speaking voice of nearly 50 per cent. When the absorption units from this source are added in, the reverberations $t_2$ and $t_3$ corresponding to conditions (1) of full attendance, and (2) a quorum of twenty, respectively, are found to be reduced to 1.1 seconds and 1.3 seconds.

(*Note.*—The figure for the coefficient of absorption per person where foot units are used given in the table, namely 6.34, is the figure originally given for $C_4$ by Sabine in "The Brickbuilder," January 1914. In the "Collected Papers" the figure has been changed to 4.72. In the case of a council chamber where the audience factor is a small one the error is not serious, but where a theatre or concert-room is being analysed for reverberation care should be taken to use the later figure 4.72.)

The resonance effect of the wood panelling, at most very small for speaking voice conditions, has not been considered in this design. The panelling has been used simply as a reflector in *the regions where reflecting surfaces are required*. The secret of successful acoustic design in this difficult class of auditory is to get maximum loudness in the region of members and Press, and above that region to reduce energy conditions to the lowest possible. The whole building, restricted in height, should function as a sound box. The old method of designing a tall building, reproducing church conditions in reverberation, and accommodating a few unfortunate Pressmen aloft in a kind of triforium, has caused too many discomforts and should be brought to a reasonable reform.

[The foregoing article is reprinted from "The Architectural Association Journal," by the courtesy of the Editor.]



| ABSORBENT | NUMBER or AREA | COEFFICIENT of ABSORBTION | Nº OF UNITS of ABSORBTION provided | REMARKS |
|---|---|---|---|---|
| PERSONS PRESENT FULL ATTENDANCE [Including Press & Public] | 271 | 6·34 | 1718 units | |
| PERSONS PRESENT. QUORUM ONLY. | 20 | 6·34 | 127 units | |
| PLASTER CEILING | 4610 sq.ft. | 0·025 | 115 units | Ordinary 3-coat |
| PLASTER WALLS BEFORE TREATMENT. | 7000 sq.ft | 0·025 | 175 units | ditto |
| CARPET AREA [1] FULL ATTENDANCE | 5050 sq.ft. | 0·4 | 2020 units | Thick carpet over felt under mat: |
| CARPET AREA [2.] QUORUM ONLY. | 5590 sq.ft. | 0·4 | 2236 units | |
| WOOD PANELLING | 3000 sq.ft | 0·05 | 150 units | Mahogany on studding at 18" centres. |
| FELT. 1" THICK, WITH 3" AIR SPACE BEHIND | 1040 sq.ft | 0·78 | 811 units | In panels, screened by Canvas |
| ABSORBENT TILES | 7000 sq.ft. | 0·5 | 3500 units | Similar in Texture to Akoustolith |

VOLUME : 186,350 cu.ft

REVERBERATION : $t_1$. [Full attendance, plain plaster walls]: 2·23 secs

REVERBERATION : $t_2$. [Full attendance, added absorbent]: 1·12 secs.

REVERBERATION $t_3$ [quorum only, ditto ] 1·34 secs

A COUNCIL CHAMBER ACOUSTICALLY DESIGNED. BY R. E. ENTHOVEN.
ALSO TABLE OF ABSORBENTS. (*See Note in Text.*)

# Architecture in the Lay Press

## A Regent Street Relic

I wonder whether it is the intention of e Office of the Board of Works, which oks after the Crown property in Regent reet, to save just one building to show posterity what Regent Street looked e when it came in all the glory of new ucco fresh from the hand of Nash ?

It is a matter well worth considering, the architectural authorities of to-day ink sufficiently well of Nash's work, to commend the preservation of a single ample. The corner building, which one retains a fragment of the original azza of Piccadilly Circus, is what I ould choose, but I suppose it will be crificed to its site value, which must be ormous.—A Londoner's Diary, in "The vening Standard."

## Bush House

A distinguished painter has recently an interview drawn attention to the il effect of American influence upon blic taste in matters of art—the subitution of crashing and squeaking ragne orgies for the melodiousness of our d-time dance music, the ousting of the gitimate drama by film absurdities, the Broadwaydizing" of our streets and uares at night by crude, dazzling, and aselessly moving electric signs. All is nerve-racking, hectic excitement and stlessness is destructive to the conmplative mood needed for the apprecian of art. America, he maintains, is ping us with the dangerous drugs of its oduction and is blunting our senses d dulling our æsthetic perception.

Yet there is one art in which America veals none of that restlessness of spirit. deed, modern American architecture nds supreme for massive dignity, reseful grandeur, and nobility of propor n. It is no exaggeration to say that nerica has added the only significant apter to the history of architectural delopment since the days of the late Reissance. And, strange to say, until the ffoldings were removed from the huge ilding on the island site between the rand and Aldwych to reveal the impos pile of "Bush House," scarcely a ce of American influence had pene ted into English architecture.—An chitectural Critic, in "The Observer."

## ‘An Interest in Architecture"

Somewhere I have seen it stated that Architecture Club, whose first exhibi n opens at Grosvenor House on March was formed to create an interest in hitecture. That seems to me the ong way of putting it, because an erest in architecture needs no creating. is the one artistic interest that nobody avoid. Everybody who builds, buys, s, rents, or wants a house or a flat, is erested in architecture, whether he ows it or not. The only question is ether or not his interest, besides being ctical and unavoidable, shall also intelligent, and that is where the hitecture Club comes in. It aims at ouraging the plain person to choose unavoidable house or flat with the e discrimination with which he oses his equally unavoidable meals. The superstition that you can have a house and avoid architecture is, I fear, partly due to architects themselves. . . .

There are, of course, different kinds of architecture, just as there are different kinds of writing. You do not expect the same qualities in a trade catalogue as in a poem, and you do not expect the same qualities in a factory as in a cathedral. But, in either case, you do, or should, expect qualities according to kind. In all cases you expect the qualities which are summed up in "fitness for purpose." Here there is another snag. People say : "Give me a house that suits its purpose and I don't care how it looks." Vain aspiration! Because if there is one thing certain in this mortal life, it is that looks are an essential part of efficiency. In short, there is no escape from the dilemma that the moment you touch building you are involved in architecture, and the only question that remains is whether the architecture shall be good, bad, or indifferent.—C. M., in "The Saturday Westminster."

## Wren's Fame

This is a lonelier renown than Nelson's. The man who knows Nelson's name should be able to add to it that of Admiral Drake or bold Admiral Benbow. Though his history book be clean forgotten he can tell you a word of Admiral Beattie or Admiral Keyes. Yet I believe that many a man, bidden to speak of famous architects, would stop with Sir Christopher Wren.

You might ask him who built that banqueting house in Whitehall, who built the Bank of England, the Police Office at Scotland Yard, the church of St. Martin in the Fields ? You might tell the names of Gibbs and Hawksmoor, of Soane and Norman Shaw, without wakening a memory in him. There is Mr. Ralph Knott, whom I saw walking the other day in the Strand. What is the house that Mr. Knott built ? Can one Londoner in a hundred answer smartly to that question ? But Sir Christopher Wren——

No doubt of it. Sir Christopher had good fortune. His very name is one of those lucky names that can never be lost in a biographical dictionary. You hear it once, and it is memorable for ever. How it towers above such names as James Gibbs or William Chambers!—"The Londoner," in "The Evening News."

## The City Churches

To speak of St. Paul's itself would be like saying a few words about "Hamlet." Nobody needs them. For some decades of the last century the Gothic revival cast a trifling obscuration on the fame of Wren's most august work. It is better realised now that neither Gothic nor classical architecture needs, for its own glory, any detraction from that of the other. You can admire Durham or Salisbury all the more fully, as well as wisely, if you also enjoy the tranquil magnificence of St. Paul's. A much graver danger, however, than any passing belittlement now hangs over the fame of Wren. A large number of his City churches have lost nearly all their resident parishioners since his time; their original function is gone; in many newer parishes of the diocese of London money for church-building, and especially for the payment of a living wage to the clergy, is badly needed; and the sites of the empty Wren churches are extremely valuable. The difficulty is genuine and acute. It is not fair merely to call the Bishop of London a Philistine for proposing to sell the sites and so condemn Wren's priceless works to destruction. He has his clergy—many of them in dire want—to look after. And yet it would be horrible to see these beautiful and irreplaceable things pulled down by the housebreakers and carted away as rubble. The destruction of the cathedrals at Ypres and Arras in the war was a lesser aggregate loss of fine architecture to France and Belgium than this would be to England. We can see, as yet, no way of escape. But for a few very rich men of imagination and public spirit the opportunity would be a splendid one. It is as if a large part of the Turner collection at the National Gallery had, for some reason, to be publicly burnt unless someone would come forward to ransom them for a good many thousand pounds apiece. The Bishop of London could no doubt find some subsidiary ecclesiastical use for the dispeopled churches if the money value of their sites could be subscribed. The crisis is urgent, and the only perfect tribute that the bi-centenary celebrations could offer to Wren's genius would be the raising of a sum large enough, not to set up a monument to him, but to preserve all the splendid monuments that he left of himself.

"The Manchester Guardian."

## An Ideal Theatre

Some day, when I inherit an enormous sum of money, I will build an ideal theatre. It will stand on an island site which really is an island site, and I will try to find an architect who knows something about architecture to build it. The whole business of acoustics and ventilation and heating will be scientifically discussed before the theatre is built, and if the architect fails to design a theatre in which it is possible to hear without strain, and to sit without being half-suffocated or frozen, or blown out of one's seat by the draught, I will personally wring his neck for him. Half the theatres in England were designed by men who ought to be prosecuted for obtaining money under false pretences. In my ideal theatre every seat will be comfortable and bookable. And that reminds me. If anyone has a hundred and fifty thousand pounds about him, I'd like to have it. My ideal theatre will then become a reality.—St. John Ervine, in "The Observer."

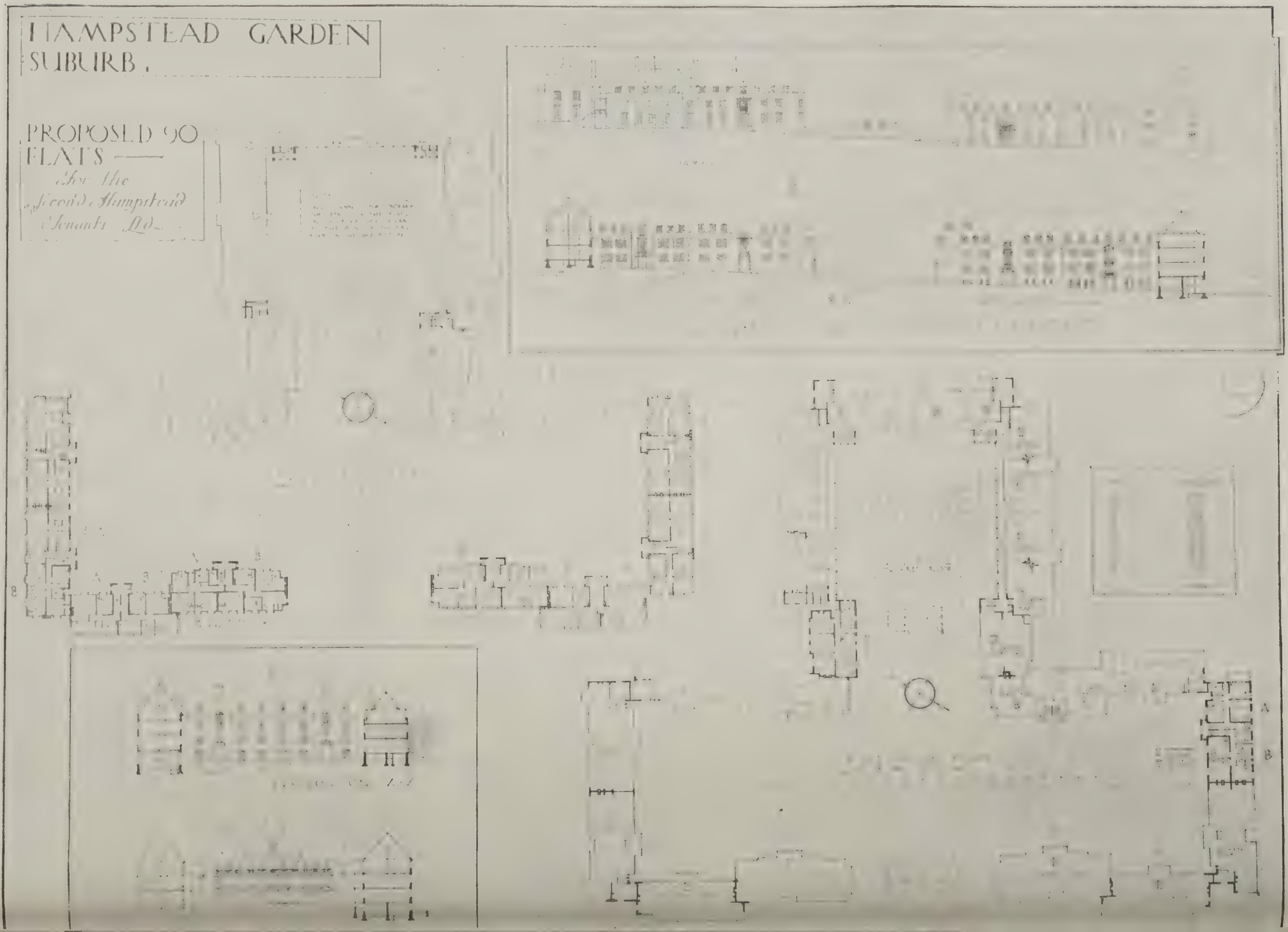
## The Architectural Press

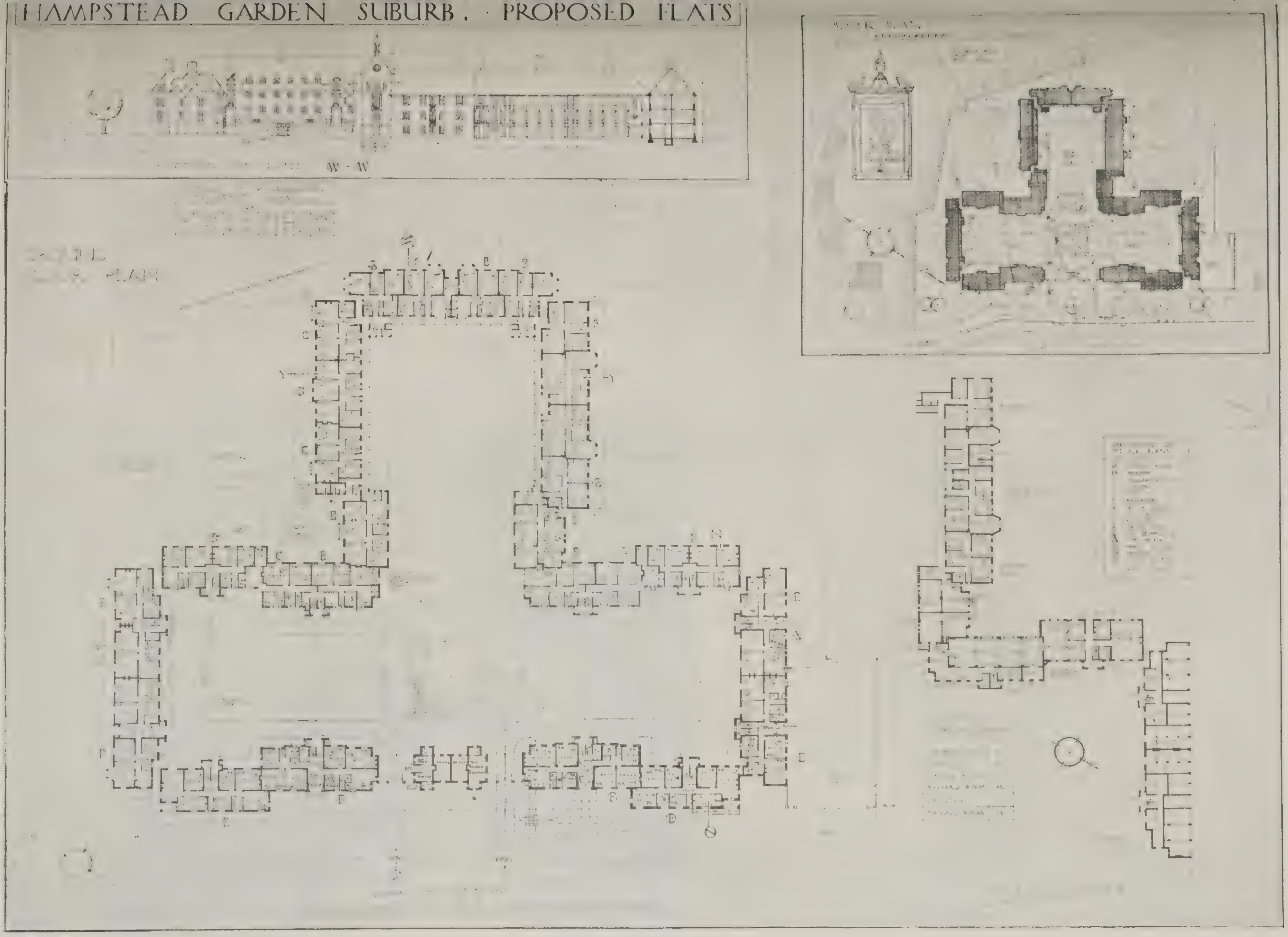
If the art of architecture continues to be chronicled in the excellent fashion of the technical journals, etc., of recent months, the public will yet comprehend precisely how much London owes to Wren.

"The Nation and the Athenæum."

# Hampstead Labour-Saving Flats Competition: First Premiated Design

J. B. F. COWPER, A.R.I.B.A., Architect





This design has been placed first in the £1,000 Competition, promoted by the Second Hampstead Tenants Ltd., for the lay-out and planning of a group of ninety labour-saving flats. Messrs. L. Rome Guthrie, A.R.I.B.A., John C. S. Soutar, L.R.I.B.A., and Edmund J. Cooper were the Assessors. Some critical notes, and illustrations of the second and third designs, will be published next week. Further particulars of the Competition appear on page 461.

# Ryde Concert Pavilion Competition

## The Winning Design

THE accompanying illustrations show the design of Messrs. Thomas Spencer and M. R. Martin, AA.R.I.B.A. which has been awarded first place in the Ryde Pavilion Competition. The second premium was awarded to Messrs. P. J. Newby Vincent and D. West, and the third to Mr. Geo. T. Morris.

In the conditions of the competition it was stated that the subsoil of the site is composed principally of sand underlying loam, the whole of it being "made up" ground. The site was reclaimed from the foreshore between forty and fifty years ago. The building is to be of a completely modern and ornamental style and such that will add beauty to and be in keeping with beautiful surroundings.

The dimensions of the proposed structure must be such that, when completed, it will have seating accommodation for at least 850 persons within the main concert hall. Apart from this accommodation, provision should be made for a suitable tea room for the sale of refreshments, etc., ladies' and gentlemen's cloak rooms and conveniences, stage, artists' dressing rooms, together with the necessary conveniences. It is desirable that an ornamental veranda shall either completely or partially surround the whole of the structure.

Owing to the position of the proposed structure being such that very fine views can be obtained of the Solent and Spithead, it is desirable that in connection with the scheme should be embodied an open-air roof veranda or balcony, on which if necessary teas and refreshments could be partaken. The floor of the main hall is to be suitably sprung as a dancing floor. The total cost of the structure is not to be more than £10,000.

The authors of the winning design, in the course of their report, state: We have purposely kept the building as low as possible so as to cause little or no obstruction to the view from the houses on the south side of the Esplanade and Dover Street. Owing to the close proximity of the railway tunnel, we have avoided placing the building nearer than 30 ft. to the same, therefore no damage can be caused to the tunnel due to the erection of the proposed building.

The exterior of the building is designed in the Italian Renaissance style, adapte to suit modern requirements and decora tive detail, with an entrance portico o the full Doric order of architecture. A similar but simplified order is continued around the whole building as a verand or colonnade. The main entrance is a the south-west corner of the buildin facing the Esplanade towards Pier Street and from the entrance vestibule access i obtained to the whole of the public part of the building. The pay office also i placed in this position and the whole o the entrances, i.e., to the concert hall tea room, cloak rooms, lavatories and staircases to the roof garden, can b supervised by one attendant.

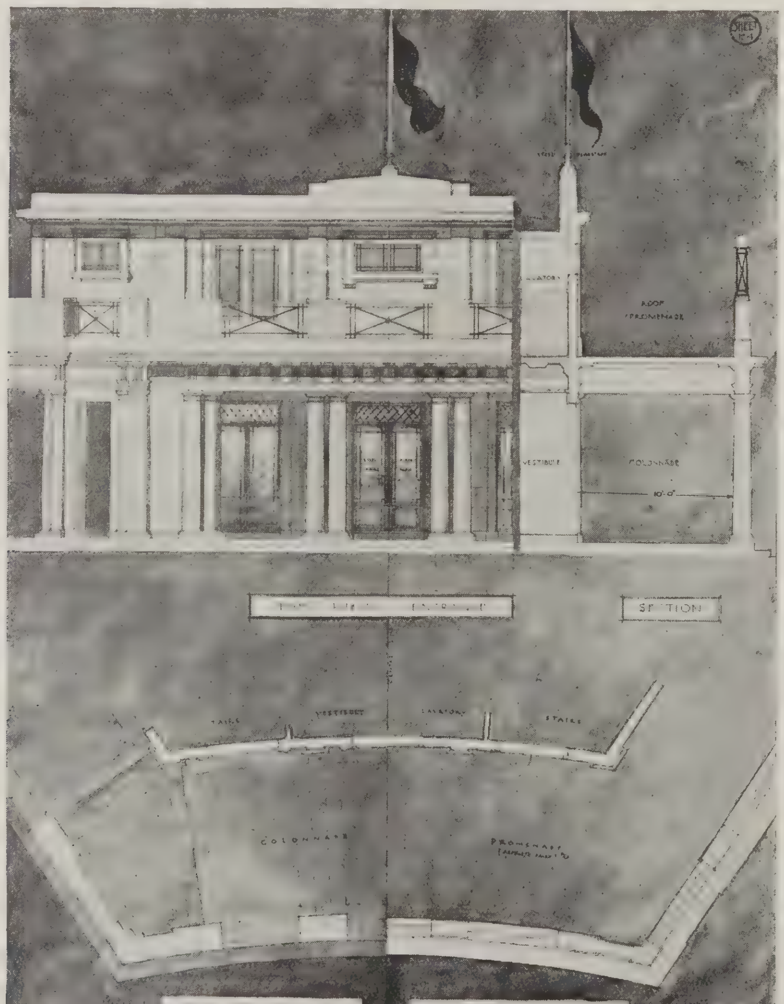
A spacious crush lobby is provided between the vestibule, concert hall, and tea room, which will allow ample room for cloaking and free circulation, and so prevent crushing when visitors are dispersing. The cloak rooms here provided are for the use of persons inside the building only, and will be fitted up to meet modern requirements. There are separate cloak rooms for male and female.

The concert hall is designed of the most suitable proportions, so that the stage is visible from any part of the hall Acoustic properties have also been fully considered. The hall provides seating accommodation for 850 persons upon chairs, full allowance being made for the necessary gangways. In the side walls are large double folding doors which can be folded back flat against the walls. With this arrangement the hall can be thrown open to allow a full circulation of air during the hot weather Additional seating can therefore be provided along the colonnade and out on the lawn if required. Similar double folding doors are placed in the wall between the concert hall and tea room, which room can also be used for additional seating accommodation in the case of concerts, or as a sitting-out room when dances are being held.

The hall is placed at the extreme eastern end of the site so as to be as far as possible from the noise of the railway and the traffic on the roads, also to give a full view of the beautiful lawn and gardens. The floor of the hall will be specially constructed for dancing.

At the far end of the hall is the stage, measuring 36 ft. wide and 16 ft. deep, specially constructed with a sloping surface, back to front. This stage will permit a full orchestral concert, and is of ample dimensions to accommodate scenery for theatrical performances. Immediately off the stage and at the same level are two property rooms for the storage of theatrical scenery, and another larger scenery store with sliding doors is provided at the rear of the stage. In connection with the stage and adjacent thereto separate retiring rooms have been provided for male and female artists, each with complete lavatory accommodation.

Underneath the stage and with the floor slightly below the level of the hall floor is a chair store, capable of storing



THE PUBLIC ENTRANCE.
T. SPENCER AND M. R. MARTIN, AA.R.I.B.A., ARCHITECTS.

ut 1,000 chairs. The panelling forming front of the stage will be made so as to 1 and chairs can thus be handed ctly into the store, thereby permitting hall to be cleared in a few minutes.

he tea room is designed to adjoin the with double folding doors in the side ls as before described. With this ngement tea and refreshments can artaken of in the open air on the colon- e or on the lawn, which is 20 ft. wide ront of the tea room. The kitchen is ed in a central position, and from it ly service is obtained to all parts of the ding, including the hall, tea room, tea gia, and by lifts to the Italian roof len. The kitchen will be equipped 1 modern gas apparatus, suitable for aring light refreshments, teas, etc. aspect of this room is north-west and, efore, will not be unduly hot during mer weather. A separate entrance lso provided.

he loggia at the northern end of the ding is 74 ft. long and 20 ft. wide, rlooking the sea. It is enclosed with e folding glazed screens so as to afford tection during inclement weather. loggia is large enough to permit of a tion being taken for a continuation he colonnade without causing obstruc- to those sitting on the loggia. The n colonnade or veranda completely ounds the building, along which per- s can promenade without being in- venienced by wet weather.

he Italian roof garden is approached two staircases from the entrance ibule. A portion of the roof garden ut 10 ft. wide immediately over the nnade provides a continuous pro- nade. The central portion, which is ed above the promenade and ap- ached by short flights of steps, affords lendid tea garden, where refreshments be partaken without interruption n those walking round the garden. m every part of the roof magnificent vs of the Solent and Spithead are seen. connection with the roof garden and the top of the staircases, separate tories are provided. There are also good stores for chairs and tables to used on the roof garden.

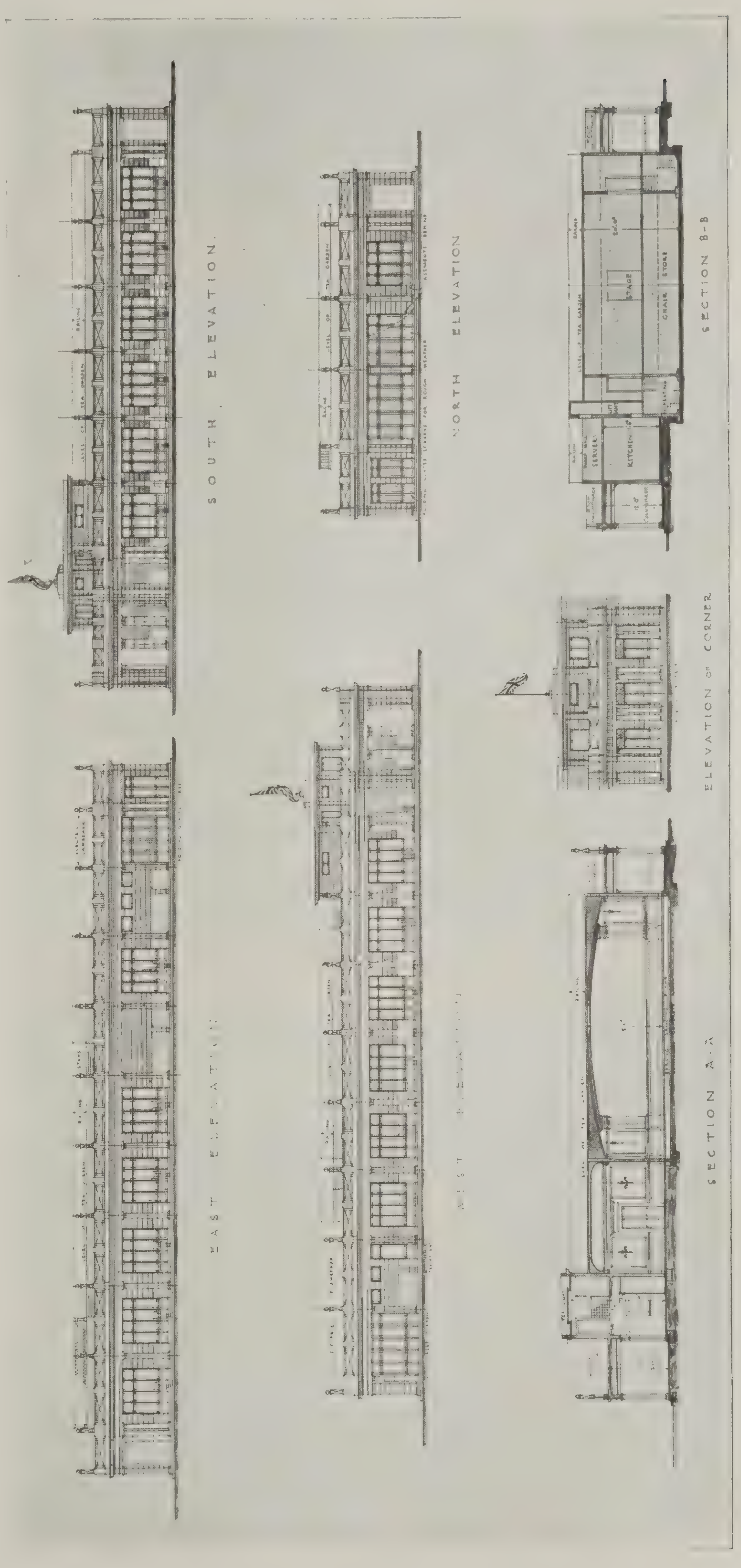
n view of the nature of the subsoil which the building is to be erected, and sidering the exposed position of the ding and close proximity of the sea have consulted our engineers and are ised that the building should be con- cted of reinforced concrete, the whole he building resting on a raft of con- e reinforced with steel bars so that centrated loads are avoided, and the ssure uniformly distributed over the le site.

he concrete surfaces are to be rendered h Portland cement stucco of natural ne colour and lined out to represent ual stone jointing. The building as gested in our scheme is, therefore, igned accordingly.

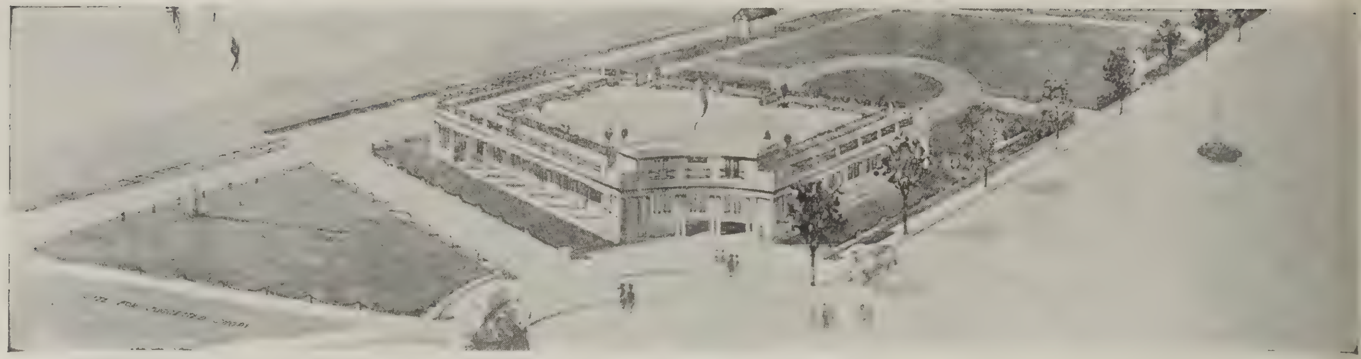
he roof flat surfaces will be covered h asphalt, so as to render them abso- ly watertight and also afford a good face for walking upon.

Vith the exception of the glass screens losing the loggia all the windows and rs are on the inner wall of the colon- e, and thus protected against weather, reby affording economy in mainten- e. Local materials are to be used oughout where possible.

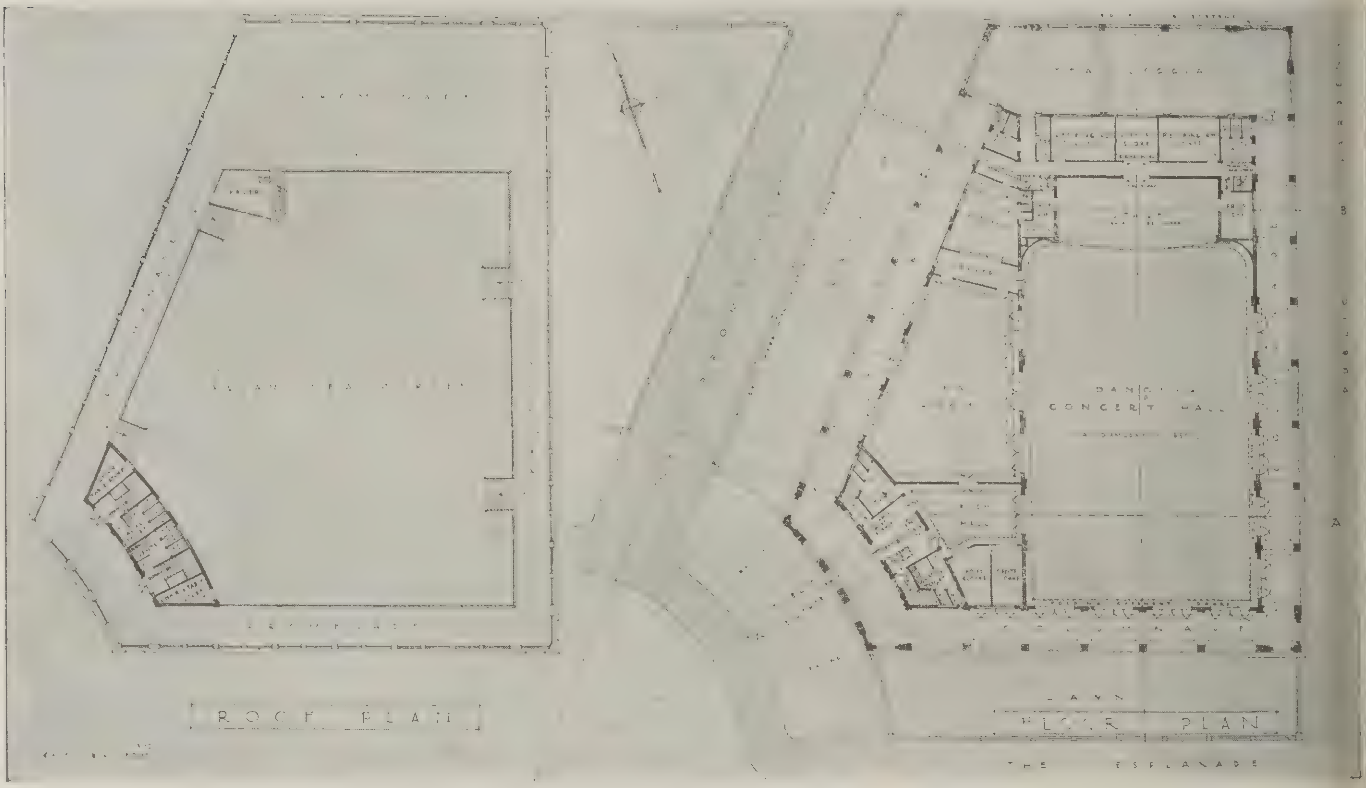
he system proposed is the low-pressure

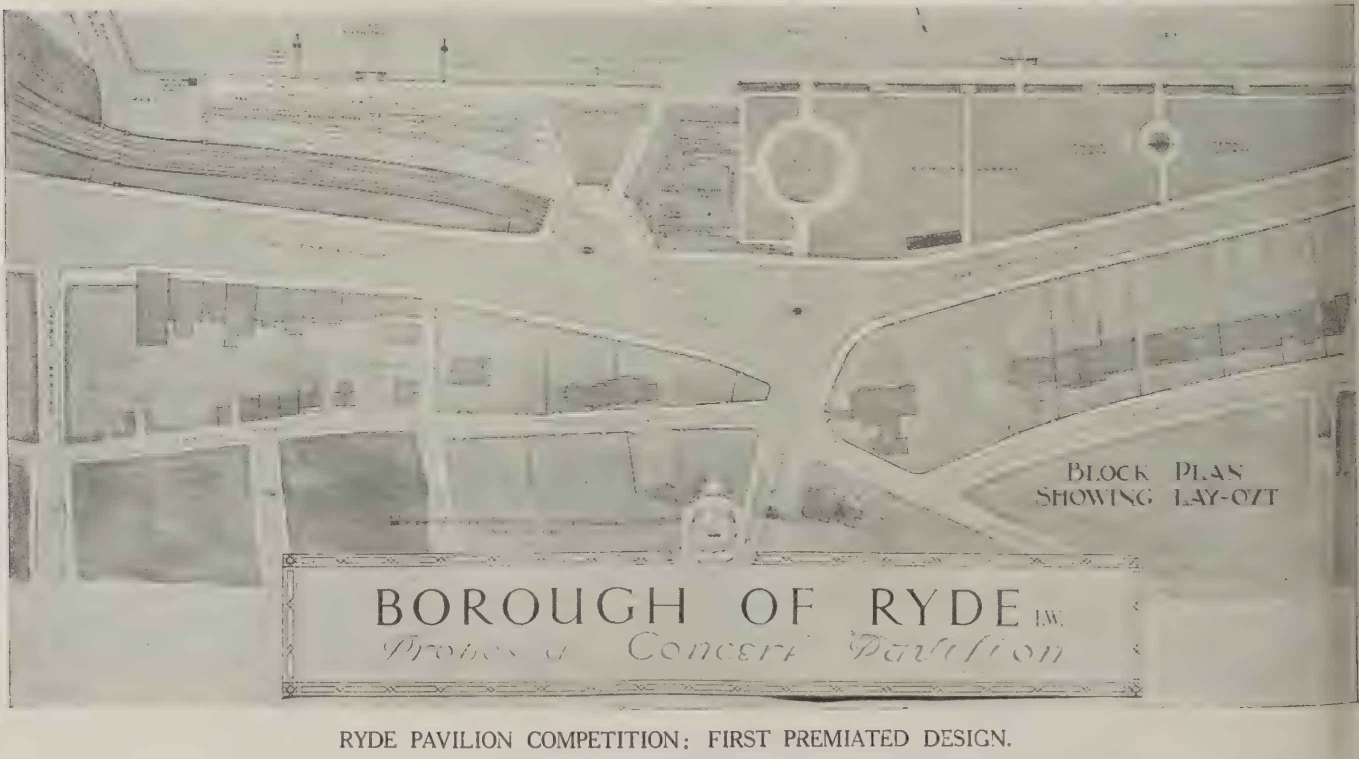


RYDE PAVILION COMPETITION FIRST PREMIATED DESIGN T. SPENCER AND M. R. MARTIN, AA.R.I.B.A., ARCHITECTS.



PERSPECTIVE BIRD'S-EYE VIEW





RYDE PAVILION COMPETITION: FIRST PREMIATED DESIGN.
T. SPENCER AND M. R. MARTIN, AA.R.I.B.A., ARCHITECTS.

water central heating apparatus with -iron sectional boiler and wrought- circulating mains.

he electrical installation is to be on conduit system, with the wiring car- in steel conduits, with proper dis- ution boards and efficiently earthed.

n the estimate of cost the figures are ed upon the actual cost of similar dings recently erected, special regard ing been given to the recent fall in es of materials and cost of labour. total cost is estimated at £9,955.

n conjunction with the erection of the ilion, we have carefully considered development of the land to the west of the site. We suggest for your further consideration that this land, which formed the entrance to the old Victoria Pier and the quay, can be made revenue producing by a lay-out similar to that shown on our block plan drawing. This land can be levelled by the removal of the slight gradient which led up to the entrance of the old pier, and the promenade thus extended as far as possible towards the horse-boat slip. By this means it would be possible to offer sites for beach huts facing the promenade, and the back portion of the site can be utilized for bathing boxes as indicated on the plan. Thus the splendid bathing which was once possible from the old Victoria Pier will again be available from the sea front. Further, there being very few shops in the immediate neighbourhood it is suggested that a block of six small, low, lock-up shops be erected. These could be let off at a rental and would be appreciated by visitors.

We have purposely formed a triangular lawn to the west of the pavilion so as to preserve the fine view of the sea when standing near the tunnel on the esplanade. The new promenade on the right will connect up with the old promenade and a narrower footway on the left will lead to the bathing parade.

# Correspondence

## he Wren Bi-Centenary

*the Editors of* THE ARCHITECTS' JOURNAL.

IRS,—The Wren bi-centenary recalls mind the famous architect's plan for rebuilding of London on spacious l beautiful lines after the Great Fire. d private interests not suppressed Sir istopher's grandiose scheme of wide nues radiating from a central plaza, should not now be wrestling with a idred perplexing traffic problems, and idon would have rivalled Paris in possession of broad and tree-lined roughfares.

he moral is plain. In these days when uilding schemes are afoot in all our es, narrow individualistic preferences uld not be suffered to rule out bold l comprehensive conceptions of the y Beautiful.

annot some co-operative, general plan adopted for the laying out of broad ilevarded avenues, in which artistic our schemes should have their part? anks to the possibilities of glazed amics the streets of London may be ersified not only with natural verdure, also with tinted buildings, so that, the words of Mr. Halsey Ricardo, we y see reproduced in our façades and ise-fronts "the almond blossom hue t flushes the sea front of the Doge's ace and the stained amber and gold the façade of St. Mark's in Venice."

J. R. CLYNES.

## The Building Crisis

*the Editors of* THE ARCHITECTS' JOURNAL.

IRS,—It is to be regretted that the otiations between the building trade ployers and the operatives have re- ted in a ballot on the question of wages y. Would it not have been far better m the operatives' point of view had the in issue been one of hours?

o industry suffers such hardships as building trades. Much of the work is e in the open, with the result that the ratives are frequently handicapped by lement weather. In the winter their put is restricted owing to the fewer rs of daylight, and many of them lose great amount of time through rain, t or fog. It would be interesting to w the average wages paid to some he trades during the past few weeks. is doubtful whether they would bear iparison with the summer earnings. in the winter the cost of living is much greater, and more fuel and artificial light are burned. If the trade unions could be induced to allow the operative to work longer during the summer months, then he would be in a much better position financially to bear the loss sustained during the winter. Apparently the trade unions are dead against any alterations in this direction, the operatives being faced with a reduction of from 1d. to 2d. per hour or a strike or lock-out.

The employers are to be congratulated on waiving their original demand for a 20 per cent. reduction all round, and the extension of the working hours from forty-four to forty-seven. Rents are still high, with the possibility, if Government control ceases next year, of being much higher, and the cost of living still fluctuates. Last year the operatives suffered heavy wage reductions, and the original demands of the employers would doubtless hit them badly. In London to-day the wages of the skilled artisan are stated to be 74 per cent. above pre-war level, and the cost of living figure, as published by the Ministry of Labour, is 77 per cent.

"INTERESTED."

## The Architectural Setting of "Robin Hood"

*To the Editors of* THE ARCHITECTS' JOURNAL.

SIRS,—Every antiquary must appreciate your correspondent "G. J. H.'s" critical contribution to the JOURNAL of February 21 on the Architectural Setting of "Robin Hood." If he, as an architect, is prepared to pass the architectural blunders and anachronisms and vote the film a good show, the student of costume and armour cannot do otherwise than follow his generous example.

The armour worn by the principals in the film is that shown in effigies and illuminated MSS. of about 1250, but it should have been subjected to drastic correction. The sword-belts and many of the other details are of about 1270–1300, while the vamplates upon the justing spears are late sixteenth century in fashion.

From the point of view of the student of armour, the worst blunder is Fairbanks's exhibition of diving and swimming in the moat in complete armour, just after the justing which opens the film. Such a feat is utterly impossible—it is ridiculous!

However, one must not labour the matter, but be thankful for a good, full-blooded, romantic story—with about as much pretence to historical and archæological accuracy as Sir Walter Scott's "Ivanhoe."

Let us hope that one day we may see an accurate historical film justifying the much-advertised employment of research directors, architectural, archæological and costume advisers, etc. Judging by recent results, their salaries are wasted money.

CHARLES R. BEARD.

## Architects' Fees for Abandoned Housing Schemes

*To the Editors of* THE ARCHITECTS' JOURNAL.

SIRS,—The fees arranged by the Institute deputation and the Ministry are abominably inadequate. In many instances where the fees for the completed work would have run into four figures something less than £100 is offered, although three-fifths of the architect's work has been done.

The Ministry are also advising urban councils to refuse to pay *anything* in cases where the agreement with the architect is not under seal, although it is very doubtful whether an agreement for personal services need be sealed.

In others, where the agreement is acknowledged, and fees agreed for executed work (without mention of payment for abandoned work) the Ministry is also advising councils to withhold payment.

It is practically certain that architects would recover in both these cases, but the cost of suing a public body, with the rates to draw on, is so great that few would risk an action; on the other hand, if councils knew that architects were combining in an action a very different tone would be adopted.

"SCRUTATOR."

## Why not a Publicity Campaign?

*To the Editors of* THE ARCHITECTS' JOURNAL.

SIRS,—We are greatly interested in the leading article published in your issue for February 14. The views expressed in that article entirely coincide with our own. At the present time the building trade is almost at a standstill, and a publicity campaign is urgently needed to revive building operations.

J. PARKINSON & SONS (BLACKPOOL), LTD

# The Wren Celebrations

Mr. Paul Waterhouse, P.R.I.B.A., has received the following letter from the Fine Arts Federation of New York :—

DEAR SIR,—The Fine Arts Federation of New York learns with much interest that the Royal Institute of British Architects is making arrangements for a "Commemoration Week" on the occasion of the bi-centenary of the death of Sir Christopher Wren.

The Fine Arts Federation desires to join you and your distinguished confreres in doing honour to the memory of the great architect, and takes sincere pleasure in paying tribute to the genius of Sir Christopher Wren and his splendid achievements.

The influence of Sir Christopher Wren and his school of architecture has been strongly felt in America, and it is with unfeigned gratification that the Fine Arts Federation expresses its deep admiration for one whose fame has in no way diminished since his death and whose works still proclaim him the greatest of British architects.

(*Signed*) ARNOLD W. BRUNNER,
*President.*
WM. LAUREL HARRIS,
*Secretary.*

The London Society sent a deputation to the National Portrait Gallery, and the Mayor of Westminster placed a laurel wreath before the portrait of Sir Christopher. Mr. Edwin T. Hall, F.R.I.B.A., gave an address.

The visits were continued to buildings by Sir Christopher Wren in London and elsewhere. A large party, composed of members of the R.I.B.A., the Selborne Society, and the London Society went to Cambridge, under the direction of Mr. Percival Ashton. First an inspection was made of the chapel and long gallery of Emmanuel College, and afterwards the party went to Trinity, the library of which is a characteristic example of Wren's work. Its features were explained by Mr. H. M. Fletcher (the Chairman of the Bi-centenary Committee).

The Master and Fellows of Pembroke College invited the guests to tea in their hall, and music subsequently in the chapel. Pembroke Chapel was erected in 1663–5, on a commission given by Bishop Mathew Wren, his uncle.

A delightful programme of sacred music of Wren's time, Purcell being the composer most largely drawn upon, was performed by an orchestra.

Among the provincial towns which celebrated the bi-centenary were Leeds, Cardiff, Glasgow, and Birmingham.

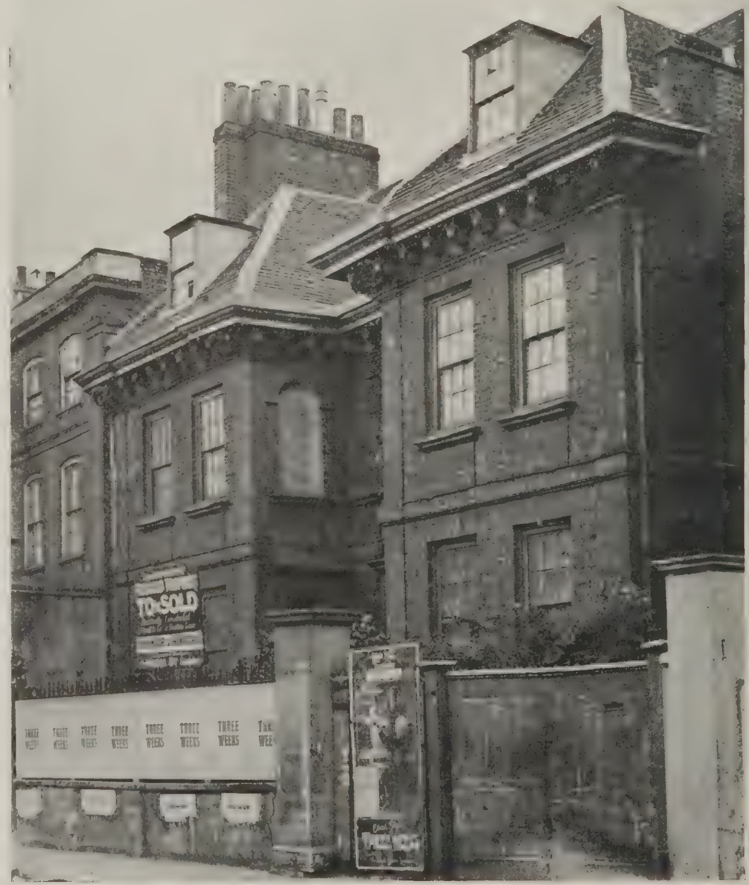
At Leeds a lecture was given on "Wren" by Mr. A. Hamilton Thompson in the Great Hall of the Leeds University. In the absence of Mr. Eric Morley (President of the Leeds and West Riding Architectural Association), Mr. W. H. Thorp presided, and there was a large audience. The lecturer, with the aid of some splendid lantern pictures, sketched the life and work of Sir Christopher Wren. On the motion of Mr. Sydney Kitson, seconded by Mr. G. W. Atkinson, thanks were expressed to the lecturer and chairman.

In Cardiff a public lecture was given on "Sir Christopher Wren" in the assembly hall of the Technical College under the auspices of the South Wales Institute of Architects and the Department of Architecture and Civic Design. The lecturer was Mr. W. S. Purchon, M.A., A.R.I.B.A., head of the department. Mr. Percy Thomas, O.B.E., F.R.I.B.A. (President of the South Wales Institute of Architects), occupied the chair, and there were about 300 present. The lecturer showed a number of examples of Wren's buildings in Cambridge and Oxford, drawing particular notice to the library of Trinity College, Cambridge, and Wren's correspondence with reference to that building and the new buildings for Trinity College, Oxford. Wren stayed in Paris in the latter half of 1665 with the object of escaping the Plague, and illustrations were shown of buildings which made a great impression on Sir Christopher; also of drawings of Bernini's design for the Louvre, which Wren wrote to say that he would have given his skin to possess. Illustrations were shown of the various types of secular buildings which Wren erected in London and the neighbourhood, culminating in the group at Greenwich Hospital, and of the plan which Wren prepared for the rebuilding of London after the Great Fire. Illustrations were shown of some of the fifty-two churches in the City of London which Wren either entirely rebuilt or entirely remodelled, and views were also shown of St. Paul's. A vote of thanks was proposed by Mr. T. Alwyn Lloyd, F.R.I.B.A., and seconded by Mr. J. H. Jones.

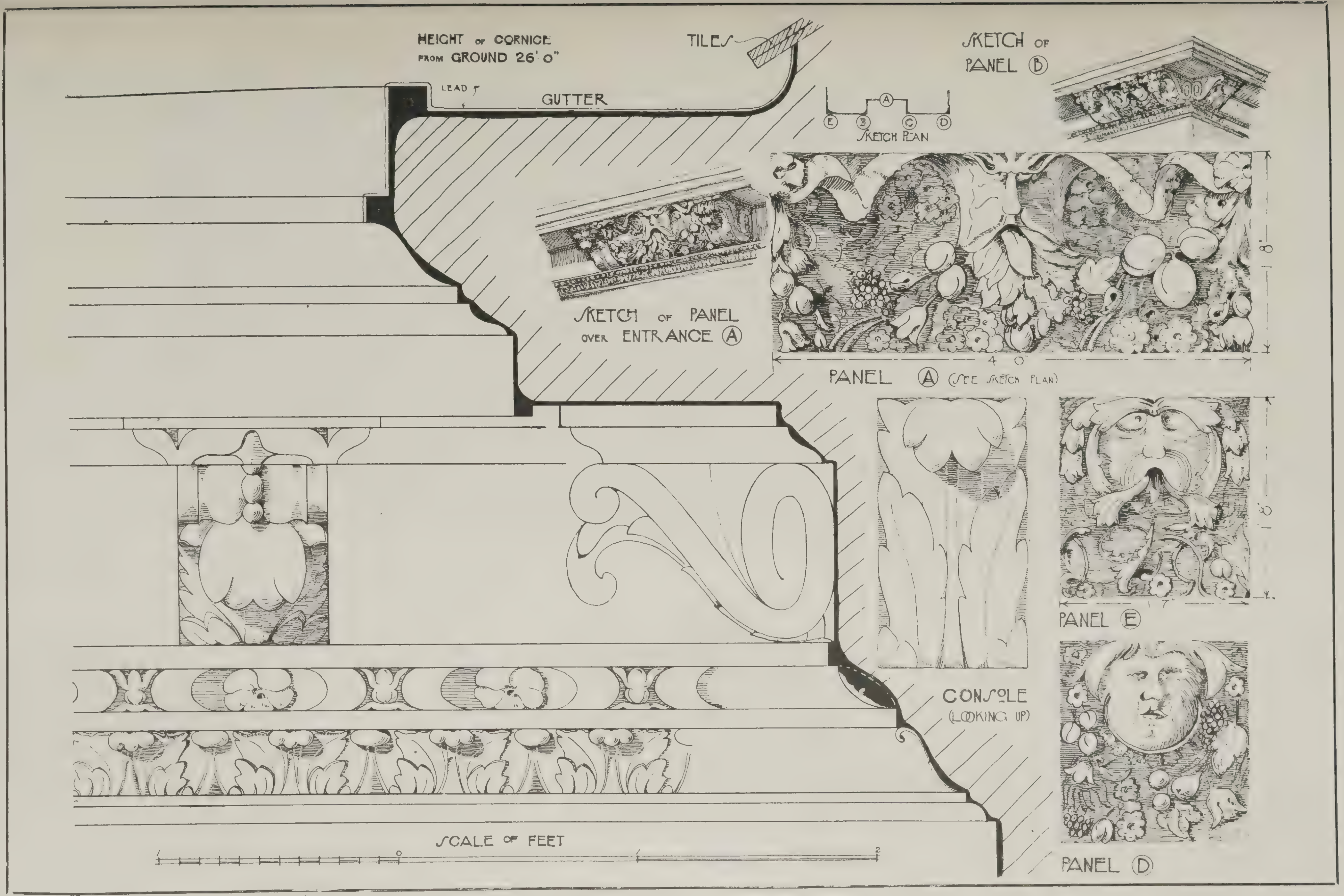
The Glasgow Institute of Architects (Glasgow Chapter of the Incorporation of Architects in Scotland) celebrated the bi-centenary by a dinner held in th M'Lellan Galleries. Mr. T. P. Marwick F.R.I.B.A. (President of the Incorporation of Architects), was the princip speaker, and in proposing the toast the evening he paid a tribute to th genius of Wren. He hoped that Wren churches would not be destroyed on me commercial grounds, but held in sacre trust for the nation. Mr. James Lochhea F.R.I.B.A. (President of the Glasgo Institute), presided. In giving the toa of "The University and Other Educa tional Institutions," Mr. George Paterson said it was unfortunate tha up till the present there was no Chair Architecture at the University of Glas gow. Professor Rait, who responde said he had been surprised that so f no one had suggested that the best wa to commemorate the Wren Bi-centenar would be to create a Wren Chair Architecture in the University of Oxfor in which the great architect had been student and professor. They could n claim to have such a Chair in Glasgow but they would be proud to welcome Chair of Architecture.

At a meeting of the Birminghar Architectural Association Sir Lawrenc Weaver, K.B.E., F.S.A., gave an illus trated lecture on "Sir Christopher Wren."

So far away as British Columbia th bi-centenary was celebrated. In Var couver the Architectural Institute British Columbia arranged, in the larges Anglican church there, a memorial se vice exactly like that held in St. Paul' Cathedral.



"WRENCOTE," CROYDON.
(*See Measured Drawing on opposite page.*)



"Wrencote," which stands in the Croydon High Street, is said to have been designed by Sir Christopher Wren. The proportions of the front are admirable, and the cornice is particularly fine. A photograph of the house appears on the previous page.

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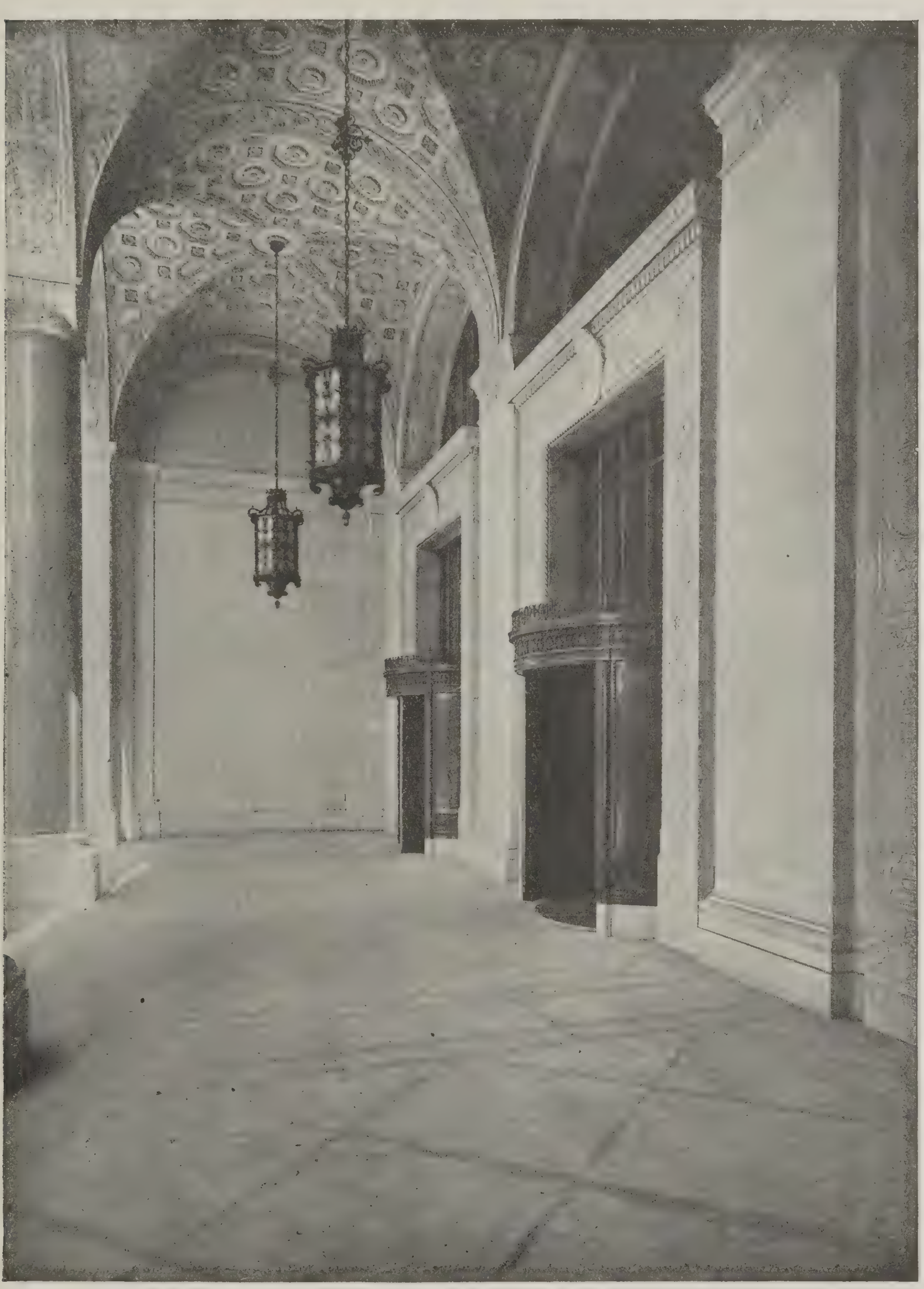
# odern American Architecture. 40.—Office Building for the General Motors Company, Detroit: Entrance to Lifts

Albert Kahn, Architect



The lifts entrance here is as imposing, almost, as was the "grand staircase" in the hall of some City Company of the sixteenth or seventeenth century. The vaulted ceiling and the large lamps provide excellent relief to the otherwise rather bare interior.

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## ience and Art Scholarships for Londoners

The London County Council are pre- ed to consider applications for the owing scholarships from British sub- ts, provided their parents or guardians e in the County of London :—

. Intermediate technical or art olarships providing free tuition at ognized schools in London and, in ne cases, a maintenance grant, for dents from 16-18 years of age in gineering, technical optics, architec- e and building, chemical trades, art, . Candidates must possess scientific artistic ability and their general educa- n must be up to matriculation standard.

. Senior scholarships in science and hnology or art and artistic crafts pro- ing free instruction at full-time day rses at institutions of university rank at which advanced instruction in nce, technology, art, etc., is given. ey will enable students who are en- ed in trades or occupations, and have ended evening classes for at least two rs, to give up their day work and pur- a course of advanced instruction ted to their employment. In some es a maintenance grant, assessed on merits of each individual case, will provided, but it will not exceed £160 ear. If the candidate is over twenty- years of age and is self-supporting, or she must be ordinarily resident in ndon. Candidates must be not less n eighteen years of age.

. Free places at the Imperial College Science and Technology for candidates least eighteen years of age desirous taking a post-graduate course in mistry, engineering, etc.

. An "Archibald Dawnay" scholar- p in civil engineering of the value of o a year, providing training for two hree years at an approved polytechnic technical school for a student between een and eighteen years of age.

Detailed particulars may be obtained n the Education Officer (Technology nch) at the County Hall, Westmin- Bridge, S.E.1, or may be seen in the cholarships Handbook," obtainable n Messrs. P. S. King and Son, Ltd., nd 4 Great Smith Street, Westminster, V.1, price 3d. (by post 4½d.).

## he Trehearne-Norman Prize

his year the Council of the Society of hitects will award the Trehearne- rman Essay Prize (triennial, value £15) the best essay on The Influence of h Buildings on Civic Development. y British subject, male or female, y compete. The jury will consist Sir Ambrose Poynter, Bart., M.S.A., .I.B.A., and Mr. L. S. Sullivan, .A., A.R.I.B.A. The essay, to consist etween three and six thousand words, st reach the offices of the Society, Bedford Square, W.C.1, by May 1. must be typewritten on one side only quarto paper, and must bear a small elope attached to it containing the ne and address of the competitor, and claration that the composition of the y is entirely his own work. The essay should be written in sound and lucid English, and may be illustrated by means of diagrams in black and white. The prize-winning work, if of sufficient merit, will be published in "Architecture."

## Competition News

*Proposed Public Baths and Washhouses Competition, Greenwich.*

The president of the Royal Institute of British Architects has nominated Mr. Henry V. Ashley, F.R.I.B.A., as assessor in this competition.

*A Block of Five Shops for the Prestwich Co-operative and Industrial Society, Ltd.*

The following notice has been issued by the R.I.B.A. : "Members and Licentiates of the Royal Institute of British Architects must not take part in the above competition because the conditions are not in accordance with the published Regulations of the Royal Institute for Architectural Competitions."

## List of Competitions Open

| Date of Delivery. | COMPETITION. |
|---|---|
| March 31 | War Memorial in Crow Nest Park, Dewsbury. Assessor, Professor C. H. Reilly, O.B.E., M.A., F.R.I.B.A. A copy of the conditions together with plans of the site may be obtained on application to Mr. H. Dearden, A.R.I.B.A., Borough Surveyor, Town Hall, Dewsbury, on payment of one shilling. |
| April 15 | Buildings for the Polytechnic Institute, Reval. Premiums 200,000 marks, 150,000 marks, 100,000 marks. Apply Office National du Commerce Exterieur, 22 Avenue Victor Emmanuel III, Paris. (8e) The competition is an International one. |
| June 1 | New Municipal Buildings and Town Hall, Cork. Total cost not to exceed £120,000, Assessor Mr. Lucius O'Callaghan. F.R.I.A.I., A.R.H.A. The successful competitor will be appointed to carry out the work. Second and third premiums £200 and £100 respectively. Apply Mr. William Hegarty, Town Clerk, Cork. The competition is limited to architects living and practising in Ireland. |
| June 30 | Bridge over Nygaardsstrommen in Bergen. Apply Department of Overseas Trade (Room 50), 35 Old Queen Street, Westminster, S.W. 1. |
| No date | Concert Pavilion, Bournemouth, to seat 2,000. Estimated cost £100,000. Assessor, Sir Edwin Cooper, F.R.I.B.A. Premiums: £300, £200, and £100. Apply Town Clerk, Municipal Offices, Bournemouth. Deposit £2 2s. (cheque). |
| No date | The Crown Agents for the Colonies, acting on behalf of the Government of the Straits Settlements, invite competitive designs for the reinforced concrete work required in connection with the construction of a new general post office at Singapore. Tentative designs, for which no fees will be paid, are required in the first instance, from which it is proposed to select a design and specify its adoption in the contract for the construction of the building. The firm whose design is so adopted will be subsequently engaged to prepare full detail plans, specification, quantities, &c., for an approved fee. Drawings can be seen and further details of the competition obtained from the Crown Agents for the Colonies, 4 Millbank, Westminster, S.W. 1, quoting Z/Straits Settlements 5664. |
| No date | Five shops for the Prestwich Co-operative and Industrial Society. Premium 75 guineas. Apply General Manager of the Society, Warwick Street, Bury New Road. Prestwich, Lancs. |
| No date | The following prizes are offered in connection with the Manchester Building Trades Exhibition to architectural students: Measured drawings—first prize, £40; second prize, £30. Architectural sketches—first prize, £20; second prize, £10. Sketches submitted may be in any medium, and must not exceed twenty. The Exhibition will be held in the City Hall, from March 6 to March 17. |

## Hampstead Labour-Saving Flats Competition

The assessors, Messrs. L. Rome Guthrie, A.R.I.B.A., John C. S. Soutar, L.R.I.B.A., and Edmund J. Cooper, have made the following awards in this competition : No .9 (1st premium), £500—Mr. J. B. F. Cowper, A.R.I.B.A., Olwyns, Wildwood Road, N.W.11. No. 11 (2nd premium), £300—Mr. George A. Rose, A.R.I.B.A., and Mr. A. V. Farrier, A.R.I.B.A., 56 Kings Road, Wimbledon, S.W.19. No. 35 (3rd premium), £200—Mr. Cyril A. Farey, A.R.I.B.A., Mr. C. Evelyn Simmons, L.R.I.B.A., Mr. A. Trystan Edwards, A.R.I.B.A., Palace Chambers, Bridge Street, Westminster, S.W.1. The first premiated design is illustrated on pages 450-51. Forty-two designs were submitted.

In the conditions it is stated that the group of buildings, which may be in two or three blocks not exceeding three floors in height, must contain : Ninety flats of varying sizes in approximately the following proportions—Type A : Ten flats with sitting-room and one bedroom. Type B : Thirty flats with sitting-room and two bedrooms. Type C : Twenty flats with sitting-room and three bedrooms. Type D : Fifteen flats with two sitting-rooms (or lounge hall and one sitting-room) and three bedrooms. Type E : Ten flats with two sitting-rooms (or lounge hall and one sitting-room) and four bedrooms. Type F : Five flats with two sitting-rooms in addition to lounge hall and four bedrooms. Certain areas were stipulated for the various rooms.

Each flat was also to have bathroom, w.c., kitchen-scullery, larder, and fitted wardrobe, and such other accommodations as the competitor may deem desirable. Each flat to have an open fireplace in one of the living-rooms, and in one of the bedrooms except in the flats with only one bedroom. In all other rooms provision should be made for ventilation in addition to windows, and for heating by gas fires or electric radiators. The other accommodation asked for included a central hall, for receptions and refreshments, lounge, writing-room, billiard-room, kitchen, and adequate offices, and in close communication with the above a small flat for the porter and sleeping accommodation for staff, a small laundry and drying room, an office near entrance for hall porter, with telephone exchange, etc., and ample room for boxes. Plenty of storage rooms which can be in basements or off staircases for letting to tenants who want box-room accommodation in addition to their flats, storage on ground floor near entrance for bicycles and perambulators, and lock-up garages for about twenty cars (some small for cycles with side cars) with separate approach road, and paved open space for washing cars. The ground not occupied by buildings was to be laid out for tennis, croquet, badminton and like games. In assessing the respective designs, the convenience for arranging these was taken into consideration.

All the designs submitted are being exhibited until March 13 at the New Workshops, Messrs. Garsubil, Finchley Road, Temple Fortune, N.W.11.

Mr. J. B. F. Cowper, A.R.I.B.A., was highly commended in "The Daily Mail" Bungalow competition.

# Book Reviews

## A Standard Method of Measurement

For many years the Surveyors' Institution and the Quantity Surveyors' Association (which bodies are now amalgamated) were accepted as the recognized authorities for deciding disputed points in connection with the measurement of building works. The frequency of the demands upon their services for this purpose directed attention to the diversity of practice, varying with local custom, and even with the idiosyncrasies of individual surveyors, which obtained. This lack of uniformity afforded a just ground of complaint on the part of contractors that the estimator was frequently left in doubt as to the true meaning of items in the bills of quantities which he was called upon to price.

In the absence of any statutory qualifications for surveyors practising in the United Kingdom, any person, up to the present, has been at liberty to describe himself as a quantity surveyor, and the public have no guarantee that he is qualified for that office. This fact has resulted in the issue of a considerable amount of unskilled work under the designation of bills of quantities.

Both the Surveyors' Institution and the Quantity Surveyors' Association were impressed with the necessity of securing greater accuracy of work and uniformity of method. The latter body, in 1909, with the object in view, appointed a committee who prepared and published pamphlets setting out the method of measurement recommended by the association in respect of these trades. The Surveyors' Institution also issued to its members circulars giving an authoritative opinion as to the correct method of measurement in the case of items in connection with which disputes had occurred. The desirability of co-operation between the two societies thus became evident, and a joint committee was set up in 1912 upon which was imposed the task of drawing up a comprehensive set of standard rules of Measurement of Building Works. In 1918 representatives of the building trades were added to this committee, four contractors being nominated by the National Federation of Building Trades Employers and the Institute of Builders. The joint committee were assisted in their deliberations by interviews with the representatives of certain trades.

The Standard Method of Measurement of Building Works drawn up and now issued in volume form, is stated in the preface to be founded upon the practice of the leading London quantity surveyors with certain modifications by way of alternatives, and not involving matters of principle, to suit the practice obtaining in other parts of the kingdom.

The publication of such a Method may be said to be epoch-marking. It should reduce litigation to the minimum, and—where one has to go to Law or arbitration—the path of the Referee will have been made smoother and straighter beyond compare.

"Standard Method of Measurement of Building Works." London: The Surveyors' Institution, 12 Great George Street, Westminster, S.W. Price 10s. 6d.

## "English Architecture at a Glance"

"Every man has a love for his own City, Town, or Village. As he wanders through the well-known streets after absence in other districts, the houses, shops, pavements, and lights speak to him of Home. And when there is a knowledge or even a rudimentary understanding of Architecture, every building stands revealed in a new light"—so writes the compiler of this volume in his opening words.

And, we might add, with what increased fondness does one think of the quiet village churches, and the old houses, when in foreign parts, if one has measured and drawn their every detail and knows the founts of inspiration from which they sprung. But to him who knows nothing of styles and periods, stone walls are apt to be thought of a little blankly—to him these sermons in stones are delivered in a foreign tongue.

The publishers of this little book* have set out to give the man in the street a new pair of eyes. Walking down the Charing Cross Road or along Oxford Street he may feel vaguely depressed, with a lifting of the spirit as he turns into Nash's Regent Street, with its generous curve, but as for knowing why, he will not guess. If he look from his window on a wet morning, and feel as wretched as the weather, he will know to what to ascribe such heaviness, but he has never been taught that a journey down Wimpole Street may have the same effect.

"The effect of environment upon mind, character, and perceptions has long been accepted, and great architecture has an inspiring influence and power—an influence felt by all," says the writer, and Aristotle said the same thing, but this is still news to "the man in the street." If there were "men in the street" in the old Roman days, it was known to them, but it has since been forgotten. And it is only by the publication of such cheap and useful hand-books as the one before us that it will again be brought to his mind.

It should be said that the book is strongly and tastefully bound in cloth boards and contains many sketches indicating clearly the features of the different styles. It is a marvel of cheapness and conciseness.

One must feel grateful to Messrs. Archibald D. Dawnay and Sons, the well-known constructional engineers, for their enterprise in the compilation of such a book.

* "English Architecture at a Glance: A Simple Review in Pictures of the Chief Periods of English Architecture." London: The Architectural Press, 27-29 Tothill Street, Westminster. Price 1s. net.

## A "Ready Reckoner"

It is nearly a century and a half since Hoppus issued his well-known Cube and Square Measurement Tables, and the fact that they still remain the Standard Tables for timber merchants and surveyors is high testimony to their general utility.

The requirements of the country, however, have enormously developed, and a more extended book of superficial measure tables is necessary for modern requirements. Tables are also wanted for ascertaining measurements in cu or square yards—the latter of which h become of importance in view of rece customs regulations.

The "Express" Superficial, Cube, a Girthing Reckoner is designed to supp these deficiencies, and combines in o volume detailed tables for every kind measurement in square or cube feet yards. The main superficial tables gi measurements up to 10 ft. by 100 with inches to 13 ft. by 13 ft.

This book is probably the most co plete of its kind issued at a modera price. All branches of the textile, co structional, and timber trades, as w as architects and estate agents, will fi it of the greatest service.

The publishers state this is the seven eighth reckoner issued by their firm.

"The (Express) Superficial, Cube, and Girth Reckoner." Gall and Inglis, Publishers, London Edinburgh. Price 2s. 6d.

## Spon's Pocket Price Boo

"Spon's Architects' and Builde Pocket Price Book" reaches, with 1923 issue, its forty-ninth edition. T whole of the prices have been revised accordance with the market values the date of going to Press, and show substantial, though long-waited for, duction on those of the last few yea As usual, the printing is excellent, and good paper, and, dry as may be the c tents to all who have not business the with, it is a pleasure to turn the leaves

"Spon's Architects' and Builders' Pocket Price B 1923." London: E. & F. N. Spon, Ltd., 37 Haymar S.W.1. Price 5s.

## Publications Received

"Egyptian Art Introductory Studie By Jean Capart. Translated from French by Warren R. Dawson. Pr 16s. net. George Allen and Unwin, L Ruskin House, 40 Museum Street, W.C

"Standard Method of Measurement Building Works." Price 10s. 6d. Surveyors' Institution, 12 Great Geo Street, Westminster, S.W., and National Federation, 48 Bedford Squa W.C.

"The Picture Lover Magazine Ca logue." Price 1s. The Picture Lov Society, Ltd., 67A Baker Street, Lond

"Quarterly Illustrated of the Inc poration of Architects in Scotla Price 1s. 48 Jane Street, Glasgow.

"Housing Betterment." Quarte Issue. The National Housing Asso tion, 105 East 22nd Street, New Y City.

"Practical Engineer Electrical Poc Book and Diary," 1923 edition. Cl 2s. 6d. net. Henry Frowde and Hod and Stoughton, the Lancet Buildi 1 and 2 Bedford Street, W.C.2.

"The Decorator's Diary and Tr Year Book, 1923." Price 5s. net. Trade Papers Publishing Co., Ltd., Bank Chambers, 329 High Holbo W.C.1.

"The Doncaster Regional Plann Scheme." By Professor Patrick Al crombie, M.A., and T. H. Johns Price 10s. net. Hodder and Stough Ltd., Warwick Square, E.C.4.

"The R.I.B.A. Kalendar, 1922–19 Price 3s. 6d. net. The R.I.B.A., 9 duit Street, Hanover Square, W.

## Tomb of Tutankhamen

The following extract is from a Play by ohn Leighton given before the Art orkers' Guild :—

SCENE : *The tomb of Tutankhamen at uxor.* A.D. 1923. *The tomb has been ened by excavators ; there is loud noise d darkness. The Guardian of the Tomb en appears in mystic light.*

(GUARDIAN OF THE TOMB speaks.)

e sons of decadence, behold your work !
ou that have dared to tamper with a Tomb
nd to disturb an ancient sanctity—
id you design to reconstruct the Past ?
ne Past shall play at reconstructing you !
is Tomb, an honour to its occupant,
rnished, as built, in token of respect,
ad lain in silence for three thousand years ;
ot all that time nor now, could I prevent
ne intermittent pilferings of thieves.
nothing sacred to your prying age ?
ay not the honoured dead be left to sleep ?
ust you because my brethren gave their best,
lding fine craft to rich material
nd finding a religious end for Beauty,
ust you strip Beauty of its great occasion
vorce ideas from their fashioned symbols,
nd make the form in which the symbol lay
ne mere exhibit of a cold museum ?

ur Art was Life, remained a living thing
beit dedicated to the Dead ;
hat Art is yours, that fumbles in the dust
hile leaving all untilled the fruitful soil ?
fle not treasuries of past inspiration !
t Reverence temper Archæology !
udy the ancient Craftsmanships, but scorn
ill adaptations from an alien age.
ek Craft and Beauty in the haunts of men,
nd in your lives, in Nature, your material ;
ork on and for the world that is around you,
shion things lovely for your daily uses,
rve your own gods with Hand and Heart and Soul.

ur hearts inspired our fingers for the task.
e wrought in due accordance with our times
nd what we did came aptly to our natures.
you propose to reproduce our forms
mindful of the working of our Spirit ?
our Spirit in your day, is yours to cherish.
vake your Spirit ! it will find a form.
our Pictures, Statues, and your daylight streets,
t them reflect the thoughts of your own age,
t them serve you in your own generation
nd not the irrecoverable Past.

nce you resolve to violate this Grave,
mplete your work and shatter our intent.
oat o'er your "treasures" ! Catalogue them ! Stun
our British Public in your daily Press
nd make the spoils of an Egyptian Tomb
thrilling subject for the breakfast table !
t all these treasures see the light of day,
(With due precautions in preservatives,)
Flash on the dimness your electric lamps,
Tear Tutankhamen from obscurity !
Reveal his State and his domestic life—
Discover what he was or wished to be
By estimation of his ornaments.
Gossip and reconstruct ! the field is yours !
I trust these heaps of plunder may provide
A fresh incentive to artistic feeling,
And help your Archæologists to solve
The great unanswered riddle : "What is Art ?"

## The Whitgift Hospital

The Archbishop of Canterbury led a deputation which waited upon Colonel Ashley (Parliamentary Secretary), at the Ministry of Transport, to protest against the threatened removal of the Whitgift Hospital at Croydon, in order to facilitate local street widening. Among the organizations represented by the deputation were : The R.I.B.A., the National Trust, the British Archæological Association, the Town Planning Institute, the Society of Antiquaries of London, the Royal Society of Arts, the Whitgift Hospital Preservation Committee, the Whitgift Foundation, the Society for the Protection of Ancient Buildings, the Royal Society of British Artists, the Croydon Natural History and Scientific Society, the Surrey Archæological Society, the Royal Academy of Arts, the London Society, the Commons and Footpaths Preservation Society, the South Eastern Scientific Societies, the West Surrey Society, and the London and Middlesex Archæological Society. Sir Aston Webb, P.R.A., and Mr. H. V. Lanchester, were among those present. Colonel Ashley, in reply, said that, leaving the hospital aside for a moment, he was in entire sympathy with the general views put forward. He entirely endorsed in general principles what had been said about the importance of the preservation of historical buildings in the life of the nation. From the through traffic point of view, there was no necessity to interfere with the Whitgift Hospital. He could not have said that a year or two ago, but the Ministry of Transport was putting a bypass round Croydon which would in all probability be opened for traffic at the end of the summer. It would be a few hundred yards shorter than routes through the town. Any sane motorist would not then wish to go through Croydon ; he would prefer to use the bypass, and save ten minutes. The Ministry were finding no money, however, towards the proposed alterations in Croydon, and so had no direct interest in what was going on there, and that particular work must therefore be left to local people. It seemed unnecessary to spend money on an alteration until one had seen what effect the by-pass would have on the traffic passing the hospital. He was about to receive a deputation from the Croydon Corporation, and the contentions of both parties would receive every consideration, but he had no power of veto.

## Parliamentary Notes

[BY OUR SPECIAL REPRESENTATIVE.]

### *"Decontrol" of Houses.*

After much questioning the Government have stated clearly their policy with regard to the "decontrol" of houses. The Prime Minister, in reply to a question by Mr. Pringle, said : It is proposed by the Government that all control shall cease in June 1925. As regards higher-rated houses, it is proposed that these shall be decontrolled in 1924, but the Bill will contain a clause that this shall only take place in the absence of a resolution to the contrary in either House of Parliament.

Mr. Linfield asked the Parliamentary Secretary to the Overseas Trade Department, as representing the Ministry of Health, whether he had obtained any estimates as to the probable number of houses that might be expected to be built in the two higher classes, under the Rent Restriction Act, between now and June 1924.

Sir W. Joynson-Hicks replied that the Government were of opinion that if their policy was carried out, the supply of these houses in 1924 should approximate to the demand.

Asked by Mr. Penny whether, in the new Housing Bill, he proposed to insert a provision to enable local authorities to make advances to builders during the course of erection of approved dwellings for persons who desired to own and live in them, Sir William Joynson-Hicks replied : Yes, sir.

Mr. Wise asked how many local authorities had adopted the Small Dwelling Acquisition Act, 1899.

Sir William Joynson-Hicks said that the Minister of Health had no information as to the number of local authorities who had adopted the Act, but fifty-six local authorities had obtained sanction to borrow money for the purpose of making advances under the Act.

### *Granite Imports.*

Replying to Mr. Lorden, Sir William Joynson-Hicks said that the quantity and value of granite, other than (1) setts and pavement kerbs, and (2) monumental and architectural objects, imported into the United Kingdom during the year 1922, and registered as consigned from Belgium and France respectively, were as follows : From Belgium, 136,451 tons, valued at £149,351 ; and from France, 20,350 tons, valued at £21,969.

### *Subsidy Grants.*

In answer to Mr. T. Thomson, Sir Wm. Joynson-Hicks said that the subsidy under section 1 of the Housing (Additional Powers) Act had been paid in respect of 39,161 houses, the total amount paid being £9,491,927.

### *British Cemeteries in France.*

Lt.-Col. Guinness informed Mr. Willey that the number of contracts in connection with the work in British cemeteries in France and Belgium which had been awarded to foreign firms was twelve, and to British firms, 297.

## Thames Valley Regional Planning Scheme

A joint town planning committee, consisting of representatives of local authorities situated within the Thames Valley, has been set up to co-ordinate the development of the several districts which together form this important sector of the Metropolitan area. The Committee have appointed Messrs. Thomas Adams and Longstreth Thompson to prepare an outline scheme of development for the whole region. This firm is acting in the same capacity for the West Middlesex Joint Town Planning Committee.

# Law Report

## Light and Air Dispute

*Wills* v. *May*.

Feb. 14. Chancery Division.
Before Mr. Justice P. O. Lawrence.

This was an action by Mrs. Clara A. Wills against Mr. John May, of Church Street, Croydon, for a mandatory injunction against the defendant, or in the alternative for damages on the ground that the defendant had so raised the height of his premises as to materially diminish, if not obliterate altogether, the ancient lights to the ground floor of plaintiff's premises at 117 Church Street. Plaintiff also complained that the defendant's building had seriously diminished the lighting of the first floor of her premises. Plaintiff owns several houses in Church Street. Defendant denied that his action had affected the rights of the plaintiff. With his denial of liability he brought into Court the sum of £75 as sufficient to cover any loss sustained by the plaintiff.

Mr. Charles A. Young, of Messrs. Douglas Young & Co., surveyors, of Coleman Street, E.C., Mr. Hugh Mackintosh, architect and surveyor, of East Croydon, and Mr. Douglas Young, gave evidence on behalf of plaintiff, and pointed out the reduction of light to the plaintiff's premises, and the depreciation in the letting and site value of the houses. They agreed that regard must be had to the possibilities of the future, seeing the progress of the neighbourhood towards one of an industrial nature.

Defendant's experts, Mr. E. S. Rodgers and Mr. H. Williams, of Croydon, declared that the lights of plaintiff's house had not been substantially affected, that structural alterations at a cost of about £50 would give it greater light than it had ever previously enjoyed, and that there was practically no depreciation in the letting or site value.

His Lordship held that it was not a case for a mandatory injunction. He came to the conclusion that structural alterations would make the house as comfortable as before, and awarded plaintiff £50 damages on that head. Damage to the combined sites he estimated at £100, and entered judgment for plaintiff for £150 damages and costs.

# Building Boom in Glasgow

At the last meeting of the Glasgow Dean of Guild Court the plans approved included several notable schemes promoted by the Corporation, chiefly the slum clearance proposal and the erection of 362 houses in London Road. This scheme involves a capital outlay of nearly £100,000. In addition, the Corporation secured power to proceed with the erection of baths and wash-houses at George Street, Whiteinch, at a cost of £50,000. The Education Department was also authorized to proceed with a new school at St. James's Road, the cost of which is estimated at £25,000. Another big scheme is that of extensions by Messrs. Macfarlane, Lang and Company, which represent an expenditure of £50,000.

# Mr. Shaw & Whalley Abbey

The following letter has been received from Mr. Shaw in response to an invitation from Father MacDonnell to contribute to the Whalley Abbey Fund :—

"No use asking me for money; I cannot pay both in meal and in malt. You do not make it clear whether you want funds to give a job to a contractor, or whether, like the monks of Buckfast, you propose to do the work yourself. Their amateur-built abbey has all the mediæval quality.—Faithfully,

(*Signed*) "G. BERNARD SHAW."

# Building Trades Wages

The text of the ballot paper issued to the building trade operatives states :—

1. I am willing to accept the employers' proposals for the stabilization of hours of labour and wage rates for twelve months on condition that the following wage rate alteration takes place, namely : Towns graded A, A1, A2, and A3, 2d. per hour; B, B1, and B2, 1½d. per hour; B3, C, C1, and C2, 1d. per hour. The labourers' rate to be not less than 75 per cent. of the craftsmen's rate.

2. I am against acceptance of the employers' proposals and am fully prepared to accept the consequences of rejection, either by strike or lock-out.

The proposed reductions will bring craftsmen's wages in London and all grade A towns to 1s. 6d. an hour. The rates in other towns will vary from 1s. 5½d. to 1s. 2d. Labourers' wages in London and A towns will be 1s. 1½d. an hour, and will vary elsewhere from 1s. 1¼d. to 10½d. an hour. Hours of work are to remain unchanged, viz., 44 hours a week during ten months and 41½ in December and January. The ballot papers are returnable to the unions on March 12 and to the head office of the Federation on the 14th.

Building trade operatives, numbering between 10,000 and 15,000, have ceased work in the Eastern Counties as a protest against a reduction in the wage rates of painters. Mr. R. Coppock, the general secretary of the National Federation of Building Trade Operatives, has given three reasons for the strike. He said (1) that the Eastern Counties employers were trying to impose wage reductions and working conditions that had not been nationally negotiated; (2) that, without waiting for the result of an investigation as to painters' wages, the Eastern Counties employers had resolved upon a differentiation; and (3) that the issue had been widened by an attempt to enforce a general reduction of wages of between threepence and fourpence an hour and an extension of the working week.

The secretary of the Eastern Counties Employers' Association has denied that, so far as the employers are concerned, the strike arises out of anything but the relation of painters' wages to those of other workers in the industry. "The Operatives' Federation," he said "has been quoting the figures of the original demand of the National Employers' Federation. The National Federation's demand has since been considerably modified, and in any case the present dispute has nothing to do with it, the painters' wages only being involved." It is understood that the Ministry of Labour is endeavouring to bring about a renewal of negotiations.

# Coming Events

*Wednesday, March* 7.

Institute of Builders.—Annual Dinne Edward VII Rooms.

Beaux Arts Committee.—Lecture an Exhibition, Society of Architects. 8 p.r

*Thursday, March* 8.

R.I.B.A.—"Architecture and Pain ing." By Mr. Walter Bayes, A.R.W.S.

British Museum.—Lecture on "E cavations at Ashur and Ur of the Cha dees." By Claire Gaudet.

Architecture Club Exhibition, Gro venor House.—"Historical Study an Modern Design in Architecture." I Walter H. Godfrey, F.S.A.

Sheffield, South Yorks, and Distri Society of Architects' Surveyors.—Le ture on "Italian Architecture in England By Major H. C. Corlette, C.B.E., R.B.( F.R.I.B.A.

Birmingham Town Planning Lecture.- "Smaller Towns." By F. C. Minshu LL.M.

*Friday, March* 9.

R.I.B.A.—Wren Fancy Dress Ball an Carnival.

Town Planning Institute.—"Acquirin and Replanning Congested Areas." I L. C. Evans, Town Clerk of Salford.

Institute of Heating and Ventilatin Engineers.—"Gas as a Fuel." By J. ( Clark, F.C.S., M.Inst.C.E.

R.T.C.A.C.S., Glasgow.—"A Plea f Better Craftsmanship." By Jas. McAule F.S.I., F.E.S., A.M.T.P.I.

A. and S.A.P.U.—Lecture by Aust Harrison on "The Press and Archite ture," Prince Henry's Room, 17 Fle Street.

*Saturday, March* 10.

A.A. visit P.L.A. Building.

Building Surveyors' and Inspecto Association.—"Notes on the Mechani of Building Construction." By Frank ( Creswell, Town Hall, Leeds.

*Tuesday, March* 13.

Architecture Club Exhibition, Gro venor House.—"Architecture and Liter ture." By Gilbert Frankau.

# The R.A. Exhibition

Following are the dates for the rece tion of architectural drawings, etc., f the summer exhibition of the Roy Academy : March 29—water-colours, pa tels, miniatures, black-and-white dra ings, engravings, and architectural dra ings; March 31 and April 3—oil pain ings; April 4—sculpture. The hours reception are from 8 a.m. to 10 p.r (except March 21, when the hours a from 8 a.m. to 2 p.m.). Labels and forn may be obtained, during March onl from the secretary, Burlington Hous W.1.

# The Rome Scholarship

A bridge spanning a ravine has be set as the subject for the prelimina examination for the Rome Scholarship Architecture. The sixth annual exhibiti of works submitted in open competiti for the Rome Scholarship, 1923, in arch tecture, painting, sculpture, and engra ing, together with works executed the final competition for the scholarshi of 1922, and some examples of the wo of Rome scholars, will be held at the Roy Academy from March 9 to 15.

# The Week's News

### *Ripon Cottage Hospital.*

t is reported that the Cottage Hospital Ripon is to be extended.

### *Tintern Abbey Preservation.*

Preservation work at Tintern Abbey e 1913 has cost approximately ,000.

### *Housing at Huddersfield.*

Huddersfield Corporation have decided build thirty-two houses without wait- for Government assistance.

### *Slum Clearance at Bermondsey.*

he London County Council propose clear a number of slum areas in Ber- ndsey at a cost of £66,700.

### *Housing at Yeovil.*

anction to a loan of £6,706 for the tion of twenty non-parlour houses is g sought by the Yeovil Town Council.

### *New Public Baths for Beverley.*

lans have been prepared for con- ing the old rifle range into public ns.

### *Golders Green Station Improvements.*

ew works to be put in hand imme- ely at Golders Green Station will cost .000.

### *Nottingham Rehousing Scheme.*

proposal to clear the worst portion Narrow Marsh and carry out a re- sing scheme at a cost of £104,250 is g considered by the City Council.

### *Bartlett School of Architecture.*

wo entrance exhibitions of the value 40 a year each for three to five years be awarded at the Bartlett School of hitecture in June.

### *Whitby Spa Improvements.*

pplication has been made for a loan 7,000 to erect concert hall and to y out other improvements at Whitby

### *Architect's Change of Address.*

r. C. P. Garrard, A.R.I.B.A., has sferred his office from Wimbourne se, Tower Street, Ipswich, to 26 ter Market, Ipswich.

### *Romsey Abbey Remodelling.*

faculty has been obtained for the re- elling of the internal arrangements of nsey Abbey, at an estimated cost of 50.

### *Transforming the Hastings Band Promenade.*

ork is well in hand for the transfor- ion of the band promenade into an ninated Norman Castle. The scheme be finished by Easter, and there will ,000 more lights than usual.

### *"Children's House" at Bow.*

"Children's House," with roof garden modern equipment, is to be erected Bow. The house will be used for l work among the boys and girls in East End.

### *New Hotel for Worthing.*

ne development of a building which ined derelict at the western end of thing for many years is proceeding e. Flats are being rapidly com- ed, and a large portion of the building be made into an hotel de luxe.

### *Darlington and Stockton Water Supply.*

Under the Bill introduced by the Minister of Health, confirming various provisional orders, the borrowing power of the Darlington Corporation is increased by £65,000 for the purposes of water undertaking.

### *Scarborough Improvements.*

The first stage in the further development of the Peasholm Park estate has been entered upon by the commencement of the construction of the 50 ft. wide semi-circular road extending for 900 yds. The estimated cost is £13,850, towards which the State is giving £3,850.

### *Amble Estate Scheme.*

The Amble Estate Company, of Amble, have decided to lay out their estate. Included in the scheme is the building of a kinema and dancing hall, billiard saloon and business premises. Messrs. Percy L. Browne and Glover, Pearl Buildings, Newcastle, have been appointed architects.

### *Recent Excavations.*

A series of twenty lectures on Recent Excavations in Mesopotamia, Egypt, and the Mediterranean, will be given by Claire Gaudet in the Lecture Room at the British Museum on Thursdays at 3.15 p.m. beginning March 1st, 1923. Single lectures, 5s. 6d.; course of twenty, £3 3s.

### *Flats for Women at Bournville.*

A block of residential flats for professional women is being built by the Bournville Village Trust. One hundred new houses and bungalows and a day continuation school to accommodate 1,400 scholars are being built by the Trust, and its associated societies.

### *New Church Hall for Brighton.*

Next year is the centenary of the Brighton Parish Church (St. Peter's), which is regarded by many as one of the best examples of Barry's ecclesiastical architecture. It is proposed to lay the foundation-stone of the new church hall to commemorate the event.

### *Sir John Soane's Museum.*

Sir John Soane's Museum, 13 Lincoln's Inn Fields, W.C.2, will be open free from 10.30 a.m. to 5 p.m. on Tuesdays, Wednesdays, Thursdays, and Fridays during March, April, May, June, July, and August. At other times admission may be obtained by cards to be obtained of the curator.

### *Proposed Barnstaple Baths.*

Barnstaple Trades and Labour Council has suggested to the Town Council that consideration should be given the question of providing a bathing-place and baths by the conversion of the 6th Devon headquarters, town property, which will be shortly given up on the completion of the new territorial headquarters.

### *Harrow School Chapel.*

Harrow School Chapel has been enriched by a set of windows, the gift of Mrs. Wills, of Thornby Hall, Northampton, in memory of Major Edward Lyon, who died of wounds received at the second battle of the Somme. The windows were designed and executed by Sir Charles Nicholson and his brother, Mr. Archibald Nicholson.

### *New Swimming Bath for Birmingham.*

Alterations and additions are to be made by the Birmingham Board of Guardians to Marsden Green Homes, at a cost of £14,000. Further office, storage, and laundry accommodation is to be provided, and a new building, for use as a swimming bath in the summer and an assembly hall and gymnasium in the winter, is to be erected.

### *Sixteen New Churches for Liverpool.*

Three new churches are now being erected in the Liverpool diocese, and there are schemes in hand for thirteen other churches. This information was given at the annual meeting of the Liverpool Church Building Society by the Lord Bishop, who suggested that Liverpool churchmen would have to raise £50,000 in the near future for church building.

### *Sports Ground for a Wesleyan Church.*

The Priory Place Wesleyan Church, Doncaster, have decided to purchase five and a half acres of ground at the Doncaster end of Wheatley Park. The site will provide two football or hockey grounds, which can also be used for cricket in the summer, nine tennis courts, and ground for pavilion, etc. The scheme is estimated to cost £2,300.

### *School Chapel in Harrogate.*

The foundation-stone of a chapel for the Harrogate College for Girls has been laid by Major the Hon. Edward Wood, M.P., Minister of Education. The chapel is to be built with the materials of the old St. Mary's Church, Harrogate, which was abandoned by the Church authorities in 1919 owing to the unsafe condition of the building. The architects are Messrs. Taggart and Silk, of Belfast.

### *New Storage Reservoir for Blyth.*

A scheme to provide work for 200 unemployed is to be started by Blyth Town Council. It is a project to build a storage reservoir to hold three million gallons of water at High Horton on the pipe-line of Newcastle and Gateshead Water Company, who supply most of the water consumed in the Blyth area. The cost of the work is estimated at £15,000.

### *British Memorial Gift to Belgium.*

Britain, through the Imperial War Graves Commission, is presenting a British memorial to Belgium. This memorial is being erected in the large open space in front of the Palais de Justice, at Brussels. As the Commission is a Government Department, the actual details of the work were left to an executive composed of representative Belgians and Britons, whilst the task of designing and carving was given to Mr. C. S. Jagger, architect, and Mr. J. S. Tate, sculptor.

### *A New Café Royal.*

The Café Royal is to be rebuilt at a cost of between £400,000 and £500,000. The new café will be considerably larger than the present building, for all the floors, except the ground floor and basement, of some of the adjoining property are to be taken over and the height of the building is to be raised to 100 ft. There are to be eighteen banqueting halls and accommodation is to be provided for 5,000 people. The largest of these banqueting halls will seat 650 people.

# Rates of Wages in the Building Trades*

The following table, which is published in the first issue of THE JOURNAL for each month, shows the rates of wages of craftsmen (bricklayers, masons, carpenters and joiners, woodcutting machinists, slaters plumbers,* plasterers, painters †) and labourers in the building industry. The labour rates for London are given in the Table of Current Prices on pages xxiii, xxiv.

| District. | Grade A. | | Grade B. | | Grade C. | | Grade D. | |
|---|---|---|---|---|---|---|---|---|
| | Craftsmen. | Labourers. | Craftsmen. | Labourers. | Craftsmen. | Labourers. | Craftsmen. | Labourers. |
| | s. d. | s. d. | s. d. | s. d. | s. d. | s. d. | s. d. | s. d. |
| North East Coast | 1 8 | 1 3 | — | — | — | — | — | — |
| Yorkshire | 1 8 | 1 3 | 1 6½ | 1 2 | 1 4½ | 1 0½ | — | — |
| North Western Counties‡ | 1 8 | 1 3 | 1 6½ | 1 2 | 1 4½ | 1 0½ | 1 4 | 1 0 |
| Midland Counties | 1 8 | 1 3 | 1 6½ | 1 2 | 1 5 | 1 0¾ | 1 4 | 1 0 |
| Eastern Counties | 1 4½ | 1 0½ | 1 4 | 1 0 | 1 3 | 0 11¼ | — | — |
| Southern Counties | 1 4½ | 1 0½ | 1 4 | 1 0 | 1 3 | 0 11¼ | — | — |
| South Western Counties | 1 8 | 1 3 | 1 6 | 1 1½ | 1 4½ | 1 0½ | 1 3½ | 0 11¾ |
| South Wales | 1 8 | 1 3 | 1 4 | 1 0 | — | — | — | — |
| Scotland§ | 1 8 | —¶ | 1 7 | —¶ | 1 6 | —¶ | — | — |

* In the case of towns printed in *italic type* below, the rates shown in the Table for craftsmen do not apply to plumbers.

† In Scotland, painters, Grade A towns, 1s. 6½d.; Grade B, 1s. 5½d.; Grade C, 1s. 4½d. Brechin, Forfar, and Montrose, 1s. 4d. Elgin, Forres and Nairn, 1s. 3½d.

‡ Excluding Liverpool and Birkenhead, where the rates are 1s. 10d. for plumbers, 1s. 9½d. for mason's fixers, 1s. 9d. for other craftsmen, 1s. 5d. for scaffolders, and 1s. 4d. for labourers.

§ Excluding Aberdeen, where the rates remain unaltered at 1s. 7½d. for masons, joiners, and plasterers, 1s. 8d. for slaters, and 1s. 9d. for plumbers.

¶ In Scotland, labourers are not included in the general grading scheme.

## Grading of Towns.

The localities in which the above rates have been reported to be in operation are as follows. In the case of localities printed in *italic type*, the rates shown in the above Table for craftsmen do not apply to plumbers. The rates of wages per hour in Londonderry are: bricklayers, masons, carpenters and joiners, slaters, plasterers, and painters, 1s. 5d. Newry: bricklayers, masons, plasterers, and slaters, 1s. 8d. Salisbury: Skilled painters and grainers, 1s. 2d., rough painters 1s. 1d., other tradesmen, 1s. 3d., labourers, 10d. Stonehaven: painters, 1s 4d. Keynsham: 1s. 7d. per hour for tradesmen and 1s. 2d. per hour for labourers. Sutherland: masons and plumbers, 1s 4d., joiners and painters, 1s. 3d., slaters and plasterers, 1s. 4d, labourers, 9d. Electrical Installation.—England and Wales (except Sussex district); also Belfast and Londonderry: Grade A towns, 1s. 8½d.; Grade B, 1s. 6¼d.; Grade C, 1s. 5d.; Grade D, 1s. 3¾d. Sussex district, 1s. 5d. Scotland, 1s. 5d.

NORTH EAST COAST :—

*Annfield Plain*, *Birtley*, Bishop Auckland, *Blackhill*, *Blyth*, *Chester-le-Street*, *Consett*, *Darlington*, *Durham*, *Ebchester*, *Gateshead*, *Hartlepools*, *Hebburn*, *Hexham*, *Jarrow*, *Lanchester*, *Leadgate*, Medomsley, *Middlesbrough*, *Morpeth*, *Newcastle*, *North and South Shields*, *Seaham Harbour*, *Stanley*, *Stockton*, *Sunderland*, *Thornaby*, *Tynemouth*, *Wallsend*, *Whitburn*, and *Whitley Bay*.

YORKSHIRE :—

*Grade A.*—*Altofts*, *Barnsley*, *Batley*, *Bingley*, *Birstall*, *Bradford*, *Brighouse*, Calder Valley, Castleford, *Cleckheaton*, *Colne Valley*, *Crosshills*, *Dewsbury*, *Doncaster*, *Gomersal*, Grimsby, *Guiseley*, *Halifax*, *Harrogate*, *Hebden Bridge*, *Heckmondwike*, Holmfirth, *Horbury*, *Hoyland*, Huddersfield, Hull. *Ilkley*, Immingham, *Keighlev* *Knottingley*, *Leeds*, *Liversedge*, *Mexborough*, *Mirfield*, *Morley*, *Normanton*, *Ossett*, *Penistone*, Pontefract, Pudsey, *Rawdon*, *Rotherham*, Scunthorpe, *Selby*, *Sheffield*, *Shipley*, *Sowerby Bridge*, *Stocksbridge*, *Wakefield*, *Wombwell*, *and Yeadon*.

*Grade B.*—Barnoldswick, Beverley, Bridlington, Goole, Hornsea, Scarborough, Skipton, *Whitby* (plumbers 1s. 7d.) and York.

*Grade C.*—Driffield, Kirby Moorside, Malton, Norton, Pickering, and Wetherby.

NORTH WESTERN COUNTIES :—

*Grade A.*—*Accrington*, Adlington, *Alderley Edge*, *Altrincham*, *Ashton-under-Lyne*, *Atherton*. *Bacup*, Barrow, Birkdale, Bispham, *Blackburn*, Blackpool, Blackro *Bolton*, Broughton (Flints), *Burnley*, *Bury*, Carlisle, Chester, Chorley, *Church*, Cleveleys, *Clitheroe*, *Colne*, Connahs Quay, Dalton-in-Furness, *Darwen*, *Denton*, *Droylesden*, *Eccles*, *Farnworth*, Fleetwood, Frodsham, *Glossop*, *Great Harwood*, *Haslingden*, Hawarden, Helsby, *Heywood*, Higher Kinnerton, *Horwich*, *Hyde*, Lancaster, *Leigh*, Leyland, *Littleborough*, Longridge, Lymm, Lytham, *Manchester*, *Middleton*, Morecambe, *Mossley*, *Nelson*. *Ormskirk*, *Oswaldtwistle*, *Oldham*, *Padiham*, *Pendlebury*, Poulton, *Preston*, *Prestwich*, Queensferry, *Radcliffe*, *Ramsbottom*, *Rawtenstall*, *Rishton*, *Rochdale*, Runcorn, St. Anne's-on-the-Sea, St. Helens, *Saddleworth*, *Sale*, *Salford*, *Shaw*, Shotton, Southport, *Stalybridge*, *Stockport*, *Swinton*, Thornton, *Todmorden*, *Tyldesley*, *Walkden*, *Warrington*, Westhoughton, *Whalley*, *Whitefield*, Widnes, Wigan and *Wilmslow*.

*Grade B.*—Askam, Broughton, Buxton, Cleator Moor, Congleton, Coniston, Crewe, Distington, Egremont, Grange-over-Sands, Harrington, Knutsford, *Macclesfield*, Maryport, Market Drayton, Middlewich, Millom, Mold, Nantwich, *New Mills*, Northwich, Sandbach, Tarporley, Ulverston, Winsford and Over, Whitehaven, Workington and Wrexham.

*Grade C.*—Ambleside, Bala, Bangor, Bowness-on-Windermere, Carnarvon, Colwyn Bay, Conway, Grasmere, Holyhead, Holywell, Kendal, Langdale, Llandudno Llandudno Junction, Mostyn, Penrith, Prestatyn, Rhos, Rhyl, and Windermere.

MIDLAND COUNTIES :—

*Grade A.*—Alfreton, *Belper*, Bilston, *Birmingham*, *Blackheath*, *Burslem*, *Cheadle*, *Chesterfield*, Coalville, Coventry, *Derby*, *Hanley*, Heanor, Hinckley, *Ilkeston*, Kenilworth *Leicester*, Lincoln, *Long Eaton*, *Loughborough*, *Mansfield*, Newcastle-under-Lyme. *Nottingham*, *Nuneaton*, Oldbury, Ripley, Stoke-on-Trent, *Sutton Coldfield*, *Sutton-in Ashfield*, West Bromwich, Willenhall, and Wolverhampton. (Plumbers employed by the Birmingham Master Plumbers' Association within 8 miles of Birmingham, 1s. 9d

*Grade B.*—Atherstone, Bewdley, Boston, Brierley Hill, Bromsgrove, Burton-on -Trent, Cannock, Coseley, *Darlaston* (plumbers 1s. 7½d.), Dudley, Gainsborough, Gorna Grantham, Halesowen, Hednesford, Kidderminster, Knowle, Leamington, *Leek*. Lichfield, Louth, Malvern, Market Harborough, *Matlock*, Melton Mowbray, *Newar* Northampton, Oakengates, Old Hill, Peterborough, Redditch, Retford, Rugby, *Rugeley* (plumbers 1s. 7½d.), Sedgley, Shifnal, Shrewsbury, Skegness, Sleaford, Solihul Southwell, *Stafford*, Stamford, Stourbridge, Stourport, Stratford-on-Avon, Swadlincote, Swanwick, Tamworth, *Walsall* (plumbers 1s. 7½d.), Warwick, Wednesbur Wellington, Worcester, and Worksop.

*Grade C.*—Ashbourne, Bridgnorth, Church Stretton, *Horncastle*, Kettering, Ludlow, Newport, Oakham, Oundle, Raunds, Rushden, Spalding, Thrapston, Uttoxete Wellingborough, and Wirksworth.

*Grade D.*—Buckden, Eaton Socon, Huntingdon, St. Ives, and St. Neots.

EASTERN COUNTIES :—

*Grade A.*—Baldock, Bedford, Berkhamsted, Biggleswade, Braintree, Brentwood, Chelmsford, Cambridge, Colchester, Halstead, Hatfield, Harpenden, Hemel Hempstead, Henlow, Hertford, Hitchin, Hoddesdon, Ingatestone, Ipswich, Letchworth, Luton, Norwich, Ongar, St. Albans, Sandy, Sawbridgeworth, Stevenage, Stotfol Ware, Welwyn, and Witham.

*Grade B.*—Aldeburgh, Ampthill, Attleborough, Aylsham, Braughing, Chatteris, Cromer, Dovercourt, Dunstable, Ely, Fakenham, Felixstowe, Frinton, Gorlesto Halesworth, Harwich, King's Lynn, Leighton Buzzard, Leiston, Lowestoft, March, Much Hadham, Newmarket, North Walsham, Puckeridge, Renthem, Saxmundha Southwold, Standon, Stowmarket, Walton-on-the-Naze, Wickham Market, Wisbech, Woodbridge, Wymondham, and Yarmouth.

*Grade C.*—Bungay, Coltishall, East Dereham, Royston, Saffron Walden, and Tring.

[N.B.—Bury St. Edmunds :—bricklayers, masons, carpenters and joiners, slaters, plumbers and plasterers, 1s. 4½d.; painters, 1s. 2d.; labourers, 11d.]

SOUTHERN COUNTIES :—

*Grade A.*—Abingdon, Addlestone, Amersham, Ascot, Ashford (Middlesex), Banbury, Beaconsfield, Bournemouth, Bracknell, Brighton, Byfleet, Chalfont, Chesha Christchurch, Cremborne, Eastbourne, Eastleigh, Egham, Eton, Gerrard's Cross, Goring, Gosport, Gravesend, Guildford, Henley, Hove, Laleham, Maidenhead, Marlow Northfleet, Oxford, Poole, Portsmouth, Reading, Southampton, Staines, Stanwell, Sunningdale, Sunninghill, Tilehurst, Tonbridge, Tunbridge Wells, Wallingford, Windso Winkfield, Woking, Wokingham, and Wycombe.

*Grade B.*—Arundel, Ashford (Kent), Aylesbury, Bagshot, Basingstoke, Bexhill, Bicester, Bletchley, Bognor, Bosham, Broadstairs, Brockenhurst, Buckingham, Burges Hill, Camberley, Canterbury, Chatham, Chichester, Chipping Norton, Cranleigh, Deal, Dorking (plumbers 1s. 5d.), Dover, Fareham, Faringdon, Faversham, Fenn Stratford, Folkestone, Gillingham, Godalming, Hailsham, Haslemere, Hastings, Havant, Herne Bay, Horsham, Hythe, Lambourn, Liphook, Littlehampton, Lymingto Maidstone, Margate, Midhurst, Milford, Milton Regis, Newbury, New Milton, Newport Pagnell, Oxted, Pangbourne, Petworth, Ramsgate, Redhill, Reigate, Rocheste Sandgate, St. Leonards, Sevenoaks, Sittingbourne, Strood, Stony Stratford, Stow-on-the-Wold, Thame, Walmer, Wantage, Wendover, Westerham, Westgat Whitstable, Winchester, Winslow, Witney, Wolverton, Woodstock, and Worthing.

*Grade C.*—Andover, Ardingley, Farnham, Godstone, Hawkhurst, Hartley Wintney,* Haywards Heath, Horley, Isle of Wight, Liss, Petersfield, Rye, Smallfiel Staplehurst, Steep, Turners Hill, and Uckfield.

[N.B.—Leatherhead :—painters, 1s. 5½d. ; plumbers, 1s. 6½d.; other tradesmen, 1s. 6d.; labourers, 1s. 1½d.]

SOUTH WESTERN COUNTIES :—

*Grade I.*—Bristol.

*Grade II.*—Plymouth * and Devonport.*

*Grade III.*—Dartmouth,* Exeter,* Kingswear,* Newton Abbot, Paignton, Portishead, Stroud,† Taunton, and Torquay.

*Grade IV.*—Barnstaple, Beaminster, Povey Tracey, Bradford-on-Avon,* Bridgwater, Bridport,* Brixham, Bruton, Burnham-on-Sea, Calne,* Castle Cary, Cheddar, Cirencester,* Clevedon, Coleford,* Corsham,* Crewkerne,* Dawlish, Dorchester,* Exmouth, Fairford,* Frome,* Glastonbury, Lydney,* Melksham,* Midsomer Norto Minehead,* Radstock, Shepton Mallet, Street, Swanage,* Teignmouth,* Tetbury,* Thornbury,* Totnes,† Trowbridge,* Wells, Westbury,* Weston-super-Mar Weymouth,* and Yeovil.*

[N.B.—Bath, Cheltenham, Gloucester* (except painters), Hereford,* and Swindon* :—tradesmen, 1s. 5d.; labourers, 1s. 0¾d.]

SOUTH WALES AND MONMOUTHSHIRE :—

*Grade A.*—Aberavon, Aberdare, Abergavenny, Ammanford, Barry, Bridgend, Briton Ferry, Brynmawr, Cardiff (plumbers, 1s. 8½d.), Chepstow, Duffryn Valley, Ebb Vale, East Glamorganshire and Monmouthshire Valleys, Garw Valley, Gorseinon, Llanelly, Maesteg, Merthyr, Mountain Ash, Neath, Newport, Ogmore Vale, Pontardulai Pontypool, Pontypridd, Porthcawl, Port Talbot, Rhondda and Rhymney Valleys, Sirhowy Valley, Swansea, and Tredegar.

*Grade B.*—Haverfordwest, Pembroke and Pembroke Dock.

[N.B.—Brecon and Carmarthen :—tradesmen, 1s. 6d.; labourers, 1s. 1½d. Llandrindod Wells :—tradesmen, 1s. 5d.; labourers, 1s. 0¾d.]

SCOTLAND :—

*Grade A.*—Airdrie, Alloa, Alva, Armadale, Ayr, Bathgate, Bellshill, Bridge of Weir, Buckhaven, Burntisland, Clydebank, Coatbridge, Dumbarton, *Dunde* Dunfermline, Edinburgh, Falkirk, Glasgow, *Gourock*, Grangemouth, *Greenock*, Haddington, Hamilton, Harthill, Irvine, Kennoway, Kilmarnock, Kirkcaldy, Larber Largs, Leith, Leslie, Leven, Markinch, Methil, Motherwell, Neilston, Newmains, Paisley, Pencaitland, Perth, *Port Glasgow*, Renfrew, Stenhousemuir, Stirling, Uddingsto Uphall, Wemyss, Whitburn, Windygates, and Wishaw.

*Grade B.*—Arbroath, Montrose, and Peebles.

*Grade C.*—*Dumfries*, Galashiels, Hawick, and *Maxwelltown*. (Plumbers at Dumfries and Galloway, 1s. 6d.; and at Inverness, 1s. 7d.)

[Douglas and District (Isle of Man :—Bricklayers, masons, carpenters and joiners, plumbers, plasterers, and painters, 1s. 4½d.; labourers, 1s. 0½d.]

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* The rate for painters is 1d. per hour less than that shown for craftsmen in the above table.

† The rate for painters is ½d. per hour less than that shown for craftsmen in the above table.

* From "The Labour Gazette."

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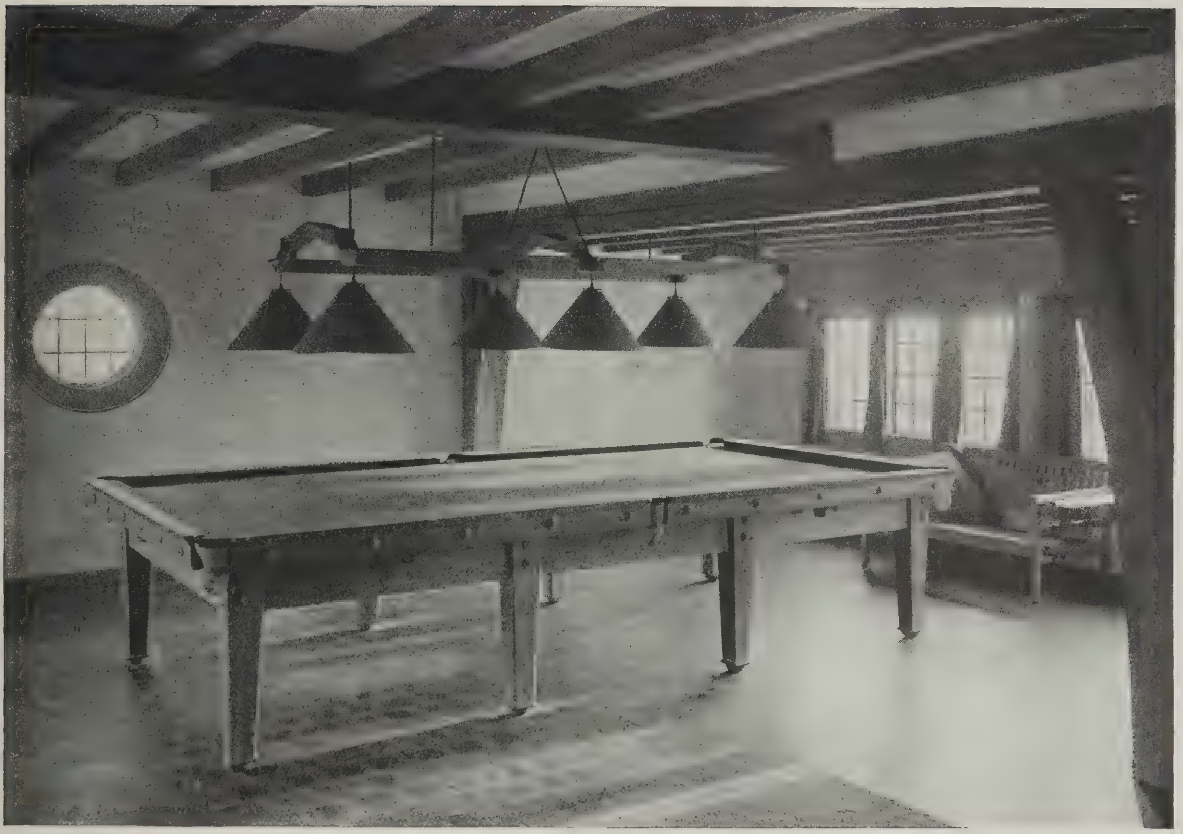
Vol. LVII. No. 1471

# THE ARCHITECTS' JOURNAL & Architectural Engineer

*With which is incorporated "The Builders' Journal."*

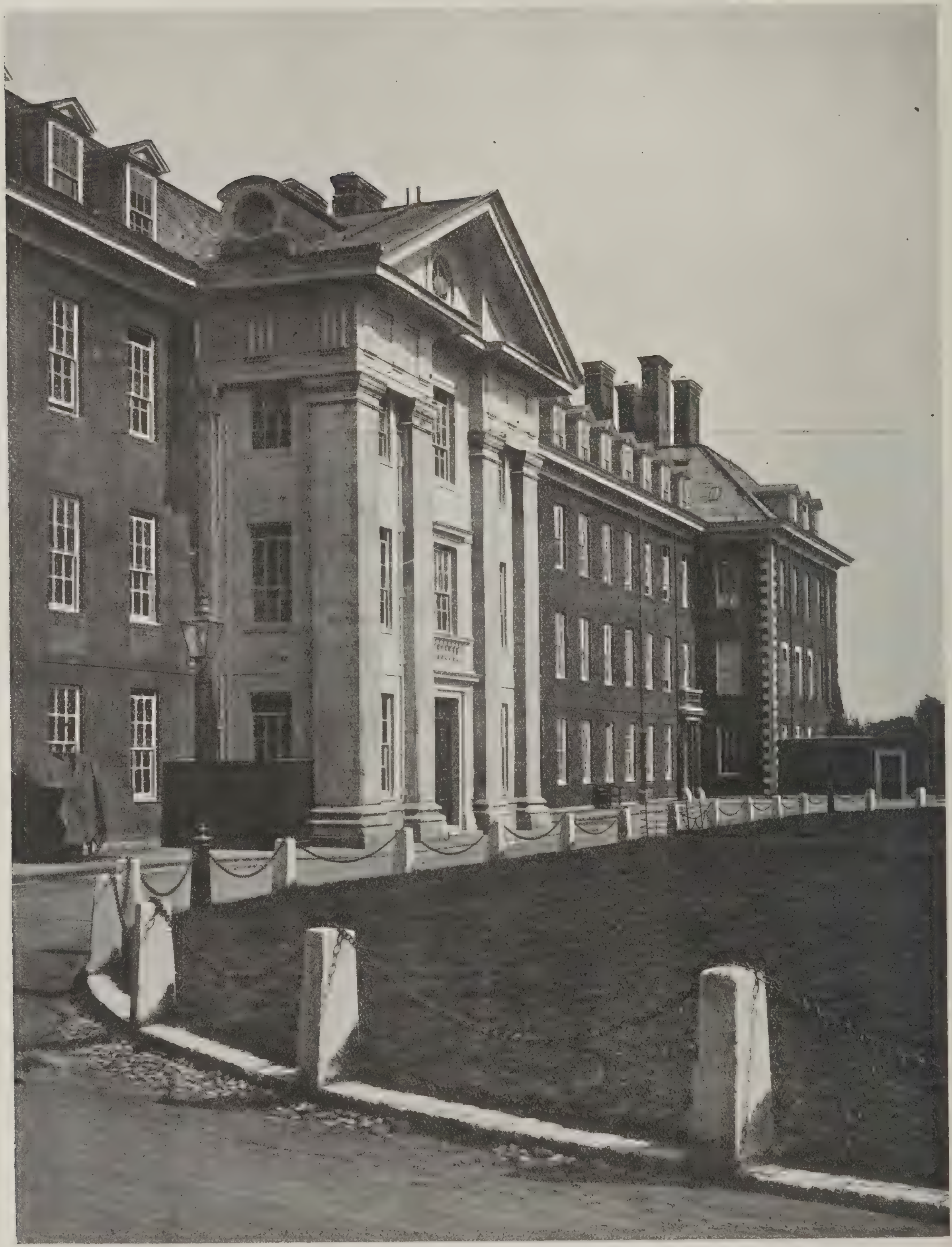


A BILLIARD - ROOM.
*By C. F. A. Voysey.*

27-29 Tothill Street, Westminster, S.W.1.

## Monumental Architecture. 9.—The Royal Hospital, Chelsea

### Sir Christopher Wren, Architect



Chelsea Hospital is now more famously known as the home of the red-coated Chelsea Pensioners than as one of Wren's most elegant works. Yet its simplicity and dignity are masterly; few, it has been said, could have combined such effect with so rigid an economy of material.

THE
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# Civic Pride and the Cinematograph

EVERYBODY will agree that the robust pride ordinarily exhibited by the individual in the place of his birth is one of the most admirable characteristics of human nature. It is true that this pride ' the native may occasionally induce him to exaggerate ie advantages of life in his own particular town; it may equently compel him to overlook its most obvious dis-lvantages; it may even develop along extravagant or ghly fantastic channels; but it is invariably sincere and uite ineradicable.

For example, the strange pride of the Londoner in the ctreme density of metropolitan fogs is well known, but a an from Manchester will obtain equal satisfaction in lating on the superior smokiness of his native air, when mpared with the atmosphere of all other cities. And it ay be recalled that a Liverpool man was recently fined rty shillings for calling out the fire brigade in order to ove to a sceptical acquaintance from Manchester that the iverpool brigade is the fastest in the world.

Again, no self-respecting native of Leicester would admit iblicly that Leicester could be compared unfavourably ith Nottingham, either in architectural achievement, itural environment, cleanliness, or county cricket elevens. native of Hereford might secretly deplore the lack of amcars in his own city, but he would never give expres-on to such thoughts when conversing with a citizen of 'orcester. And no one, except at considerable personal sk, would remark to a townsman of Swansea that Cardiff undoubtedly the most progressive municipality in 'ales.

Of recent years this development of civic rivalry has been eatly accentuated by the exploits of professional football ubs, composed principally of players who are not natives the towns they represent. In the near future it is likely be extended in quite a different direction, for the Glasgow orporation has recently authorized the preparation of a nematograph film dealing with its civic activities and, cording to an announcement in the Press, this film will ow "the municipal parks, the fire brigade, the electrical id tramway works, the treasures in the art galleries, the spitals, and other public institutions."

The effect of such an experiment in civic advertisement ill be awaited with some curiosity, for it is to be assumed at the exhibition of these official pictures extolling the erits of Glasgow will not be restricted to the theatres of at city. The example may prove a source of inspiration other municipalities and, should the cult of the civic m become popular, some very interesting developments ay be anticipated. Thus, it will at once become apparent at for Glasgow or any other city to circularize the rest the community with pictures carefully restricted to the rticular activities or attributes of which it happens to proud, is not nearly good enough. If the Glasgow orporation wishes to invite a fair and unbiassed com-rison of its achievements with the achievements of other ties, it should also order films to be prepared showing, y, a selection of the one and two-room tenements in hich at least 50 per cent. of its citizens reside at the present time. The Corporation may consider it unnecessary to include anything of this description in its present series, but when the idea of the civic film has really developed, it is obvious that each civic photographer will be commissioned to prepare films, not only of his own town, but also of other towns. The latter exhibited for purposes of comparison with the former, and accompanied by descriptive titles compiled in the breezy phraseology cultivated by cinematograph film producers, would undoubtedly prove of great interest, and "WHAT GLASGOW DID NOT SHOW US LAST WEEK !—SENSATIONAL OMISSIONS IN TWENTY REELS" has possibilities quite as thrilling and far more instructive than the most poignant drama of true love, revolvers, and revenge.

The anxiety of the Croydon Corporation to demolish the Whitgift Hospital is pathetic in its persistence, and in any contemplated cinematograph film dealing with its civic activities the Corporation might feel inclined to omit all reference to the vexed question. Fortunately the exhibition elsewhere of a series of pictures of the hospital would not thereby be prohibited, and in order to cater more particularly for picture-house patrons with exotic tastes, a film of "WHAT CROYDON PROPOSES TO PULL DOWN !" might even be followed by a specially selected Grand Guignol series depicting "WHAT CROYDON DOES NOT PROPOSE TO PULL DOWN."

If only the municipalities of Nottingham and Leicester could be induced to expose the civic deficiencies of each other through the medium of the cinematograph, the interest aroused in these rival Midland cities would certainly prove of greater assistance in the advancement of the civic achievements of each than the present pastime of indulging in cross-talk over a distance of five and twenty miles. And when both Nottingham and Leicester have attained such a degree of civic perfection that nothing further remains to be exposed on either side, it is not beyond the bounds of possibility that they might enter into coalition with the express object of bringing Birmingham up to date.

For some time it has been fairly obvious that the abnormally heavy doses of intellectual cod-liver-oil administered by publicists to the civic patient are not being followed by any appreciable decline in the popularity of prize-fights or brass-band contests, or racehorses, or guessing competitions. Whilst the housing problem, the transport problem, the smoke problem, and so many other problems of urgent civic importance are awaiting solution, the ordinary citizen really cannot be expected to exhibit an extravagant enthusiasm on hearing that excellent progress (on paper) is being made with these matters, but that in the meantime the provision of wirework waste-paper baskets for attachment to municipal lamp-posts has been definitely agreed upon, and the equipment of civic park-keepers in distinctive uniforms of a semi-military character is an accomplished fact. The jaded palate of the civic patient craves for something of a more piquant nature.

The preparation of what may perhaps be described as intellectual chutney is not an impossibility, and if it can be administered successfully through the medium of the cinematograph, the contention of the film syndicates that they have an educational as well as a recreational objective will be considerably strengthened. Producers of cinematograph films are said to spend astonishing sums of money on the erection of cardboard and brown paper cities, as backgrounds for their pictures. For the production of the civic film no cardboard is required. Everything is already in position, and if the various municipalities in the country do not feel disposed to emulate the example of Glasgow, an excellent opportunity will arise for the cinematograph syndicates to take up and develop the idea themselves.

The encouragement of civic rivalry is certainly not reprehensible if its result is likely to be of the slightest benefit to the community. And no one will deny that an accurate knowledge of what other towns are doing and what they are not doing is a very necessary asset to every citizen.

A popular interest in architecture is possible of achievement by the exploitation of popular methods, and popular methods are not necessarily vulgar methods. It is not suggested, for instance, that public interest in architecture would be intensified by the action of a band of zealots who might take a solemn vow to stand on orange boxes at street corners and harangue the passers-by on the corrections for optical illusion as observed in the Parthenon. But it is seriously advanced that a popular interest in all kinds of parks and fire-brigades and electrical and tramway works and art galleries and hospitals and other civic institutions is conducive to a popular interest in architecture, and from that point of view alone the experiment of the Glasgow Corporation is worthy of the greatest publicity and encouragement.

F. N. J.

## An Unfair Competition

An advertisement in "The Western Morning News" invites architects to submit plans for a proposed parish hall at St. Marychurch, the committee being "prepared to award remuneration only for the plans they adopt." The day for sending in designs has now gone by, but we cannot imagine that there has been any satisfactory response to this invitation. We hope that the committee will realize the extreme unreasonableness of what they are doing and forthwith promote a competition on sound and proper lines. We suggest that if they are unacquainted with the necessary procedure they should get in touch with the secretary of the local architectural society.

## Architecture and the Layman

Mr. Gilbert Frankau's title of "Architecture and Literature" may not have been completely fulfilled in the address that he gave last week at the Architectural Association, but at least it served as a useful peg on which to hang some rather random remarks, mostly critical, about architecture and architects from the layman's point of view. Mr. Frankau's chief points seem to be as follows: that the technical vocabulary of the architect is unintelligible to the layman; that present-day architecture does not reflect the character of the race; that labour-saving devices are a nuisance; that architecture is an individualistic profession somewhat in danger of Government control; and that there is much virtue in the jerry builder. Dealing with these points *seriatim*, we would say that every profession has its technical phraseology, and there is no reason why architecture should not have one. The public are not asked to learn the meaning of "entasis," "cyma reversa," "impost mould," or any other technical term. These are for architects alone. Then about architecture not reflecting the character of the race—well, if this is so, it is not the fault of architects; nor are architects to be blamed for labour-saving devices: these are mostly proprietary inventions, and some of them are excellent. Architecture, says Mr. Frankau, is an individualistic profession. But you m have too much individualism, which is worse than none all. The cult of individualism produced Piccadilly Circ and Queen Victoria Street, not to mention suburb Government control of housing did not destroy individ ality in architecture; on the contrary, it encouraged If Mr. Frankau would take a tour round the Governme housing schemes he would be astonished at their varie of architectural treatment. And last we have Jerry t Builder, who, generally speaking, is most unfairly disparage An architect of our acquaintance holds that he (Jerry) the greatest benefactor of the British race because his bad fitting doors, draughty windows, and leaky roofs ensu to all who dwell in his houses the healthy conditions open-air life. If Mr. Frankau has given us the point of vi of the man in the street, then that individual (if he is n really an abstraction) is a bigger problem than we thoug

## Broadcasting Architecture

Sir Banister Fletcher did good work for architectu when he broadcast an address on Sir Christopher Wren la week. It is estimated that over a hundred thousand perso listened-in on that occasion. How many of these "broa catchers" had listened to an address on architectu before? Very few, we imagine. Obviously wireless h immense possibilities from the point of view of arc tectural propaganda, and we hope that Sir Baniste pioneer effort will be followed up by a regular series addresses on architecture. Sir Banister was distinc happy in his choice of subject, and we imagine that very interesting sketch of Wren's life and work was listen to with much profit and pleasure by that vast, silent audien Certainly, if architecture is to be popularized, as we wish it to be, it must be dealt with in an interesting wa Few subjects have greater possibilities of boredom heavily handled. If the broadcasting of architecture widely taken up it might be wise, at first, to enlist the of some well-known public men, such as Mr. Chestert or Mr. Belloc, who could be relied upon to invest subject with the necessary attractiveness. For the d must be seasoned—at first, in any case; when the pub has been thoroughly "broken in" we may then get down the entasis of the Parthenon columns and the refineme of Decorated Gothic. Of course, the architectural possi lities of wireless do not end with the broadcasting of popu lectures. The time may possibly come when the Presid of the R.I.B.A. will broadcast his Presidential Addre comfortably seated by his fireside, with the entire army Fellows, Associates and Licentiates listening-in. Fo debate on Registration it would, of course, be necess for members to have their own transmitting sets to expl their various views. But all would be "sending," none "listening-in"! No! Wireless will never displ 9 Conduit Street.

## The Passing of the Morgue

The announcement that the Morgue is to be demolish is not likely to draw indignant protests from French arc tects, for it has little claim to architectural distincti but its disappearance will at least evoke "the pass tribute of a sigh." That grim little building beyond flying buttresses of Notre Dame is part of familiar Pa and nobody really likes to see familiar things of this s passing away. It was a saddening sight that of the hou breakers at work on old Newgate. The sinister associati of the Morgue have had a peculiar fascination for a cert sort of mind. The mad Méryon made it the subject of of his most morbid etchings; and it is not without sig ficance that Poe called one of his most horrible tales " Murders in the Rue Morgue." Soon the place will be o a memory. And surely the French are becoming less turesque in their nomenclature; there is a regretta prosaic flavour about that title of the new Morgu "Institut Médico-Légal."

# As Others See Us

## Architects Through a Novelist's Eyes

MR. GILBERT FRANKAU'S lecture at the Architectural Association last week took several surprising turns. "Architecture and Literature," the title of the paper, had apparently l the audience to expect an elaborate comparison between e two arts, enlivened, if the Fates and Mr. Frankau were nd, by the novelist's brilliant metaphor and pungent wit. What Mr. Frankau did say, however, had all the piquant arm of unexpectedness. We all love being talked to out ourselves, even if the discourse is not entirely com- mentary, and architects and students alike revelled in e orgy of home truths to which they were treated. The eaker thrust shrewdly, it is true, but at no time was his il without its button, and the twinkle in his eye belied e mordancy of his words.

It was, in fact, a thoroughly stimulating evening. To be iticized is good; to be able to reply to that criticism is tter, but even if we know in our hearts that the critic is tirely wrong, his unexpurgated opinion cannot but give od for thought. Not that one would wish to insinuate at this particular criticism was ill-founded; more than ce the speaker voiced what appear to be very real griev- ces on the part of the man-in-the-street. For the man-in- e-street it was who, in Mr. Frankau, found an able inter- eter and an ardent champion.

Before taking up the cudgels on behalf of ὁι πολοι, wever, Mr. Frankau dwelt for a little on the unimagined fficulties of the novelist in regard to architecture. He had visualize the plan of his hero's house, to describe the reet along which he took his morning walk, the country ansion he visited. And occasionally he found himself con- onted by the problem of equipping an ordinary room with many doors as Seymour Hicks used in one of his favourite rces from the French.

A new language, complained Mr. Frankau, was needed r architecture. If the novelist used architectural phraseo- gy he was unintelligible to the public. Why, he asked tterly, should *ornament* become *embellishment* in technical rlance? Architecture, in fact, required a new verbal chnique, and a committee might well be called in to duce its abstruse terms to honest Anglo-Saxon. The chitect should come off his technical high horse (at this age the speaker evidently mounted a steed of another riety) and realize that the public was vastly interested in uses, but not in messuages.

All professional men lived on and abused the public, and mplaints that the public "won't spend money" were iversal. The plain fact was that the public was their aster, and they were all, writers and architects alike, rking to the human animal character.

Here Mr. Frankau digressed to make the expected com- rison between the making of the book and the making the building, both based on a solid foundation; both ected for a definite purpose, through the stages of plans, affolding, construction, ornamentation, to their final opling with humanity.

This, however, brought the speaker back to his original ievance. Present-day architecture did not, he said, lect the character of the public—(voice at the back— ideous!"). That was a precise illustration of what he ant—the professional attitude of contempt for the public. was, he contended, a mistake to despise the public—a peless mistake. The man-in-the-street was not uneducated architects seemed to imagine; he both knew and appreci- ed what was good—in fact, he "ate" it, *when* he could get

Architects, Mr. Frankau hinted, might with advantage ulate the novelist, who built his book for a specific rpose, and aimed at the average individual who played f, ate roast beef, and went to sleep on Sunday. Person- y he believed in the public, and thought that architects should remember the people who paid for the houses and lived in them.

The mention of houses reminded the speaker of a further grievance. Modern houses, he said, were full of conveniences, but empty of comforts. They were noisy, and the present tendency was to save the servant and "strafe" the mistress.

The housing question was the problem of the moment, and the public was vitally interested, but architects stood aloof (has a professional assemblage ever before been openly accused of a deficiency of initiative?) whereas they ought to tell the public why they had not got houses. Mr. Frankau's own explanation was simple: "Scrap Government control. Till then industry is damned," and on this theme he elaborated.

There was a similarity between architects and novelists in that both felt the impulse to express their unhampered individuality. They must, however, be guided by tradition, and use it in relation to the public who paid them their wages. Above all, they should fight the tendency to intolerance. There was a tendency to scoff at everything modern, but it should be remembered that modern architecture was severely hampered by financial and labour difficulties.

The small builder especially deserved encouragement; above all, let the profession cling to individualism and fight for freedom from control.

A vote of thanks was proposed by Professor Richardson, who said that architecture, an elderly Cinderella, had discovered in literature her fairy prince. Architects found that literature played an important part in architecture, as every man who built wrote a book about it. Literature, from the Bible to Kate Greenaway in the seventies, had inspired architecture. But architects were the "medicine men," and it was for the public to take what they gave them.

Mr. Newton said he was offended by the assumption that architects were solely interested in housing, they were far more concerned with the expression of an idea. Let writers teach the public to seek for fine qualities in buildings.

Mr. Lawrence Dale thought that architects were inclined to disregard the public, but at the same time they should not pander to their vices. The same might be said of authors.

Mr. Manning Robertson, referring to Mr. Frankau's creed of individualism, thought that people should be restrained from annoying their neighbours, and ought not to be allowed to do as they like.

Mr. Moberly and Mr. Howard Robertson supported Mr. Frankau, who, in reply to Mr. Newton, said that he had dwelt on houses deliberately. People could not live in fields and go and look at council halls. He had tried to bring a breath of public air into the atmosphere of the common room. Planned towns were horrors. England was picturesque and beautiful, and expressed the character of her people.

Wishing to obtain further light on certain of the very intriguing suggestions made by Mr. Frankau, we sought an interview, which he was good enough to grant.

Asked whether he seriously considered that architects should take part in politics, as he had implied in his remarks on housing, Mr. Frankau repeated his contention—that everything that concerned the people ought to be of intimate concern to the architect. The profession was, he considered, far too "stand-offish," far too obsessed with lofty ideas of art. Architecture was nothing of the kind, he argued; it was a craft, and architects should come off their art-pedestal, mingle with the people, try to think and feel as the people thought and felt, and give it what it wanted.

He professed surprise at the dumbness of the profession in regard to its wrongs. Architects were admittedly not as busy as they might be, and yet their services were absolutely necessary if good houses were to be built. Why didn't they *do* something about it? asked Mr. Frankau; write, speak, agitate, anything rather than suffer in silence.

Asked whether his favourite doctrine of individualism had not very grave dangers, Mr. Frankau was emphatic in its defence. It must, of course, be governed by tradition, but within those limits every man should be free to express himself as he willed. If his building was fitted to its purp that was enough.

Mr. Frankau has evidently no use for pure art, lofty ideals leave him cold. Yet he is, on his own confessi a "best-seller." Fine craftsmanship no one would de him; what he does, he does extremely well, and demand for his work is enormous.

One wonders what would happen to English architect did it receive a leavening of his principles! E. N. B

# A Few Notes on Sir John Soane's Work

## By F. W. TROUP, F.R.I.B.A.

IN some respects Sir John Soane's buildings are so modern and up-to-date that we have to remind ourselves that exactly a century ago he was seventy years of age. He was an exceptionally practical architect, and it is curious to note how he combined his intimate knowledge of building work with the prevalent fashion of his day to be monumental, or to aim at that style by reproducing Roman and Greek monuments.

He suggests to my mind a likeness to Philip Webb, in the care with which he works out details and provides for the convenient working of whatever establishment he is called on to provide for. In all those high lantern lights, which surmount his domical rooms in the Bank of England, I believe that in every case the windows can be reached for cleaning without having to resort to ladders or scaffolding.

There are no windows or means of natural ventilation in those top-lighted rooms, except in the lanterns. To overcome this Soane built his supporting piers with flues in them. The heating of the building was done by means of large stoves placed where most effective, the smoke from the stoves being carried up one flue to a chimney, the flue in the next pier forming an inlet for fresh air. The rooms are now heated by radiators and I should imagine the ventilation has suffered from the change.

In Dulwich Gallery, another of Soane's works, we have a striking example of the knowledge and care he devoted to the proper lighting of these exhibition rooms. In no gallery in London can the glazed pictures be seen with less effort than at Dulwich. In fact, there are few galleries anywhere to equal Dulwich in that respect. His arrangement for the lighting has, however, been modified, and to some extent destroyed by modern alterations.

Soane's often quoted use of clay bottles or pots in place of bricks to build his domes is another example of his ingenuity. It was not an original idea, but it would not have been possible to carry these domes on such slender supports without this cellular structure, which must have reduced the weight to nearly half that of a solid brick dome. What a boon it would have been had the same idea suggested itself a century earlier to Wren. The Dean of St. Paul's would give a good deal now to be able to reduce the weight of the dome and of Wren's famous brick cone to one half their present weight!

Soane in his earlier training had the advantage of having been apprenticed to another practical architect—George Dance, Junr., architect of Newgate Prison. None knew better than Dance how to use his materials, and he was particularly sure of himself in the use of bricks. St. Luke's Hospital in Old Street is usually given second place in the order of merit among Dance's works—Newgate coming first. But in considering those two buildings, if we take into consideration the money that was at his disposal, I am by no means sure that the order ought not to be reversed. Just as Soane's domical rooms seem to me to be the prime architectural features of his design at the Bank of England, so was the brick vaulting at St. Luke's one of the most interesting features in that building. Although we have no evidence that Soane worked on the drawings for St. Luk Hospital, we know that it was finished five years bef Soane was appointed architect to the Bank of E land.

Much of the detail and finish of Soane's work see peculiar, and some of it even bizarre to our eyes. Bu make little of that. Very much of what some architects doing at the present day will fill our successors with won and possibly contempt 100 years hence. The trimmings architecture yield more quickly to the changing fash of the day—perhaps quicker even than the many reviv of styles through which we have passed within the last si years.

I have already referred to the custom in Soane's time reproducing ready-made orders and sometimes wh façades from Roman and Greek examples. Soane follov the fashion in this respect, and did it in a masterly way the exterior screen walls of the Bank. I am inclined think that his use of these classical features was not alw quite so happy in combination with the interior work t was so much more distinctively his own creation, althou one could readily quote both rooms and corridors where results were entirely successful.

The planning and arrangement of the various rooms parts of the building of the Bank of England are extrem fine, but in judging this particular part of Soane's worl must always be remembered that the site grew and enlarged from time to time until finally enclosed by surrounding screen walls. It was not a clean site on wh Soane had to work, else the general scheme would have b very different indeed from a man of Soane's calibre. So has been accused, or was accused at the time, of ruthl ness in his sacrifice of the work of his predecessor, Robert Taylor, but much of Taylor's work was what should call temporary structure, and I think Soane more than justified in what he did. In fact, he was re very conservative, and he showed great ingenuity in c bining previous work, provided it was sound work, with new additions.

All his own buildings, moreover, were permanent solid work, and little of it consisted of the lath and pla construction which Sir Robert Taylor used for his interi Even Soane's successor, Cockerell, who is responsible the large room in the south-west corner of the Bank, roo it in timber with lath and plaster ceilings, and within rec years the timber of this roof has had to be replaced heavy steel girders.

It is to be regretted that the proposed reconstructio the Bank seems to make imperative the sacrifice of so m of Soane's fine planning and the arrangement of his roo and courts—depriving us of what Lethaby described the only "Palace" within the boundaries of the City London.

It was from Lethaby, none the less, that came the suggestion that the way to deal with any rebuilding sche for the Bank, was to raise up a new structure or new bu ings, set back from and within those familiar screen w designed by Sir John Soane.

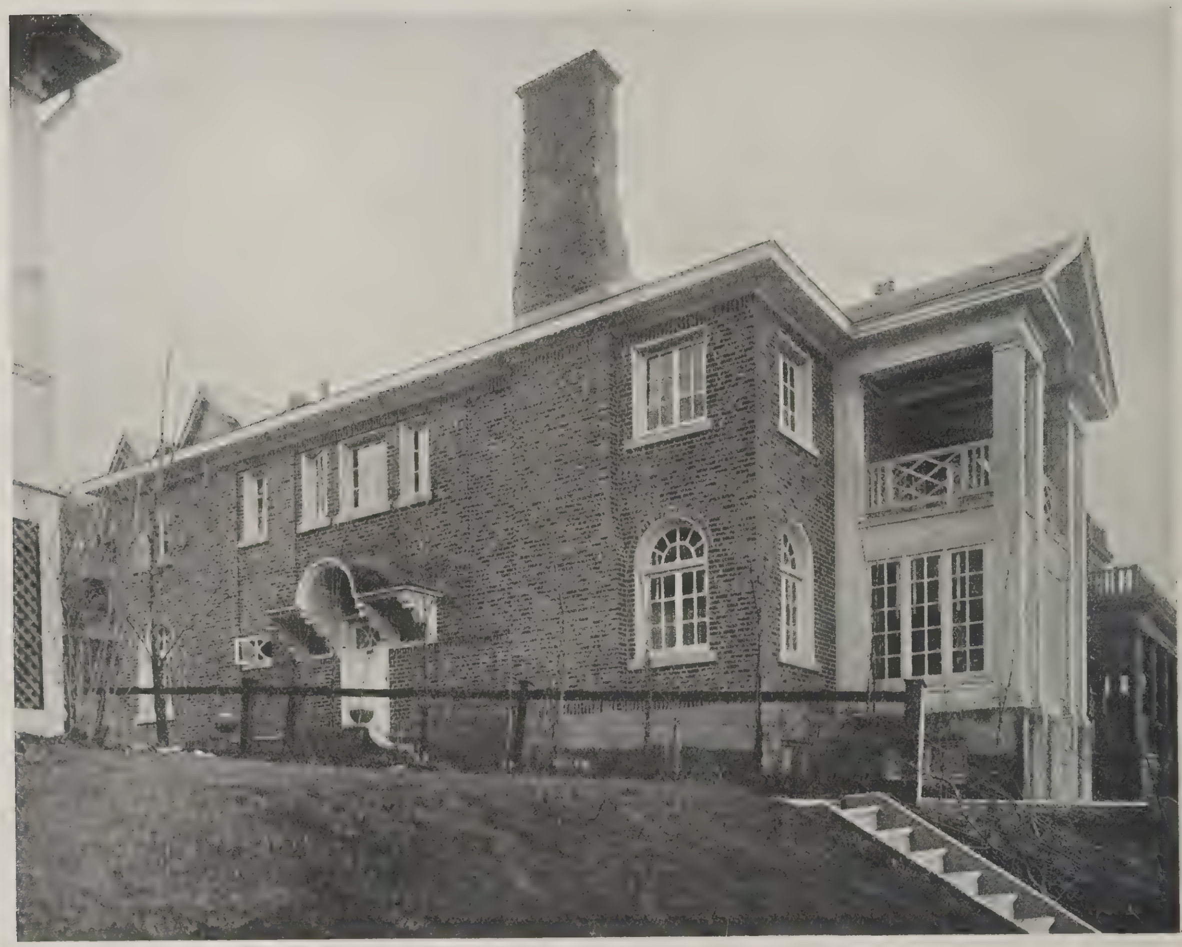
# Some Canadian Houses

### By SEPTIMUS WARWICK, F.R.I.B.A.

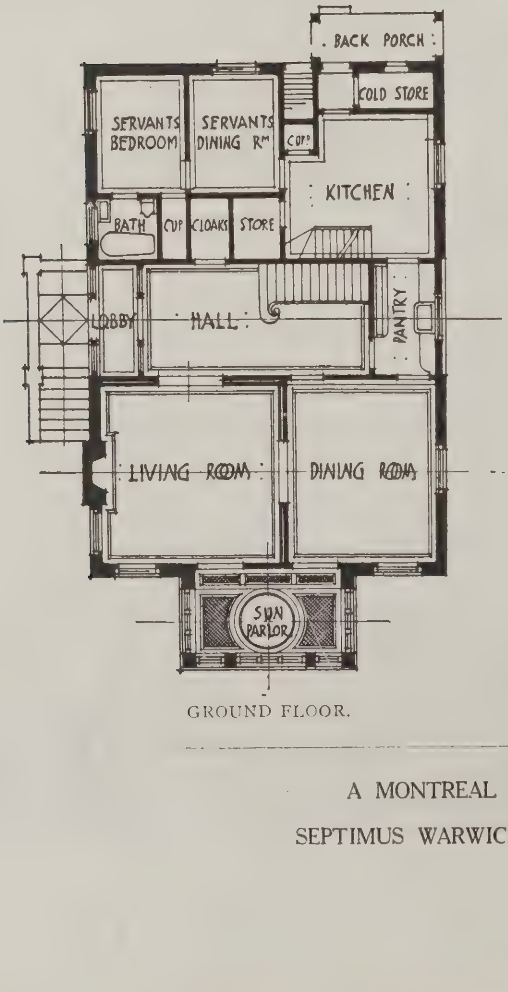
THE average Canadian house differs in several respects from its prototype in England. In the erection of the house no external scaffolding is used. It is the custom to build the lower walls concrete up to the ground-floor level, and when the ndations are prepared to erect shuttering all round the ernal walls, and to place the ground-floor joists in ition on this shuttering. The joists are then covered h rough boarding laid diagonally, and the platform thus med is used for pouring the concrete to the lower walls, storing the bricks, and for the bricklayer to work from. the work proceeds trestles with planks are erected on platform, and when the first-floor joists are built in another platform is formed of rough boarding and the work is carried on in a similar manner. The ceiling joists on the upper floor are again boarded over, and the roof is constructed from this boarding. The rough boarding is cleared off on each floor after the plastering has been completed, and hard wood floors are nailed direct to it to form the finished floor.

Only the external walls above the ground floor are of brick, the internal walls all being of wood. The chimney shafts, when not in the external walls, are built independently without brick cross walls. Central heating is always installed in the houses. The fireplaces are used mainly as architectural features, and are invariably

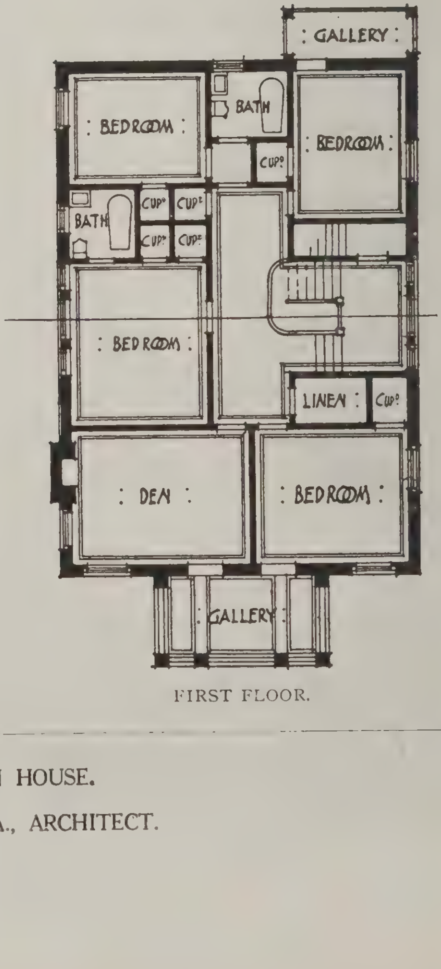
THE STAIRCASE IN A MONTREAL SUBURBAN HOUSE.



A GENERAL VIEW



GROUND FLOOR.



FIRST FLOOR.

A MONTREAL SUBURBAN HOUSE.

SEPTIMUS WARWICK, F.R.I.B.A., ARCHITECT.

rranged to burn wood logs. The roofs are designed in a mple manner without internal valleys on account of the ıow.

In the larger houses a slight steel construction is sed in the centre of the house, and in the smaller nes a steel beam is introduced for stiffness in the round floor, but wood construction is general internally bove this level.

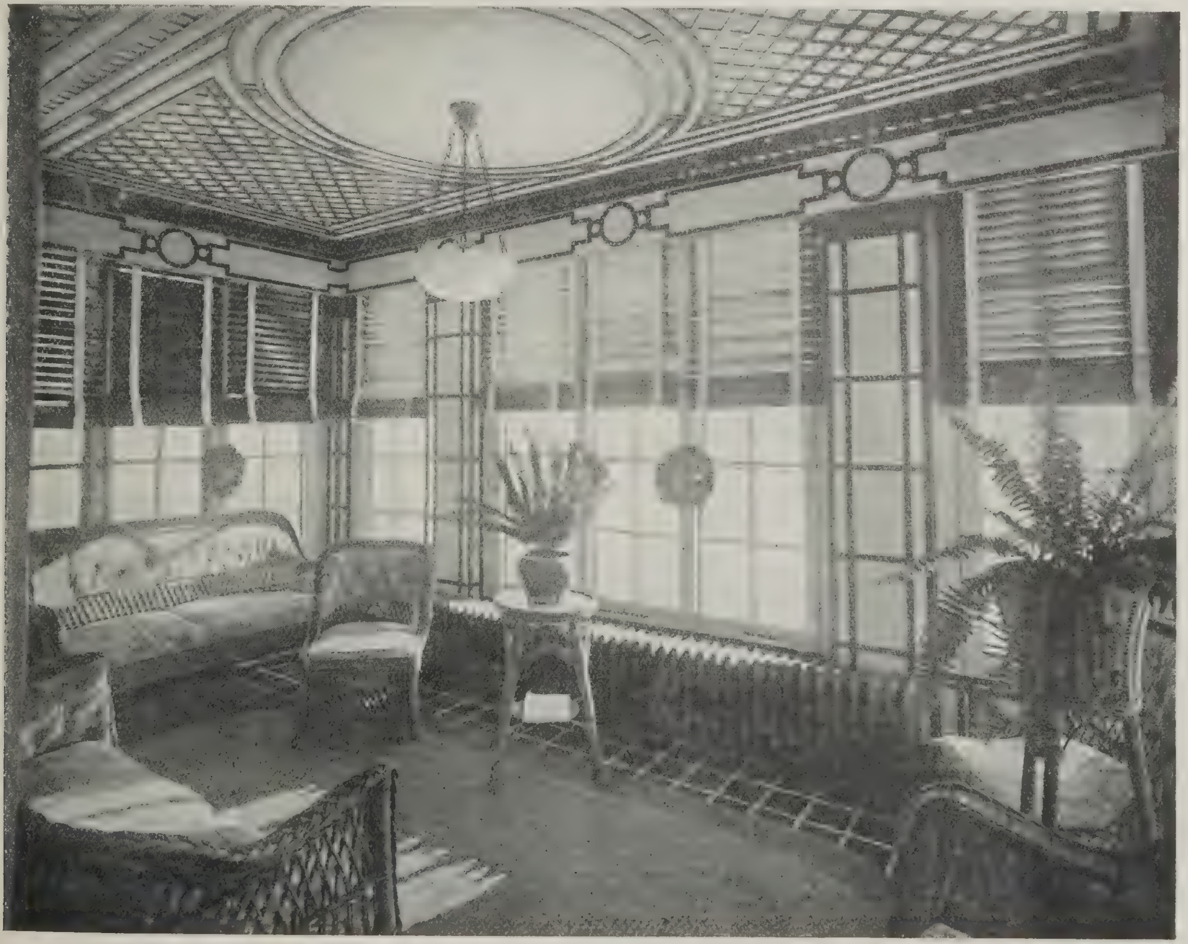
The number of servants employed by the average anadian household is less than in England. The servants et higher wages and do more work, their duties not being pecialized to the same extent as in England.

A house similar to the one illustrated on opposite page ; efficiently run with one maid. The kitchens are planned lose to the dining-room, with a well-fitted serving-room etween. This serving-room is always a fair-sized room, ontaining a sink, etc., and numerous cupboards with lazed upper sliding doors and wood doors under. The ervant's bedroom, the bathroom, and the sitting-room are laced on the ground floor near to the kitchen; except in he larger houses, where the servants' accommodation ollows the English practice, and is placed in the roof, a nen shoot is provided with openings on all floors to disharge direct into the laundry in the basement. Wardobes as furniture are seldom used, cupboards being fitted o each bedroom instead. Each fireplace is provided with separate flue with an opening in the hearth, so that the shes can be dumped direct to the cellars.

All the houses on the upper level of Montreal have magificent views over the city to the River St. Lawrence. n consequence, an outlook-room facing south, and known s a sun-parlour, is invariably insisted on by the clients, nd in most cases this room becomes the main architecural feature of the house. These outlook-rooms, on ccount of cost, are built of wood. The architects' ingenuity is taxed to provide a satisfactory treatment as the rooms are generally of a good size and much too large in proportion to the rest of the house. Internally, however, when comfortably warmed, they form a very pleasing feature of home life. Placed between the living- or drawing-room and the dining-room they can be used for breakfast and tea, and for coffee after other meals. They are easily the most frequently used rooms in the house, and much care is expended on their interior decoration.

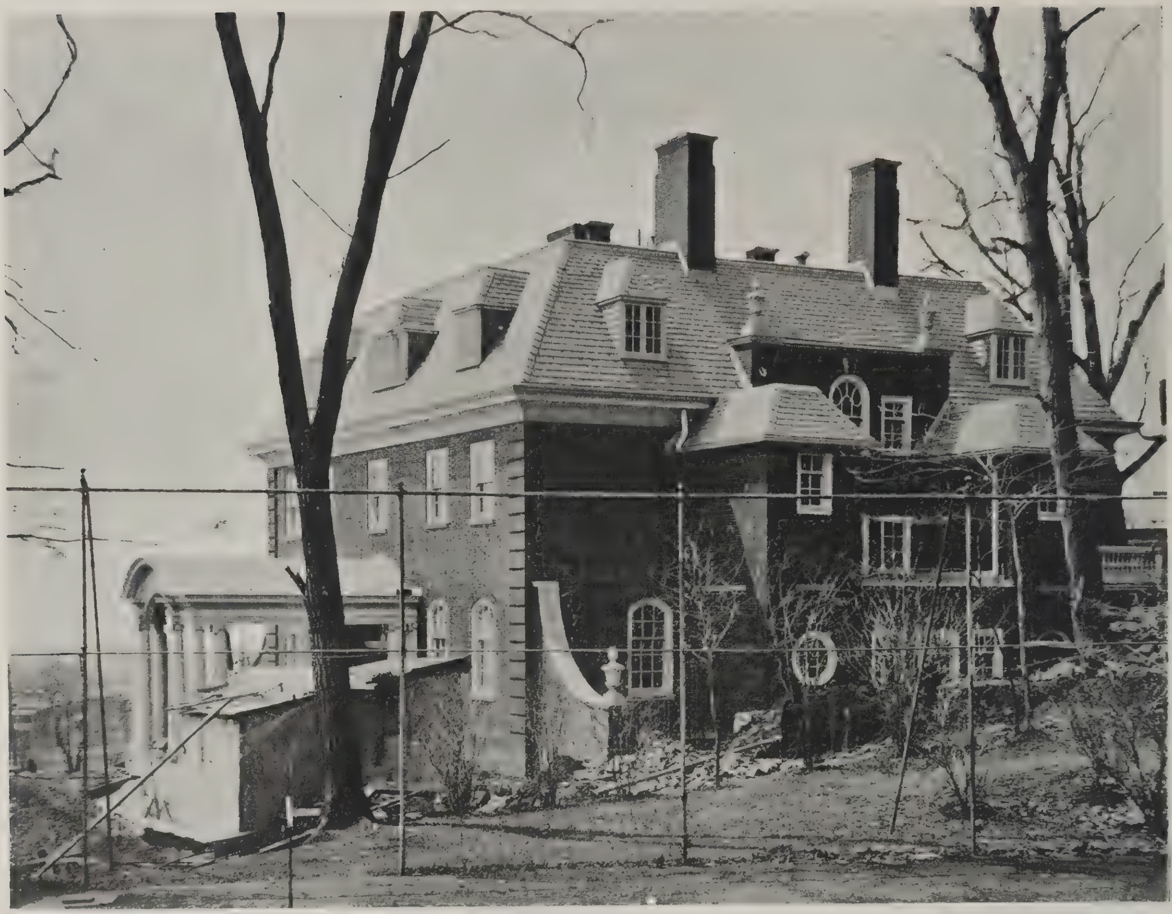
In the smaller country houses found along the lake shore the lower external walls are constructed of concrete or rough field stone, and from the ground-floor level both internally and externally in wood. In the house illustrated on page 477 the external walls are of 12 in. by 3 in. planking laid on end. This construction is not usual. Ordinary studding is generally used at 12 in. or 16 in. centres. In this case the house was on the site of some existing houses constructed in this manner, and the old timber was utilized in the new house. The external face of the wood was covered with tar paper, upon which weather-boarding was laid direct. The internal face of the wall was covered with B.C. fir panels laid on fillets, and the frieze and ceilings covered with Beaver Board with wood strips. A feature of most of these houses is made of a large veranda overlooking the lake.

The larger country houses are not very different on general lines to the usual English country houses. A notable exception is that sliding doors with large openings are used between the principal rooms and the hall and staircase, the ground floor thus becoming one large room, only divided from the servants' quarters with solid partitions. The windows of both the city and country houses are provided with double sashes, the external sashes being taken down during the summer and refixed every winter.

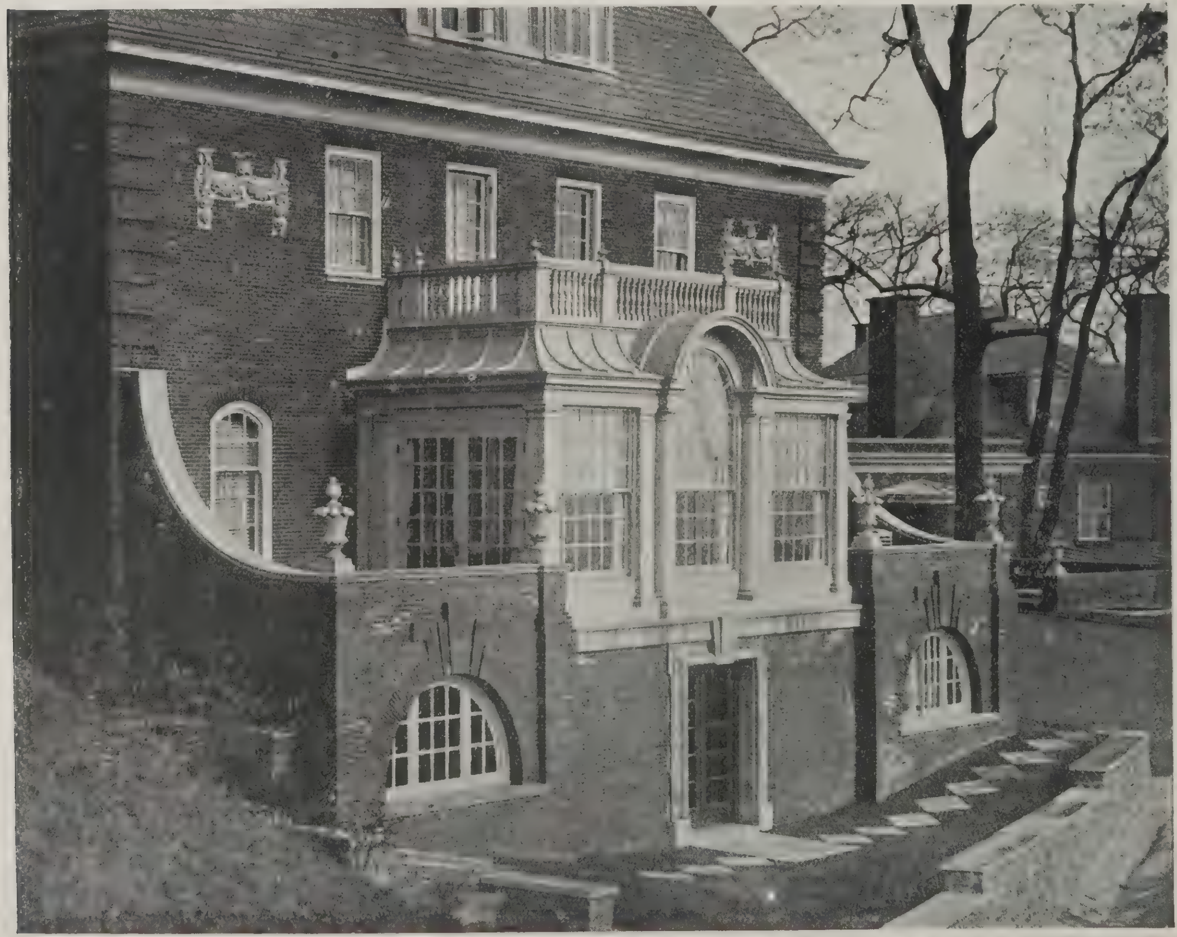


THE SUN-PARLOUR OF A MONTREAL SUBURBAN HOUSE

SEPTIMUS WARWICK, F.R.I.B.A., ARCHITECT.



THE BACK ELEVATION.

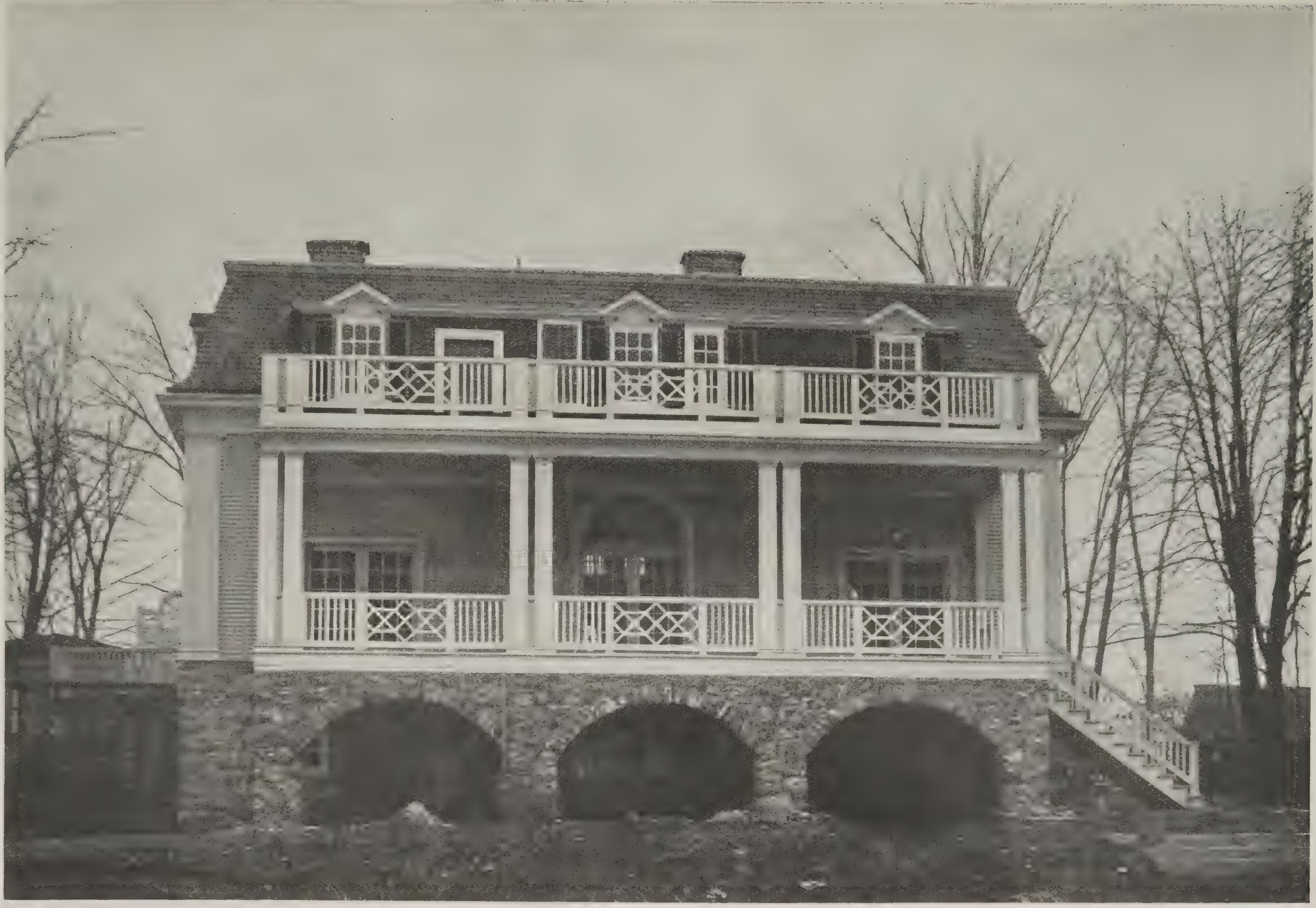


THE SUN PARLOUR.

SENATOR WEBSTER'S HOUSE AT MONTREAL. SEPTIMUS WARWICK, F.R.I.B.A., ARCHITECT.

# Colonial Architecture. 2.—House at Dorval : The Lake Front

Septimus Warwick, F.R.I.B.A., Architect



A large veranda is a striking feature of most of the small country houses along the lake shore. The external walls of these houses are of concrete or rough field stone up to the ground-floor level and then of wood. In the house illustrated an unusual form of construction, described on page 475, was adopted.

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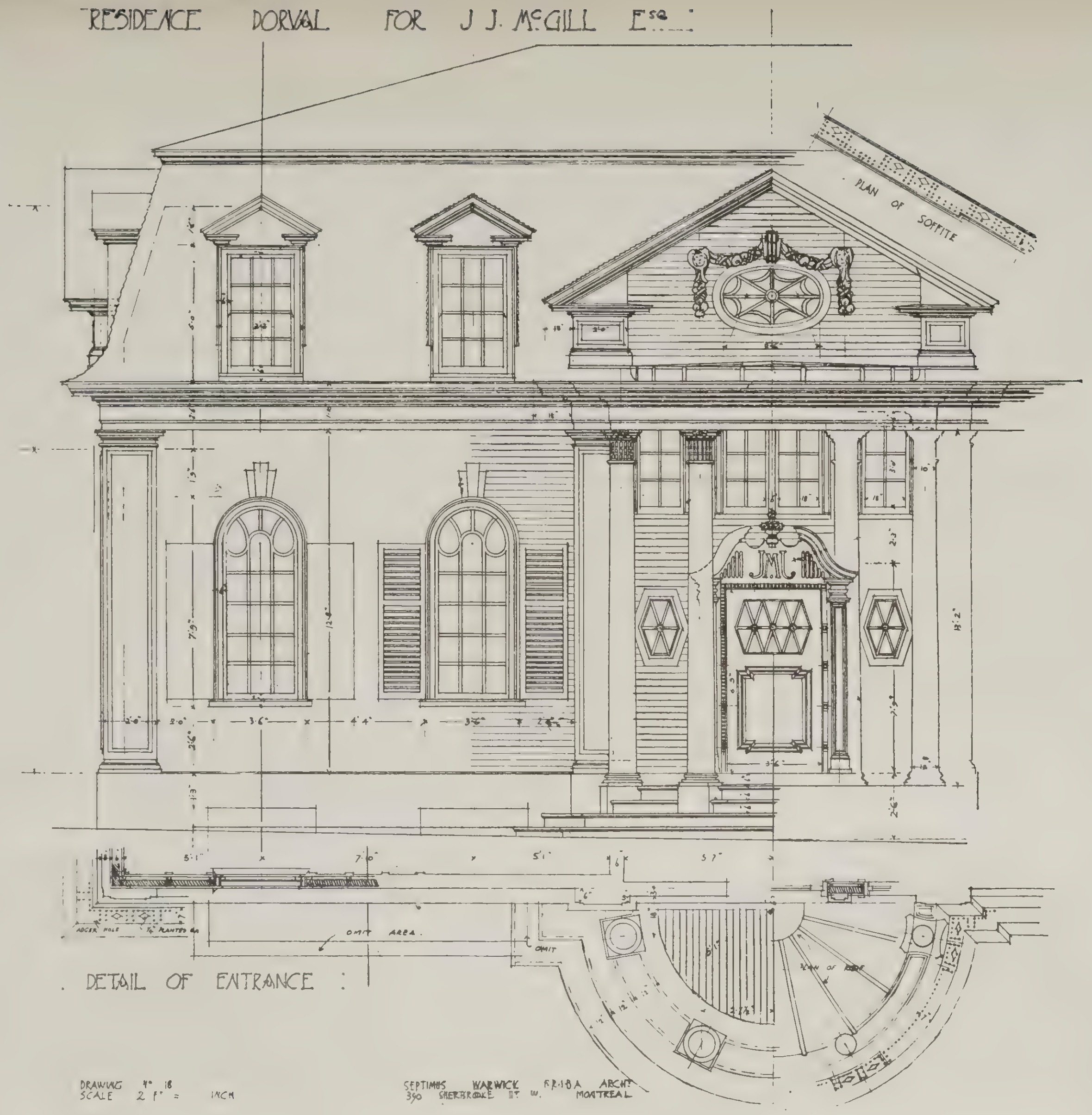
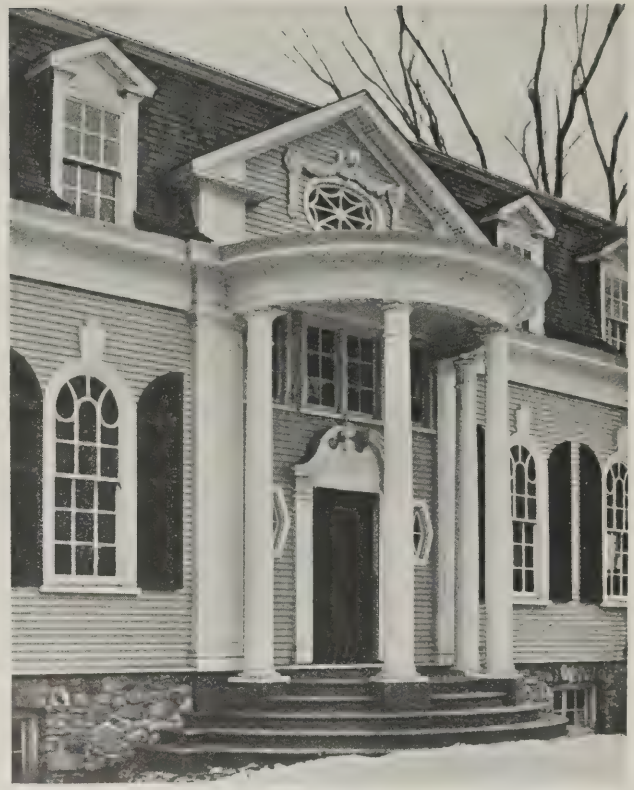
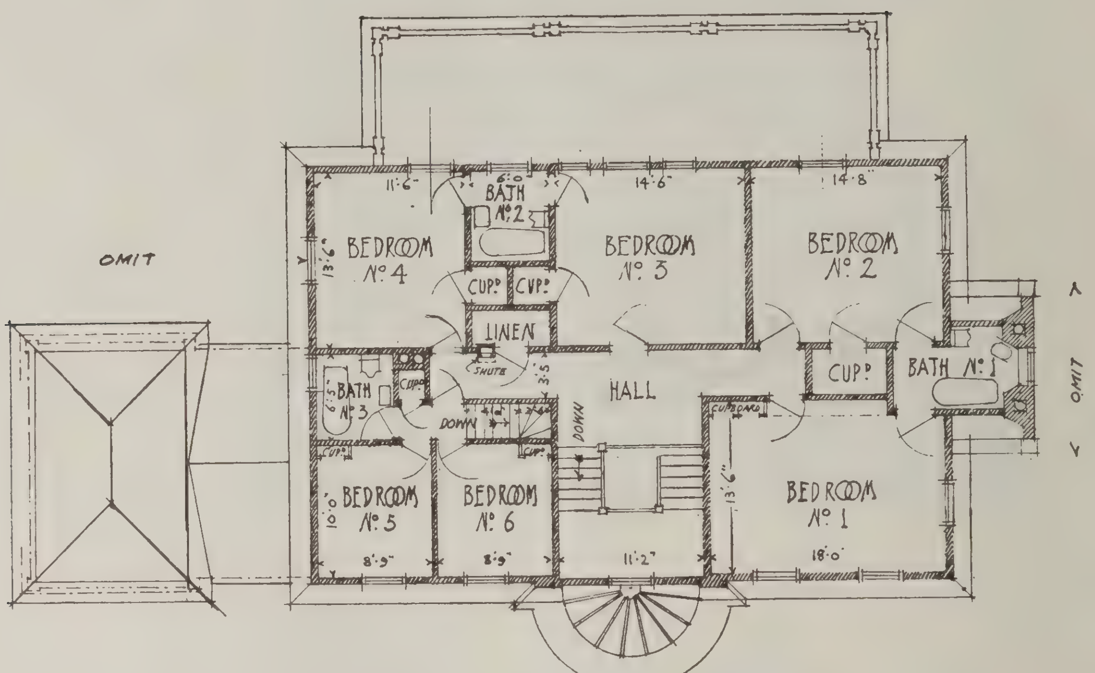


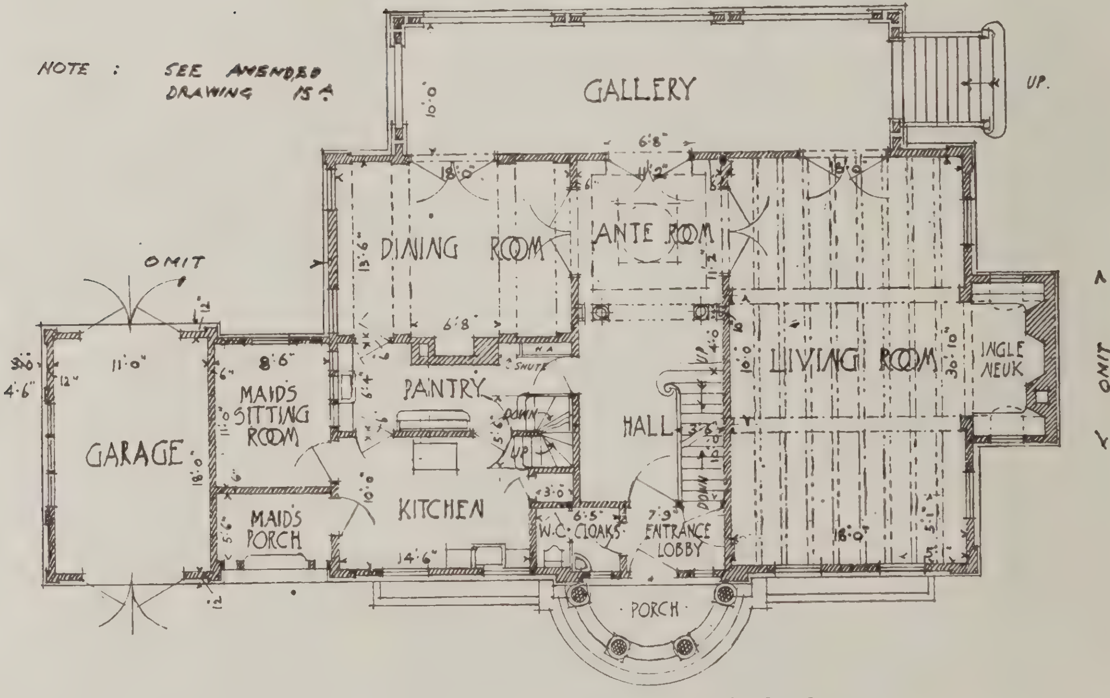


VIEW OF ENTRANCE.

HOUSE AT DORVAL: DETAIL OF ENTRANCE SEPTIMUS WARWICK, F.R.I.B.A., ARCHITECT.



: FIRST FLOOR PLAN :

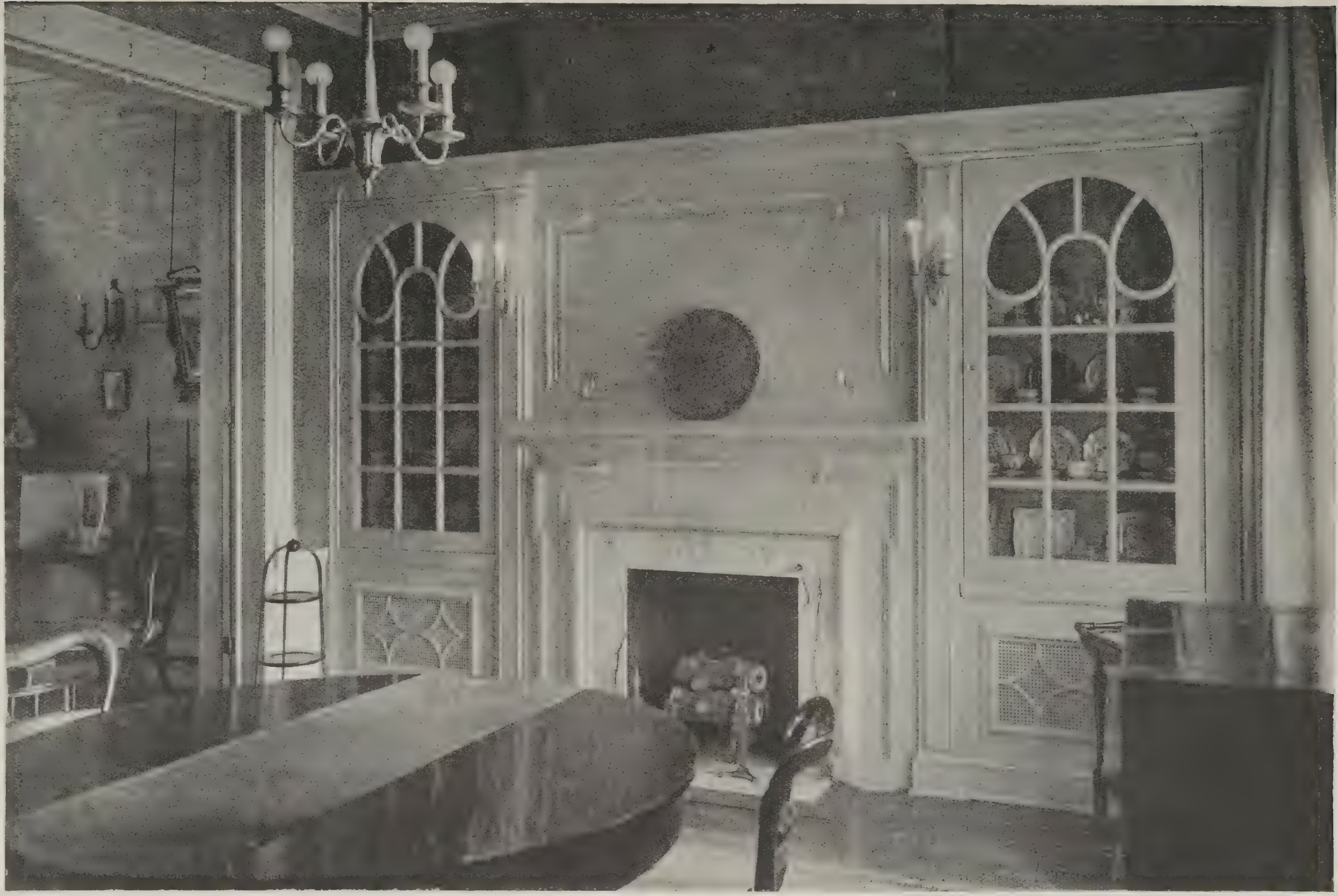


GROUND PLAN :

HOUSE AT DORVAL : GROUND- AND FIRST-FLOOR PLANS.
SEPTIMUS WARWICK, F.R.I.B.A., ARCHITECT.

## Colonial Architecture. 3.—The Dining-room of a House at Montreal

Septimus Warwick, F.R.I.B.A., Architect



Central heating is always installed in Canadian houses, and the fireplaces, which are invariably arranged to burn wood logs, are used mainly for architectural effect.

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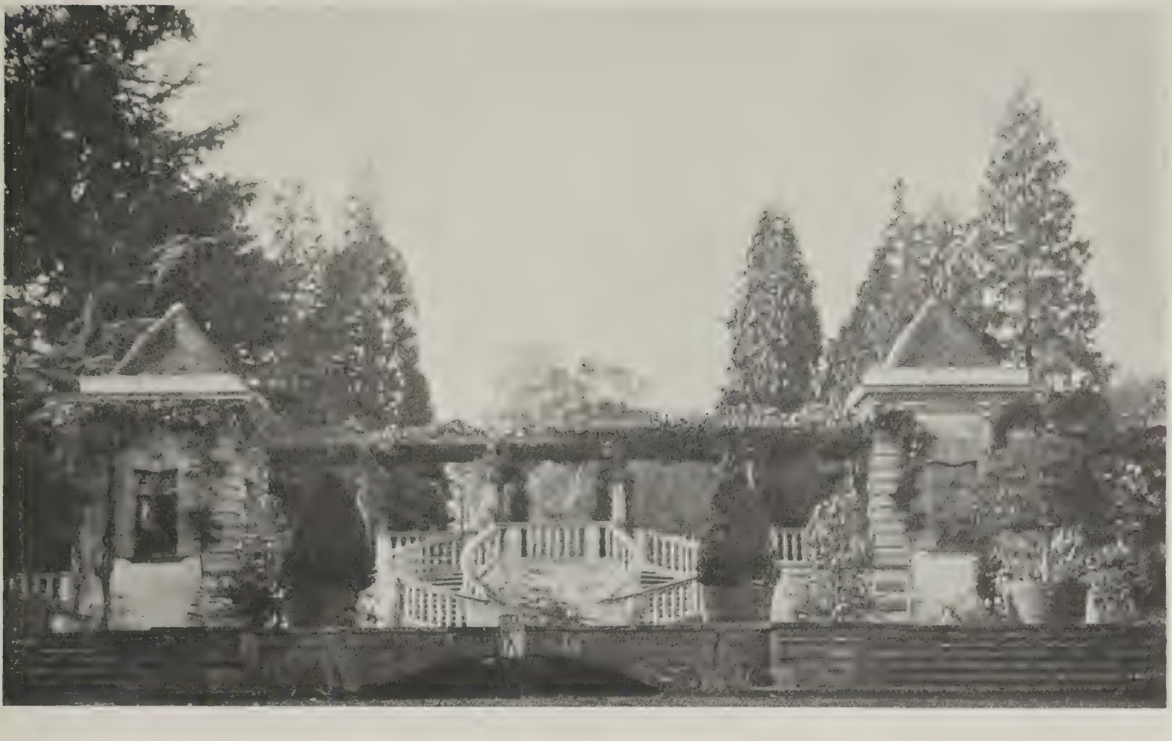


THE PERGOLA.

# Binfield: A Recent Example of Garden Design

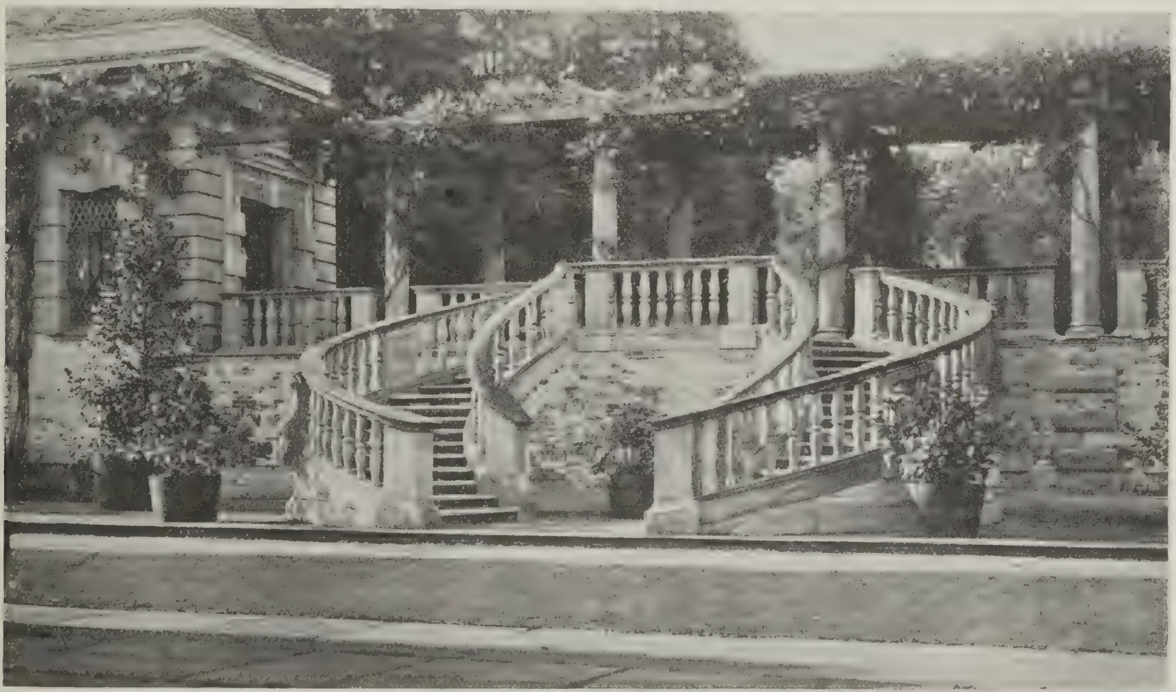
## OLIVER HILL, A.R.I.B.A., Architect

THE part of the gardens at Binfield illustrated in this article comprises a series of some half-dozen architecturally treated courts isolated by a natural ravine from the remainder of the grounds. hey are arranged in a setting formed of some fine groups f matured trees standing around the site of an old house hat had been demolished.

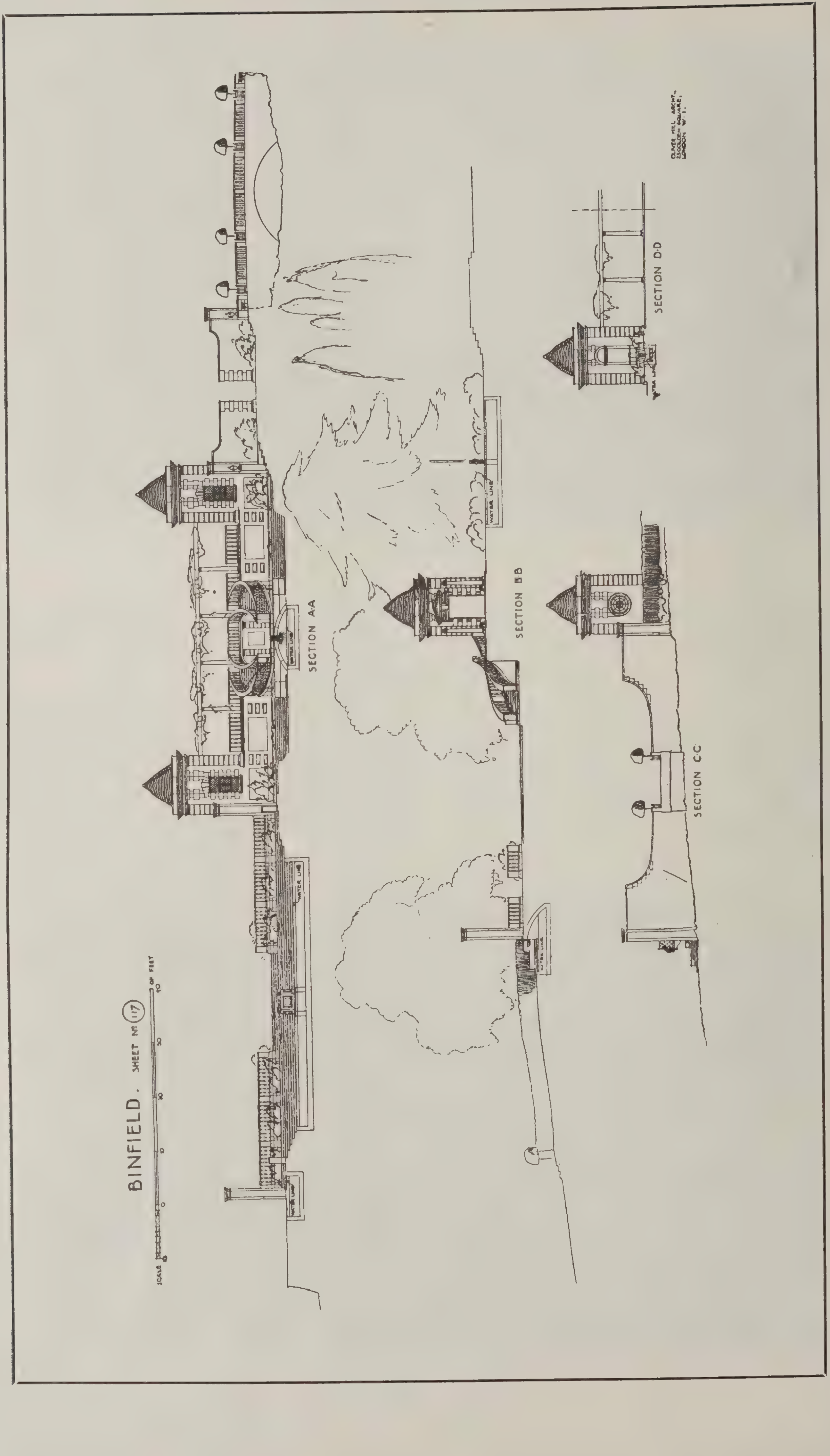
The intended idea was that this group of formal courts should form a kind of focal point amidst the much larger natural grounds and also become a pleasing approach to the park beyond.

A bridge was thrown across the ravine, and the first court comprises a formal setting of shaped walls in whitened 2-in. brickwork, to form a background to the magnolias, figs, vines, and other large-leaved varieties planted here.

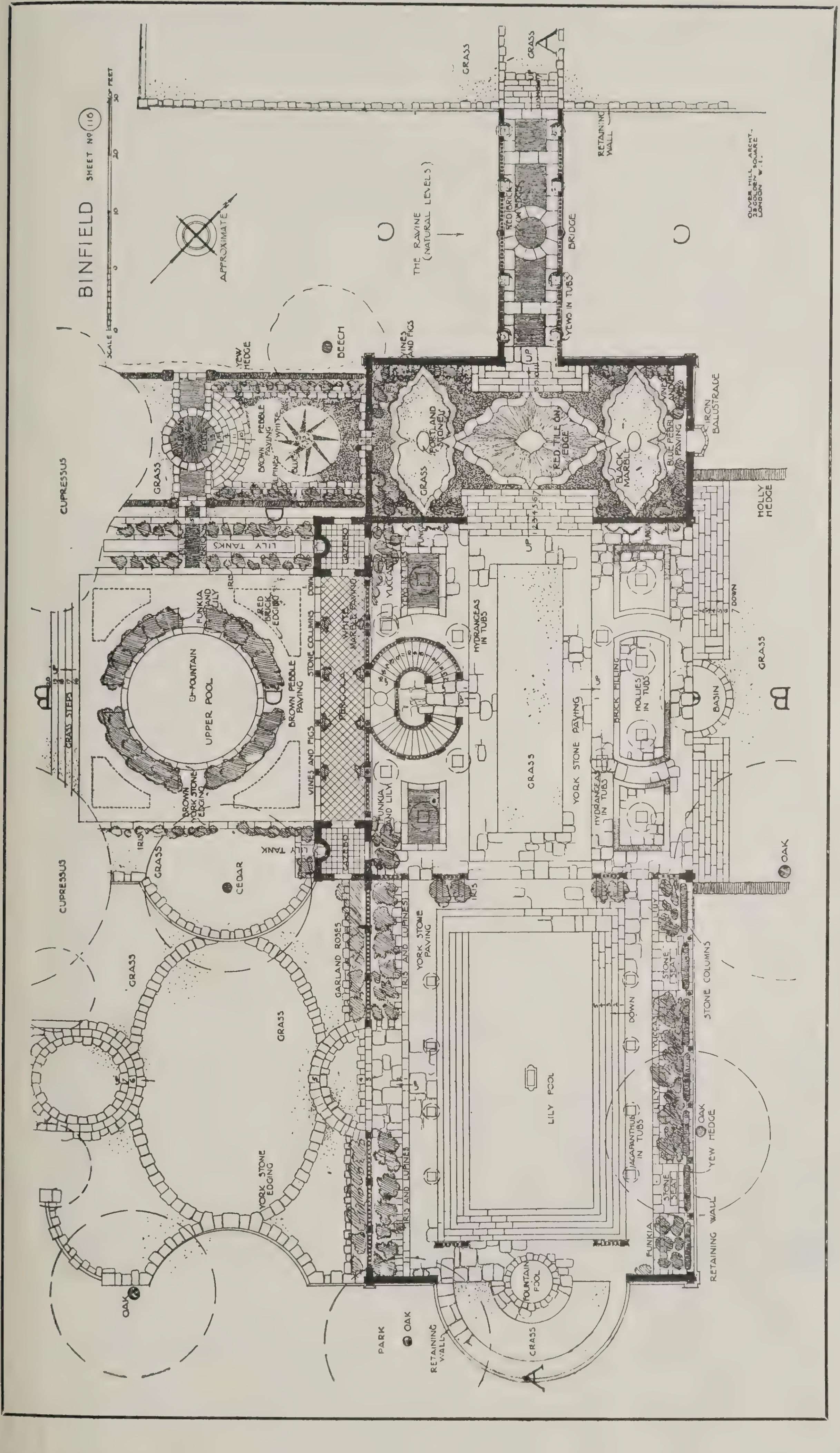
The paving is constructed of panels of tile and turf having



STEPS UP TO PERGOLA.


BINFIELD. SHEET No 117
SCALE 10 0 10 20 30 40 OF FEET
SECTION A-A
SECTION B-B
SECTION C-C
SECTION D-D
WATER LINE
OLIVER HILL ARCHT., 23 GOLDEN SQUARE, LONDON W. 1.

MOORE CLOSE: SECTIONS OF GARDEN LAY-OUT. OLIVER HILL, ARCHITECT.



MOORE CLOSE: LAY-OUT OF GARDEN. OLIVER HILL, A.R.I.B.A., ARCHITECT.

shaped edging of Portland stone and black slate, with fillings of picked blue beach pebbles.

Long vistas in four directions centre through the next or green court.

From here rise the horseshoe stairs to the upper court with its circular pool, gazebos, and connecting pergola. Above this again is the tennis court with its fine setting of cypress-like cupressus.

Continuing through the centre court one comes to the pool court. The figure for the pedestal in the centre is not yet completed.

From the centre court, opposite the horseshoe stairs, a way leads through the undulating turfed and holly-edged semicircle, by receding levels, to the wild garden through a spinney, at the bottom of which lies a naturally formed water garden.

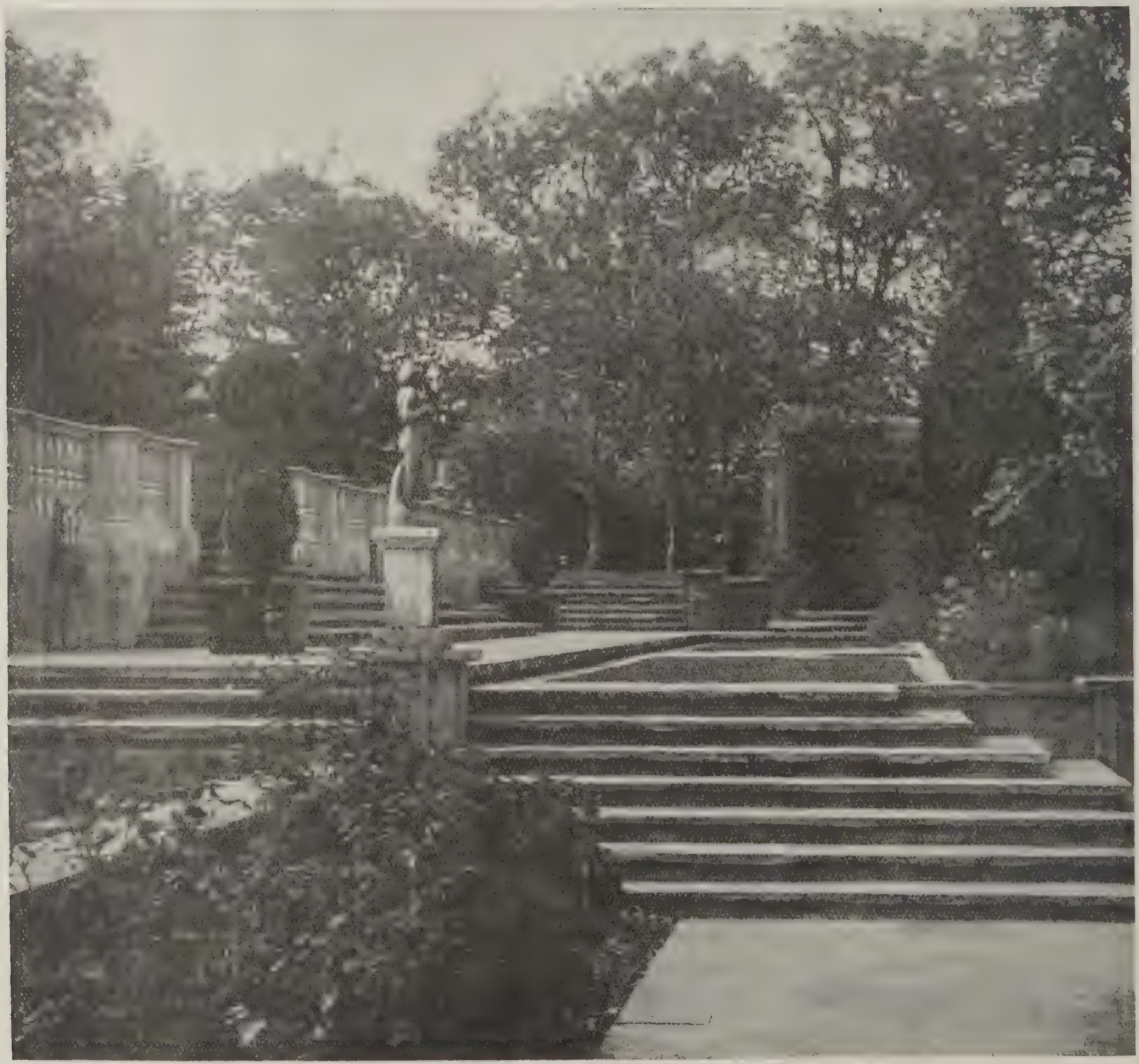
## The A.A. Exhibition

Some very beautiful photographs and other illustrations of gardens, old and new, including a number of Binfield, are now on view at the Architectural Association, Bedford Square. The exhibition includes work by Sir Edwin Lutyens, Sir Reginald Blomfield, Mr. Paul Waterhouse, Messrs. Romaine Walker and Jenkins, Messrs. Wratten and Godfrey, Mr. Clough Williams-Ellis, and Mr. Robert Atkinson, who also shows some delightful water-colours. Ther are old engravings of such famous English examples c garden design as Hampton Court, Hatfield, and Wiltor while the Italian school is represented by the Boboli, Florence, the Ville Carlotta, the Castellazzo dei Arconati, an the Villa Gamberaia, near Florence. The fame of France i well upheld by Versailles and Marly.

In addition there are some charming water-colour by Miss Ella du Cane, of the Generalife, Granada, and th Chateau Hydra, Algiers.

Altogether the show is a most excellent one. Ancien and modern are seen in close juxtaposition, and comparison are inevitable. Modern English work is, however, seen t great advantage. About those vast formal spaces of th French and Italian Renaissance there always seems to b something a little too overwhelming. Their very scal dwarfs the people who walk in them. The English traditio is much more in accord with humanity. Hampton Court in spite of its size, has a very homely look about it, just a the palace, to which it is the setting, has the appearance o a large, comfortable mansion.

Modern English work of the formal school has just th same charm. English architects have a way of handlin geometrical forms so as to give them a delightful sort o picturesqueness and informality. This is clearly shown i the A.A. Exhibition.

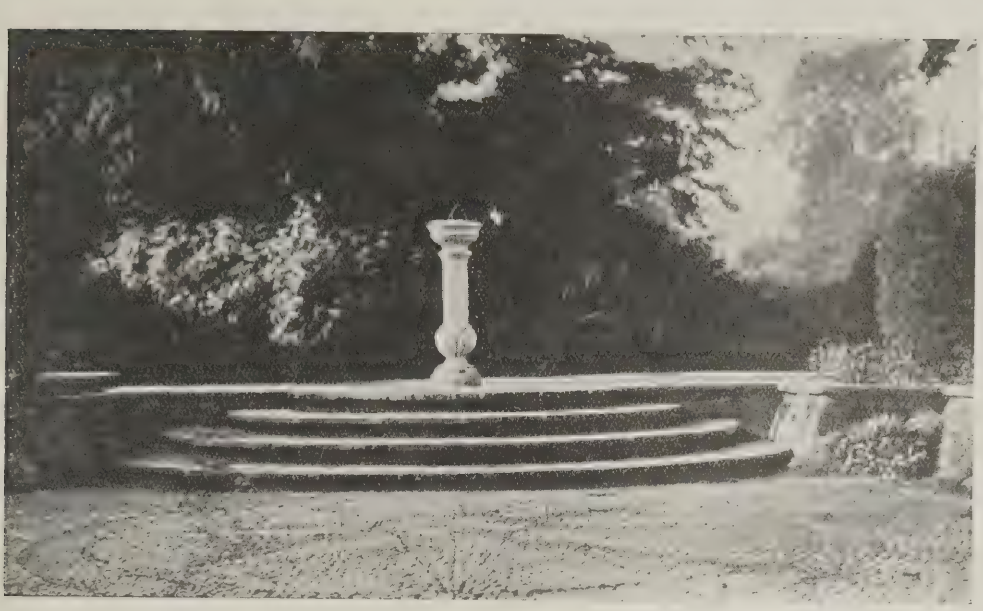


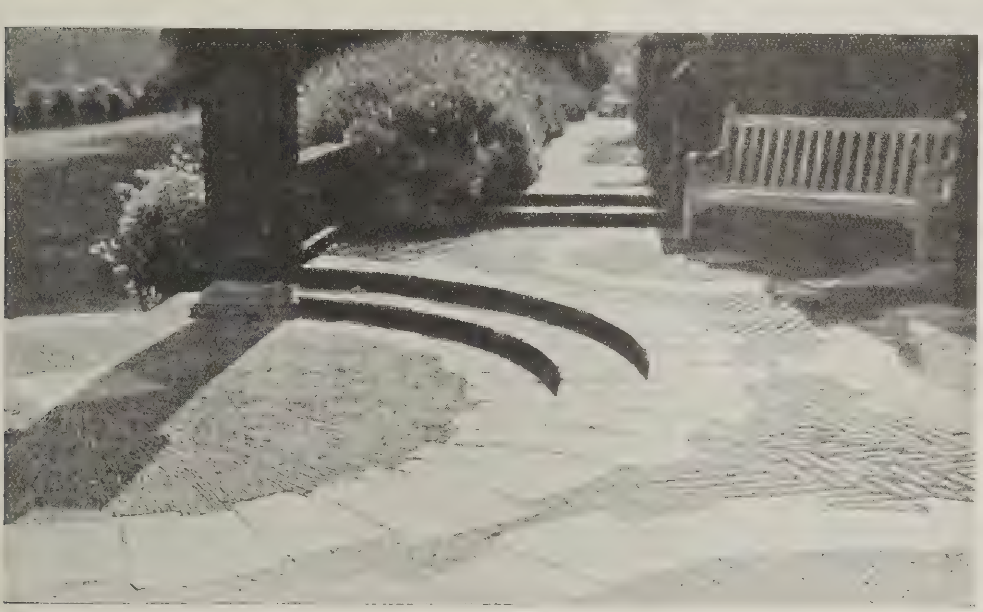
A VIEW LOOKING NORTH.

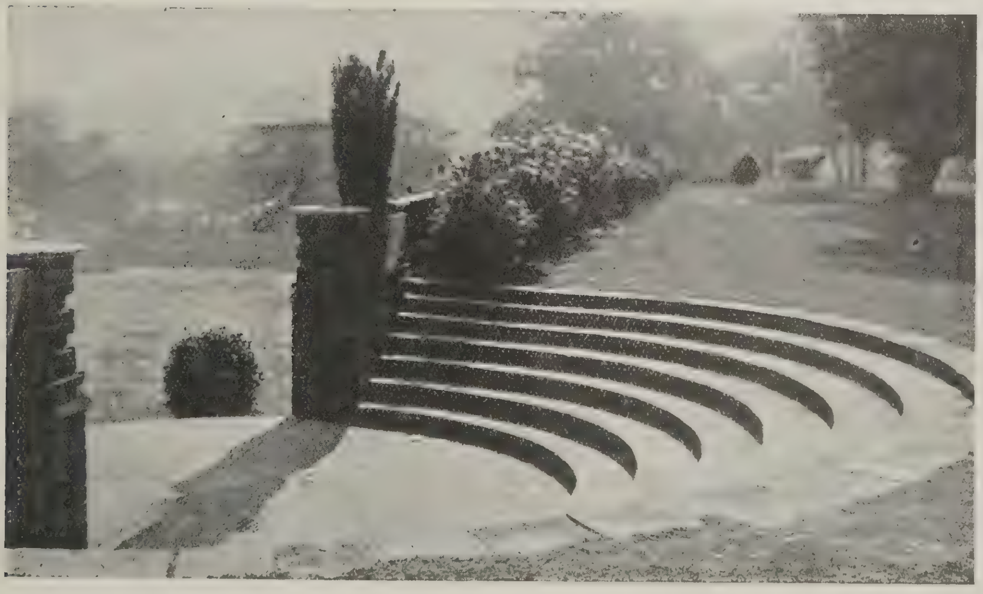
MOORE CLOSE: THE GARDEN

# Garden Architecture. 1.—Moore Close, Binfield

Oliver Hill, A.R.I.B.A., Architect







THREE ASPECTS.

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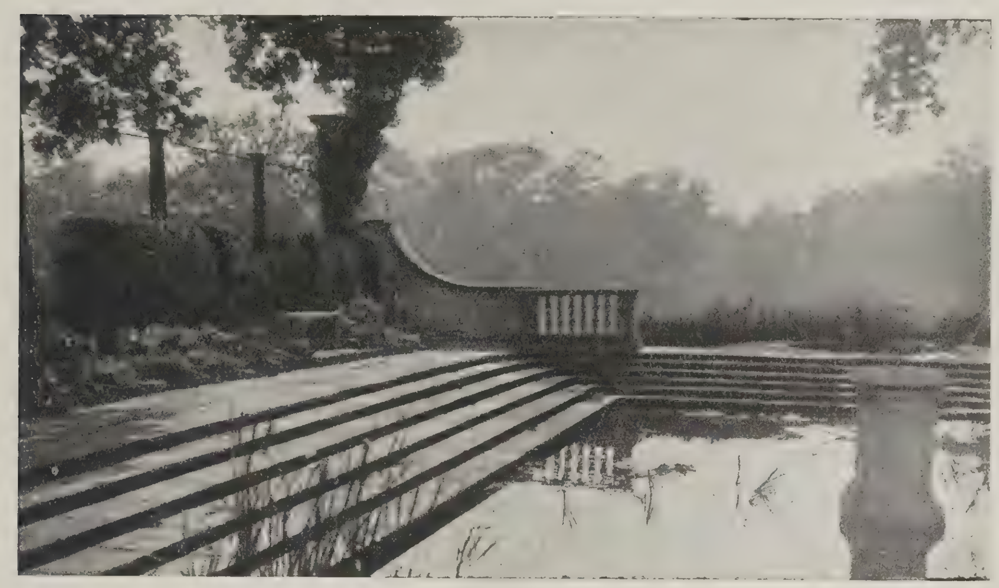
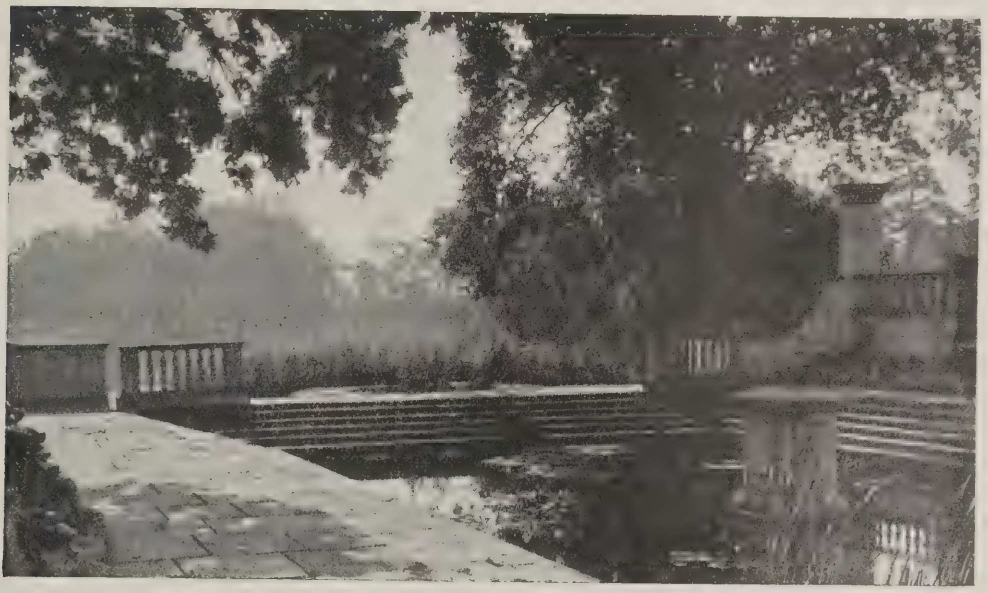
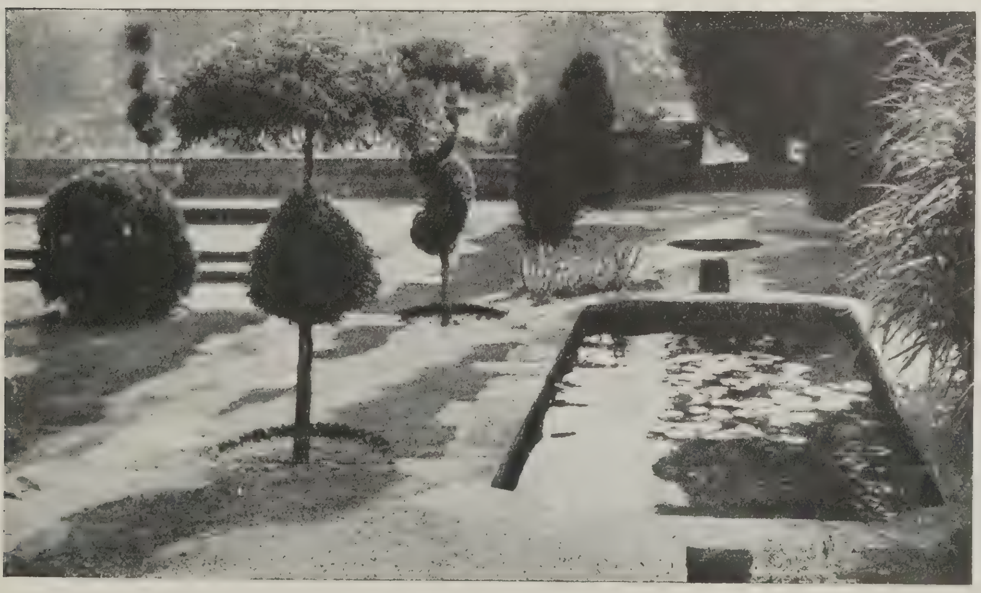
# Garden Architecture. 2.—Moore Close, Binfield

Oliver Hill, A.R.I.B.A., Architect







LILY POOLS AND LILY TANK

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# Jniversity College School of Architecture

## The Policy of the School and the Work of the Students

HIS week we illustrate some representative examples of the work of the students of the University College, ndon, School of Architecture. To assist student at the outset of his career, a riculum has been arranged by the ool, not only to ensure training on a tematic basis, but also to obviate, as as possible, the inevitable hiatus that urs between ordinary school education l academic study.

t is recognized that building is as much art as it is a science, and that archits are artists who need to grasp not y the realities of the factors governing ir work, but also the technique assoed with each particular branch of it. is impossible, in so far as building is cerned, to define where art begins and ere science ends. An architect more n any other artist should be instructed associate his work with the conditions modern life; he must be familiar with underlying principles of the sister s of painting and sculpture. His wledge of building should be based n a close appreciation of history, lition, and research; moreover, regardthe scientific aspect of his profession, must be guided to regard construction being organic and functional and not eparate and independent theory.

he freshman entering the School is first instructed in means of expression: he attends lectures on draughtsmanship and presentation. These studies are followed by lectures on architectural history and theory illustrated by lantern slides, blackboard demonstrations, and diagrams, as well as by visits to the British Museum. At a convenient stage, a definite course of reading is arranged in connection with the departmental library and the Yates library, having as its aim a knowledge of architectural literature bearing upon the subject.

Directly a student becomes familiar with the rudiments of draughtsmanship, sketching, geometry, and perspective, and has attended the opening lectures on building construction, he is encouraged to prepare designs of an elementary character, and is brought to realize the principles characteristic of building throughout the ages.

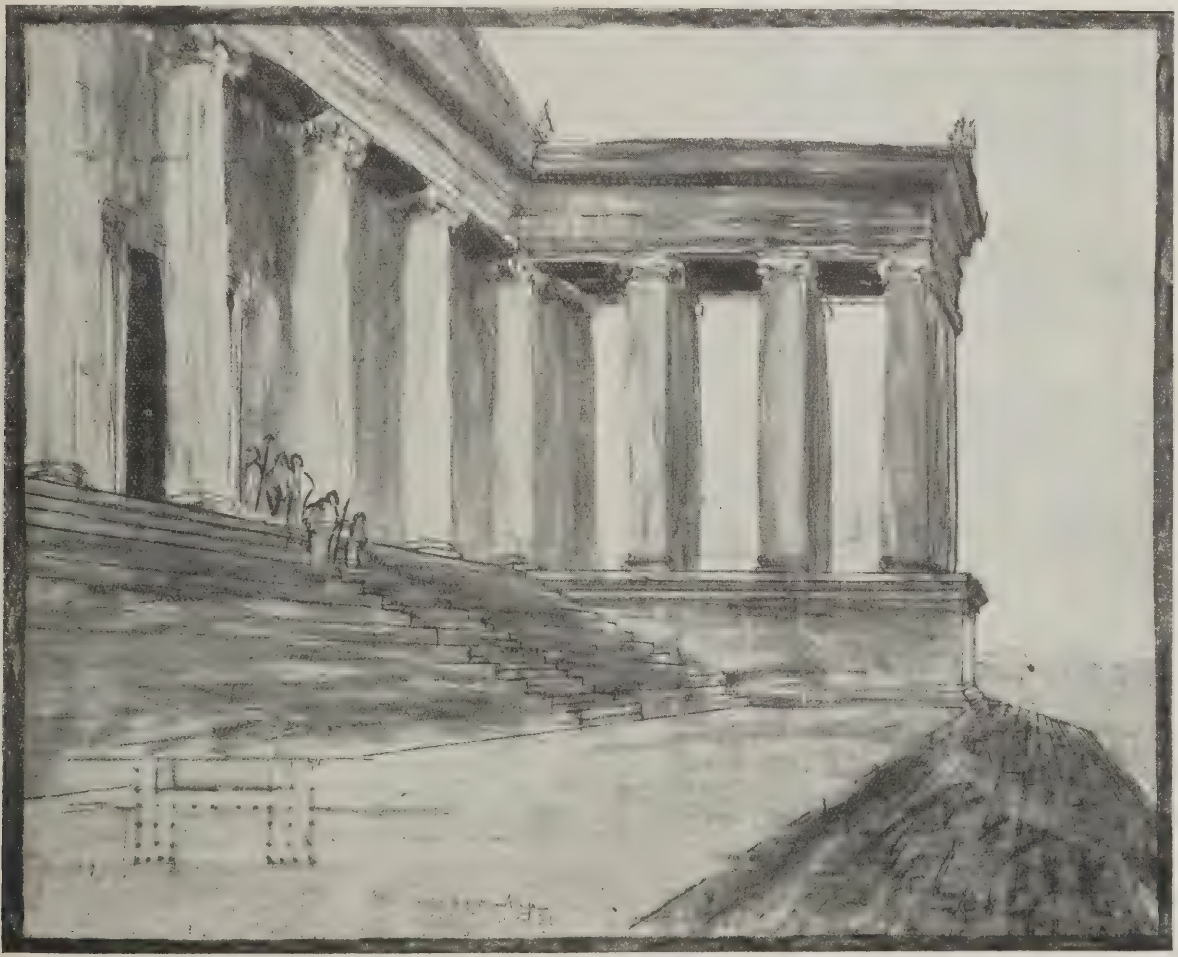
The whole of the first term is devoted to encouraging appreciative interest towards building on the part of the student, and to showing by the correlation of lectures and studio work how one branch is interdependent on another.

Work in the second and third terms follows closely on the lines of that previously undertaken, with the exception that the studies gradually become more advanced and more closely related. At all stages the lessons of tradition are pointed out and stimulus given for imaginative renderings. The summer vacation affords the student an opportunity to increase his knowledge of old work from the study of the list of buildings arranged for his guidance.

During the vacations, students have specific work allotted to them, which includes studying and sketching historical examples of art generally in London and the country.

By the time the student reaches the second year, he is ready to undertake simple essays in historical design combined with subjects in which prominence is given to construction. These studies widen the student's previous acquaintance with the architecture of Ancient Civilizations and extend to the Renaissance and modern times. Special lectures on these subjects, by Professor Gardner and others, have been arranged; also on the Theory of Composition and the History of the Renaissance in Italy, France, and England.

During the third year students taking the certificate course qualifying for exemption from the intermediate examination of the R.I.B.A. concentrate mainly on design and constructional subjects, and prepare a specified number of designs combining construction with require-



A MONUMENTAL ENTRANCE TO A SACRED ENCLOSURE.

SIX-HOUR SKETCH DESIGN: GREEK STUDY. BY H. M. ARMITAGE.

ments likely to be encountered in modern practice.

Work during the fourth and fifth years is confined to courses specially arranged for students taking the degree and diploma courses. In addition to advanced lectures on construction, structural engineering, and professional practice, students have to prepare designs at intervals to meet stated programmes.

Although architectural drawings are merely a means to an end and not the end themselves, the ability to express ideas on paper in a satisfactory and attractive manner is essential to the architect. Architectural drawing is fully dealt with in the architectural studio, but, in addition, students sufficiently advanced may draw from the life in the Slade School. The three great arts of painting, sculpture, and architecture are thus housed side by side. Painters, sculptors, and architects are sometimes called upon to collaborate, and would be more frequently so called upon if they better understood one another's work. The close association of students in the kindred arts should do much to promote such an understanding. Special arrangements have been made whereby architectural students can attend the Slade School to become acquainted with the principles governing decorative painting in so far as the subject is related to architecture.

Appended are the subjects set for some of the drawings illustrated :—

### FIRST YEAR.

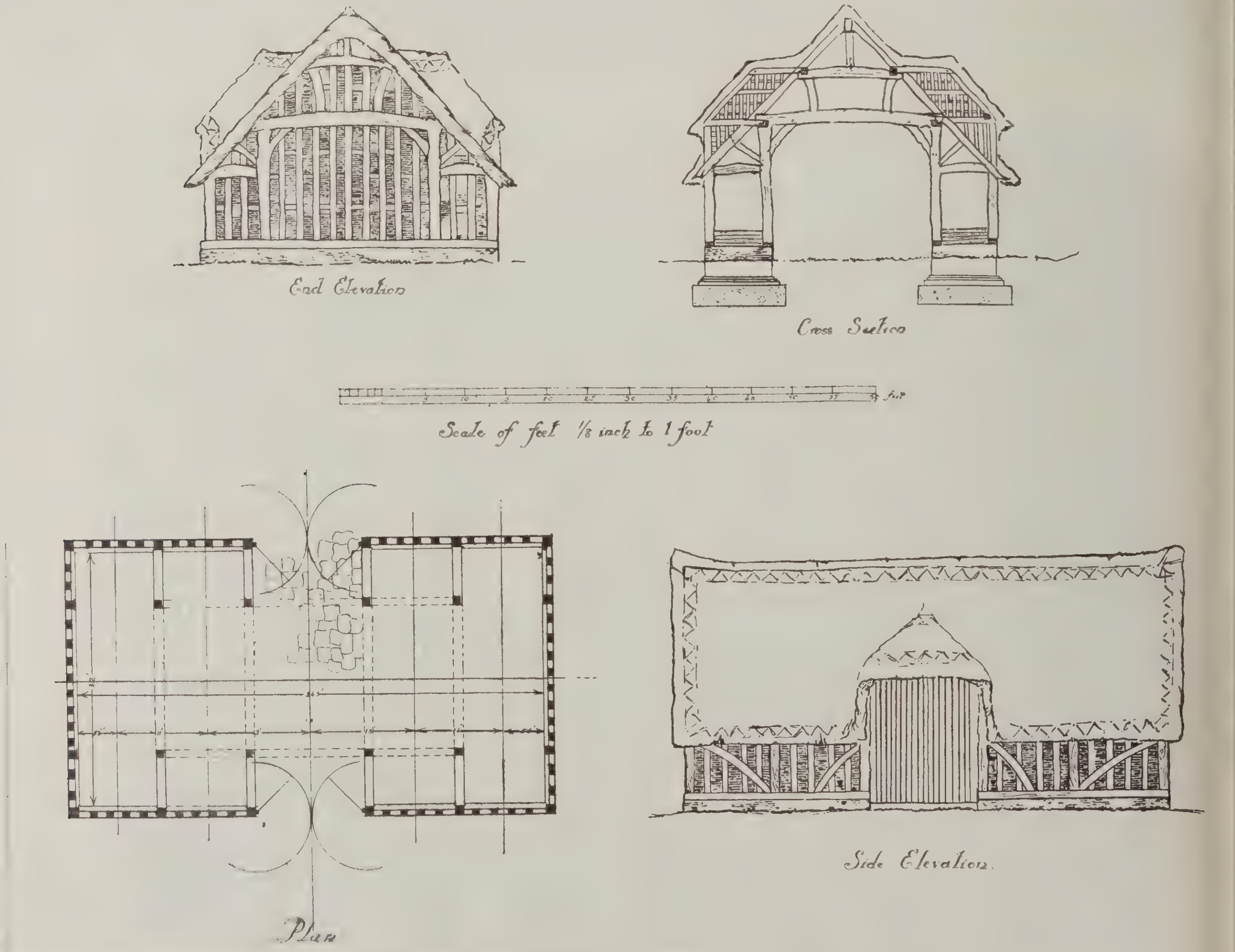
*Study in Traditional Timber Construction : A Timber Barn.*—A design is required for a timber barn, of a floor area of 1,500 to 2,000 sq. ft. A door is to be provided on one or both sides of the barn, and an aisle or aisles may be incorporated if desired. Materials.—Roof and framing of walls to be of timber. Filling in or covering of walls to be of brick or wood. Roof covering to be thatch. The barn to be paved with some suitable flooring. Drawings required.—Plan side and end elevations and cross-section to $\frac{1}{8}$ in. scale. A cross-section to $\frac{1}{2}$ in. scale, and isometric details of the main timber joints to $\frac{1}{4}$ F.S.

Six-hour Sketch Design. *Greek Study : A Monumental Entrance to a Sacred Enclosure.*—Sacred enclosures were situated on small plateaux, rising above or overlooking the surrounding fertile plain, and having a steep approach to the main entrance, somewhat after the manner of those at Delphi, Athens, etc. A design is required for this main entrance. It should be treated in a monumental manner, befitting its function as a gateway to ground holding a peculiarly sacred and religious significance. Overall width

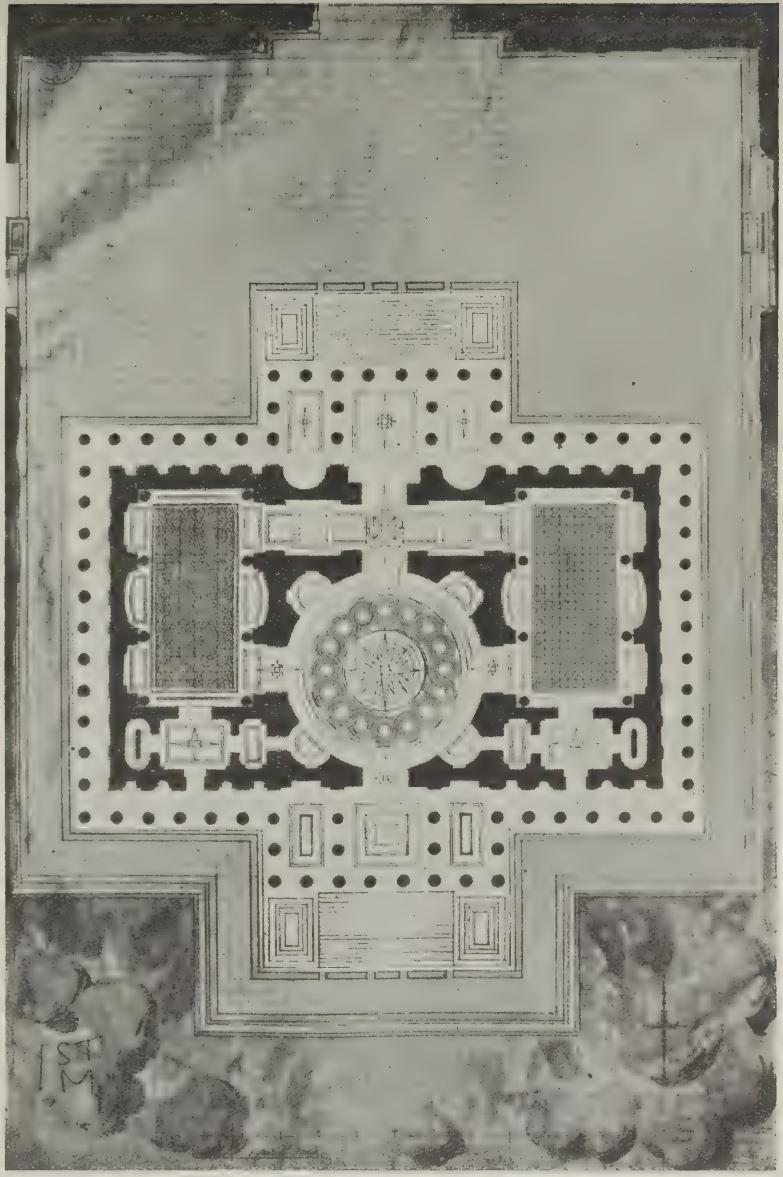
of actual gateway should be 35 ft.
45 ft. Drawings required.—A perspe
tive view in colour which must fill a
imperial sheet. A $\frac{1}{8}$ in. scale plan shoul
also be shown on this sheet.

### SECOND YEAR.

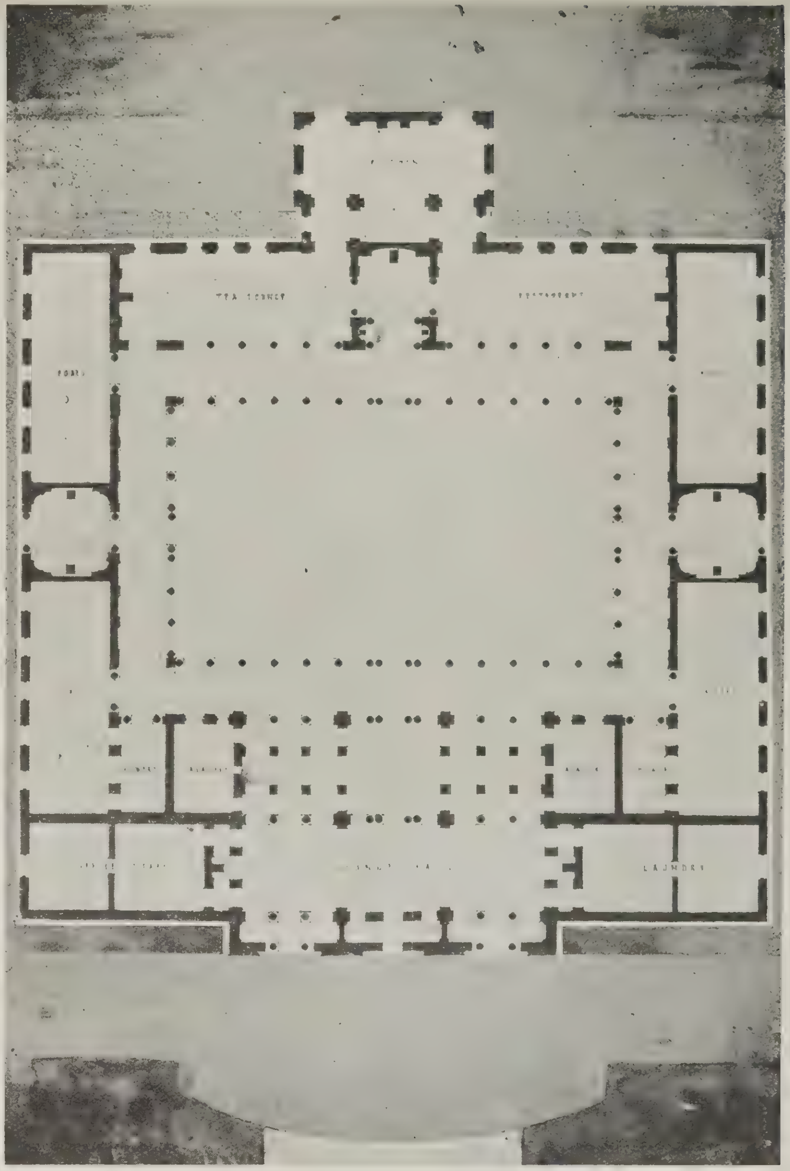
*Roman Study.*—The richest marbles
Africa, the finest bronzes of Italy, th
dyed stuffs of Tyre and the noblest worl
of Grecian artists have been collected
a Roman Emperor for the decoration an
furnishing of an audience chambe
where he will receive the ambassado
of foreign powers. He has chosen a si
overlooking the precipice on the sout
edge of the Palatine Hill. The approac
on the north side will be by a lor
avenue of trees, while on the south
terrace will give an extensive view
the Roman Campania. Besides the lar
reception hall, the building will conta
a room for the retirement of the Empero
and another of similar size for the use
the ambassadors. The area of th
reception room will be between 1,500 ar
2,000 feet super, and each smaller roo
is to be about two-thirds of that siz
Drawings required for sketch study, to
scale of $\frac{1}{8}$ in. to 1 ft. : (*a*) plan ; (*b*) elev
tion to south ; (*c*) section on centr
axis, perpendicular to the south elev
tion. The sketch design to be handed
and a copy must be kept by each stude



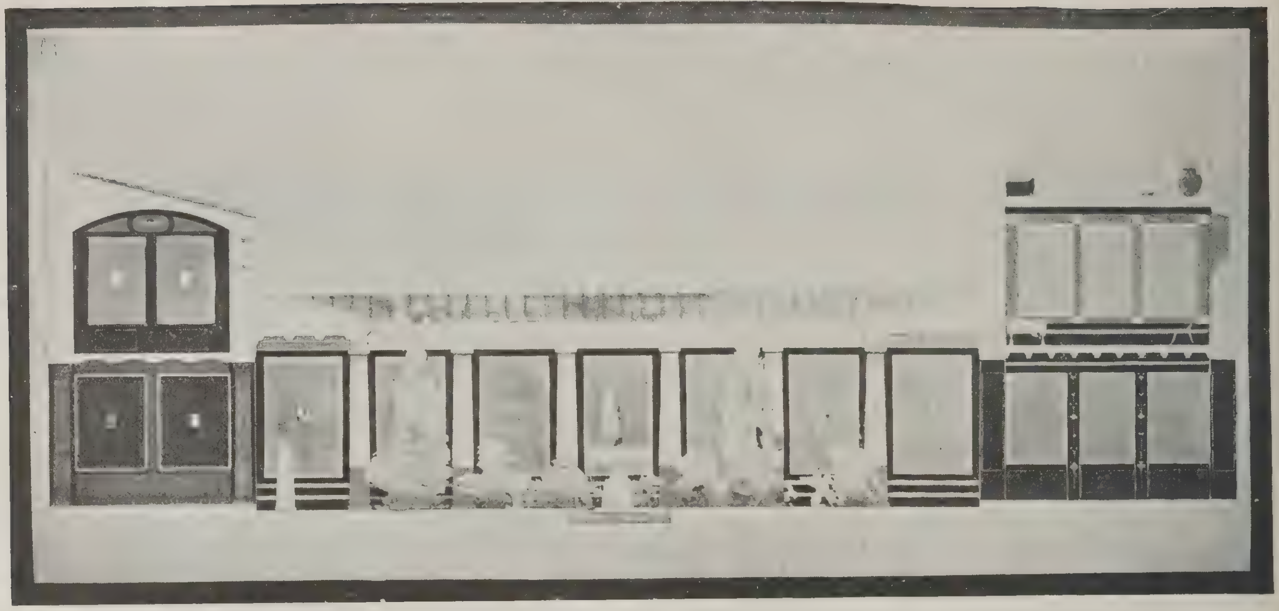
A TIMBER BARN. BY L. PAYNE.



A STUDY IN ROMAN PLANNING.
BY JOHN R. ALABASTER



AN OPEN-AIR SWIMMING-BATH.
BY G. L. MORGAN.



THE PERISTYLE OF A POMPEIAN HOUSE. BY G. F. KELLEY

and pinned on the studio wall, ready for criticism. Finished drawings, same as sketch design, to be rendered in monochrome, and to be handed in to the Exhibition Room.

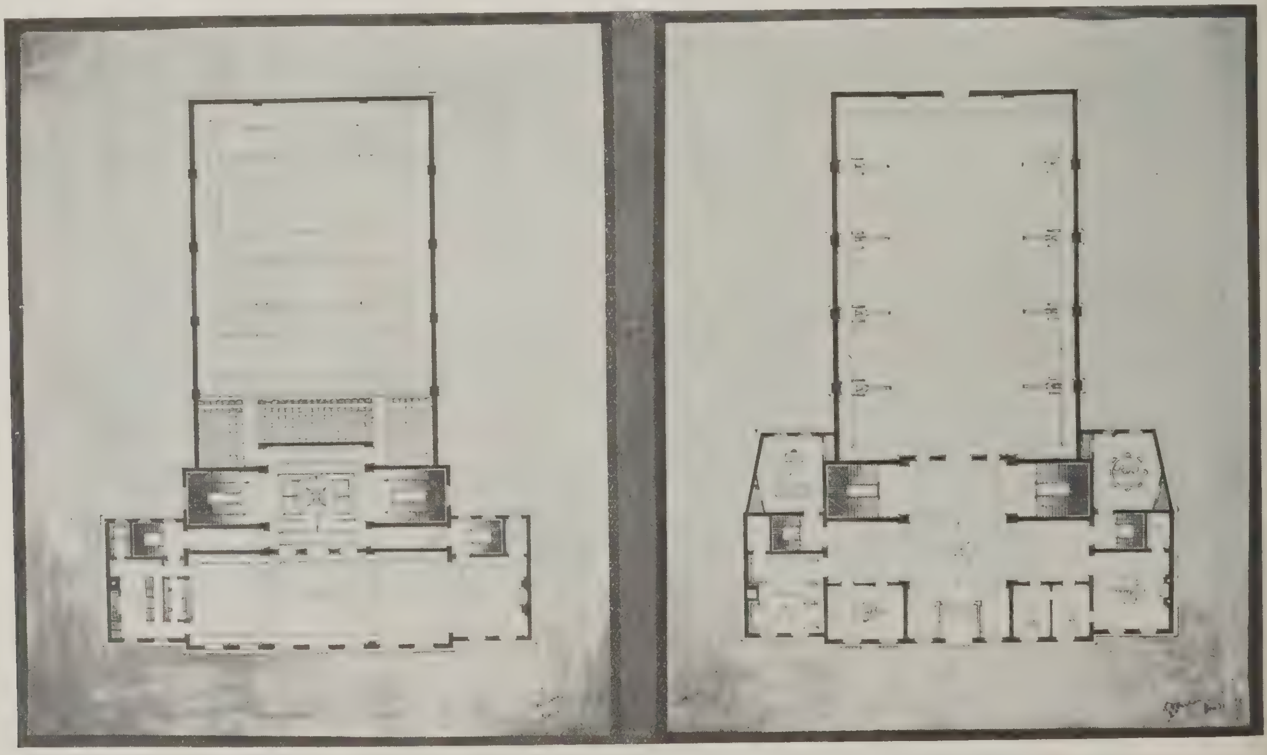
*Græco-Roman Study: the Pompeian House.*—A design for a house for a banker, a man of luxury, in the City of Pompeii is required. The objective is to show not only the domestic architecture of the period and the type of dwelling, but to hint at the art and life of the people. For this purpose the design must include the wall decorations, the mosaic and the general furnishings. The main lines of the typical house must be followed, but free scope is to be given to adapting the design to the needs of the client. The rooms round the atrium may be in two stories, and shops, which would be let by the banker, may be included if desired. The site is rectangular, and is situated at the junction of two streets. The width is 50 ft. and the length 180 ft. The entrance is to be on the narrow frontage. Drawings required: sketch plan of complete ground floor; sketch long section through atrium and peristyle: all to a scale of $\frac{1}{16}$ in. to 1 ft. section through tablinum, scale of $\frac{1}{2}$ in. to 1 ft. Peristyle and exodra to be rendered in colour.

THIRD YEAR.

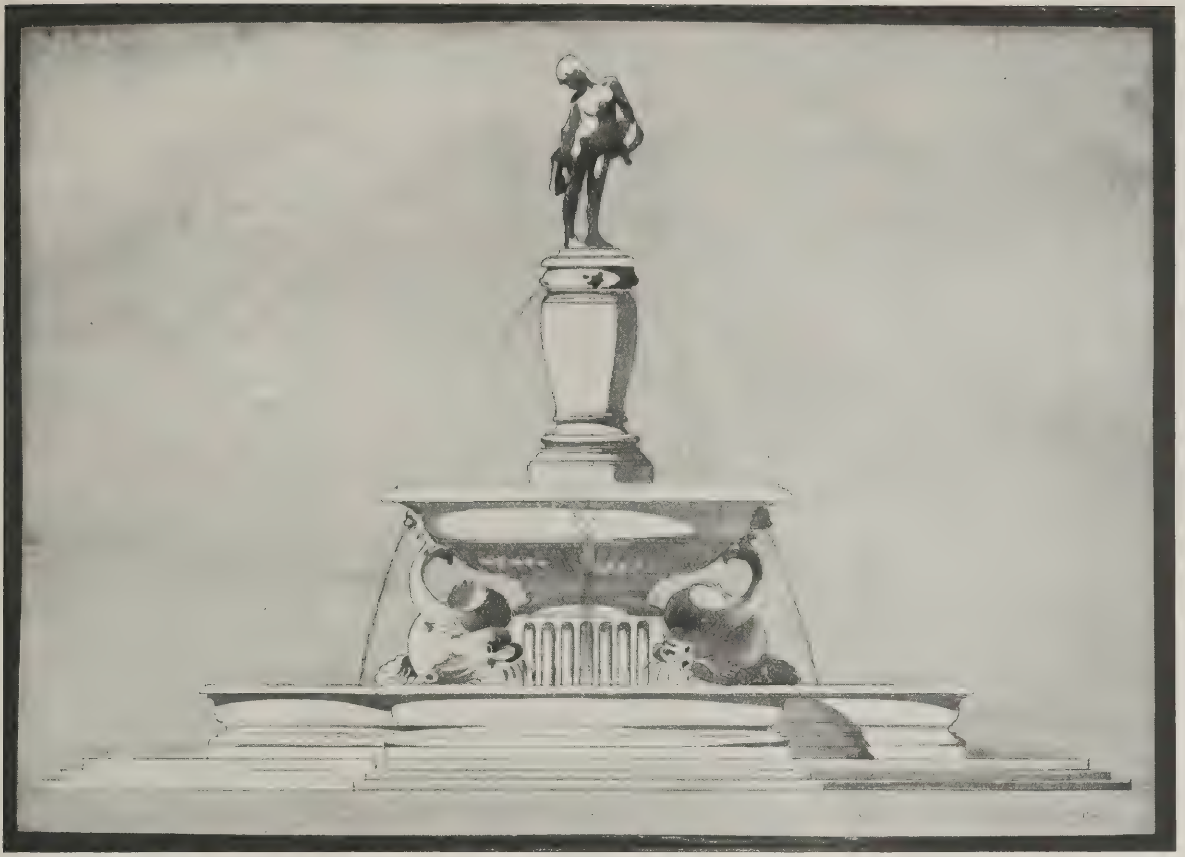
*An Open-air Swimming-bath.*—A design is required for an open-air swimming-bath on an open and level site, at a popular health resort. Required: One general swimming-bath, about 4,800 ft. super, for mixed bathing. The building accommodation is to include the following: Entrance hall; office for tickets, issue of towels, etc.; office for clerks; lounge; restaurant and kitchen; seats for about 400 spectators of swimming rac etc.; judges' box; Press box; dressi boxes (about 25 ft. super) for 50 m ditto for 50 women; arrangements shower-baths for men and wome necessary lavatory accommodation baths and public; a small laundry; st rooms; some form of open tearoom (su as a loggia) overlooking the bath shou be provided. Drawings required: scale of $\frac{1}{8}$ in. to 1 ft. Sufficient drawi to explain the scheme. Detail to sc of $\frac{1}{2}$ in. to 1 ft. Sketch design to scale $\frac{1}{16}$ in. to 1 ft.

FOURTH YEAR.

*A Drill-hall and Headquarters Bui ing.*—A site has been acquired at the s of a suburban street for the erection o new drill-hall and headquarters build for a London territorial battalion. Si The site is shown in the diagram; back of the site is parallel to the str



A DRILL-HALL AND HEADQUARTERS BUILDING. BY A. M. HARGROVES.



DESIGN FOR A FOUNTAIN IN A PUBLIC GARDEN BY P. C. R. JAYASURIYA.

ont. Light, other than top light, can
ly be obtained from the street front or
om areas within the site. An emergency
cit may be had at the back of the site.
he accommodation required is : General.
-(1) Drill-hall, approx. 10,000 ft. super;
) galleries to seat 200 spectators (two
cits from the gallery must be provided);
) entrance vestibule in which battalion
otices will be posted; (4) adequate
orizontal and vertical communications;
) adequate lavatory accommodation
roughout the building. Administra-
on.—(1) Orderly room; (2) small office
r colonel; (3) small office for adjutant,
close connection with the orderly room;
) armoury, approx. 500 ft. super;
) quartermaster's stores, approx. 500 ft.
per; (6) band-room; (7) quarters for
retaker; (8) boiler-room. Officers.—
) Officers' mess for approx. thirty
ficers; (2) ante-room, used as lounge
d in which officers assemble before
tering mess; (3) servery; (4) kitchen,
hich may be part of general or men's
tchen; (5) small changing rooms and
athrooms. Men.—(1) Canteen, in which
eals may be served, area approx. 3,000
super. In connection with the canteen
ill be: (2) a lounge; a raised stage;
airs will be substituted for the tables
hen a canteen concert takes place.

The staff of the School is as
llows: Architecture: A. E. Richardson,
R.I.B.A., professor; Arthur Stratton,
S.A., F.R.I.B.A., reader in architec-
re; Martin Briggs, F.R.I.B.A., lec-
rer in building construction; James
urford, A.R.I.B.A., assistant; J. D. M.
arvey, B.A., assistant; A. Stanley
urner, A.R.I.B.A., assistant; E. P. B.
usman, B.A., A.R.I.B.A., assistant in the
ening school. Master of the Architec-
ral Atelier: James Burford, A.R.I.B.A.
own Planning: S. D. Adshead, M.A.,
R.I.B.A., professor; Engineering, Municipal: M. T. Ormsby, A.M.Inst.C.E.I., Chadwick professor; Engineering, Civil and Mechanical: E. G. Coker, M.A., D.Sc., M.Inst.C.E., F.R.S., professor; A. H. Barker, B.A., B.Sc., lecturer, heating and ventilating engineering; E. Sprague, A.M.Inst.C.E., senior assistant. Painting and Sculpture: H. Tonks, Slade professor; T. Borenius, Ph.D., professor, history of art; W. W. Russell, A.R.A., assistant professor; P. W. Steer, assistant professor; G. Thomas, assistant (sculpture). Archæology: E. A. Gardner, Litt.D., Yates professor. Hygiene and Sanitation: H. R. Kenwood, C.M.G., M.B., D.P.H., F.R.S.E., professor; A. G. R. Foulerton, F.R.C.S., D.P.H., lecturer; M. E. Delafield, B.A., M.B., B.C., M.R.C.S., L.R.C.P., D.P.H., assistant and lecturer, and the professors and lecturers in general subjects in the Faculty of Arts.

LIFE STUDY. BY G. L. MORGAN.

# Model Clauses for Town Planning

A GREAT many local authorities will welcome the publication by the Ministry of Health of this set of model clauses. Although still leaving, as is both right and inevitable, much to local discrimination, it affords a valuable indication of the lines upon which the Ministry desires town-planning schemes to be prepared. The publication is divided into two main parts: a set of clauses, preceded by an explanatory memorandum. The clauses themselves are grouped under six headings: General, Streets, Building and Building Lines, Reservation of Lands for Open Spaces, etc., General Convenience and Amenity, and Miscellaneous.

The first of these is a short section devoted to definition. The second covers all matters relating to acquisition of land selected for new streets or street widenings; charges, whether against the community at large or against the frontagers; relaxation of by-laws; diversion of highways. The suggested clauses are collated with the existing germane Acts of Parliament, viz.: The Private Street Works Act of 1892 and the Public Health Act of 1875. Much of the land earmarked for thoroughfares will not, of course, be required for such purpose for many years. In order, therefore, that such land may not become sterile the owners may erect buildings thereon with the permission of the authority and on the understanding that no compensation is subsequently claimed in connection with the removal of the buildings. It is suggested that three months' notice shall be given to persons interested in the land, and that at the expiration of the time the land becomes, according to circumstances, a public highway or a private street, in either case the authority have the right of entry. This is typical of the clauses comprising the section on streets, the whole of which are designed to enable the authority to keep a strict control over all street development and to obtain ready access to land dedicated to streets or street widenings.

Part III, Building and Building Lines, deals, of course, *inter alia*, with zoning. In this matter a useful discrimination is maintained, and zoning is divided into two kinds: zoning by density, and zoning by character. For the purpose of assessing the former the Ministry suggest the introduction of a system of "land units," the density of which is to be calculated in terms of dwelling houses for single families which are known as "building units," every class of building having its equivalent in terms of building units. The land unit is a loose measurement, the only indication of its extent being a maximum limitation of seven acres. The clauses suggest that the authority should organize a system by means of which owners can declare land units, and can thus ascertain in advance exactly what restrictions and limitations govern the development of their land, and where it is proposed to develop an area by the sale of building plots a plot plan can be previously submitted to the authority so that the exact number of buildings to be erected under the density restrictions can be ascertained and the proposed plot divisions approved prior to sale. The character zoning is a simpler matter. The various zones: residential, special business, special industrial, general industrial and business, etc., are indicated on the scheme map, and in regard to each zone buildings are grouped under three headings: buildings that may be erected without consent, buildings for the erection of which the authority's consent is required, and buildings which may not be erected. The only buildings which fall under the last heading are "buildings for noxious industry." Where application is made to the authority for erection of a building of a kind other than that which is predominant in the zone the authority must advertise its intention before giving consent in order that adjoining owners and interested persons may have opportunity to object. In this ection the Ministry fail rather to emphasize sufficiently the desirability of treet zoning, without which chaos will ultimately develop. The height of buildngs is dealt with, 70 ft. is suggested as a maximum height, with certain exceptions. Building curtilages are treated, and a model table is shown in which the percentage of the area within the curtilage which may be built over is governed by the character of the building and by its height. No terraces may include more than eight houses without a break of at least 6 ft. And no block shall be erected nearer the owner's boundary than 3 ft. The clauses dealing with Reservation of Lands for open spaces are few and simple; they contain schedules of the different purposes for which the land may be required, and the methods by which the authority can acquire it.

The fifth part, which is devoted to general convenience and amenity, is disappointing. It contains only four sections, which deal respectively with safety of traffic, preservation of trees, advertisements, and maintenance of private gardens, and few of the clauses in the sections contribute materially to an increased amenity. The traffic section, for example, might have contained clauses giving the authority power, if they thought fit, to insist upon the erection by any 'bus or tram undertaking of adequate stopping-place indicators, terminus shelters and seats, and receptacles for used tickets. There should be provision, too, for some sort of control over the design of buildings so as to prevent the terrible juxtaposition and lack of harmony in our streets which is one of the surest destroyers of amenity. The clauses dealing with advertisement, although giving the authority absolute control, since the first clause states that "no advertisement shall be displayed in such a position or manner as to injure the amenity of any part of the area," are insufficiently emphasized in the explanatory memorandum. There should be definite spaces for the display of hoardings and postings, and the defacement of buildings by pictorial or illuminated advertisements is to be utterly deprecated, for it is the absolute negation of amenity. Amenity depends also upon such things as the design of street lamps and tramway standards. Authorities should maintain strict control over such things. There should be clauses, too, dealing with the preservation of ancient monuments, buildings of historic interest, and features of particular natural beauty.

The last part of the publication deals, under the heading of miscellaneous, with agreements, boundary adjustments, recovery of expenses, appeals, compensation and betterment claims, the serving of notice and such like administrative matters which it is as well should be as uniform as possible in order to avoid anomalous situations between adjacent authorities.

There is no doubt that the clauses will be a help to authorities, but it is to be regretted that they are not made somewhat more comprehensive. A little time ago the Ministry of Health appointed a committee, under the chairmanship of Lord Newton, to consider the matter of smoke and noxious vapours abatement. A very full and reasoned report was issued. Yet, as far as we know, no action has been taken with regard to any of its recommendations. So long as we permit the very possibility of the existence of the dirt and fogs which, owing to the misuse of coal, darken all our cities and half the countryside, the achievement of any real amenity is an impossibility Surely no town-planning scheme is complete which fails to face this problem Yet in this publication there is scarcely an allusion to smoke. Bound up with the smoke question is the provision of alternative methods of heating, for it must be remembered that it is the domestic hearth rather than the factory furnace which is responsible for most of the trouble (2½ million tons of potential fue escape in soot from the domestic and 500,000 from the industrial chimney) Local authorities should give every encouragement to gas and electrical undertakings while at the same time protecting the public against exploitation. At all events it is to be hoped that all authorities wil be alive to the smoke nuisance. The government missed a stupendous opportunity for popularizing alternative methods of heating in connection with their housing schemes. On paper they urged gas installations, in practice they cut them out owing to their necessitating, in some cases, a slightly increased capita expenditure, and where a house is equipped throughout for soft coal consumption and gas, of course the cos must be increased, but soft coal consumption in the open grate must ceas before the town can be either healthy o beautiful, and it is sincerely to b hoped that no opportunities will b lost this time for mitigating the smok menace.

However, the general trend of th clauses, like the town-planning movemen itself, is to show that in all future development, be it a matter of roads, zoning density, or park preservation, the community as a whole is to be considered first, individuals afterwards, the civi renaissance which we all desire to see ca be achieved on no other basis.

Town Planning. Model Clauses for use in the preparation of schemes. London: His Majesty's Stationer Office. 1s. 0d. net.

# Hampstead Labour-saving Flats Competition

## A Criticism of the Designs

THIS competition dealt with a rather novel problem in planning. Not that flats have not been built efore, but, so far, the idea of formally corporating a communal centre had ever been seriously explored—in Engnd, at any rate. Sociologically speaking, is type is a halfway house between e collegiate system and the system of rge town flats. The kernel of it is the mmunal centre; perhaps the nearest pproach to it in England is Meadway ourt, built ten years ago in the Hamptead Garden Suburb. But there the rrangement for the communal service as more or less improvised afterwards. n this case, however, the idea of having communal centre was formally condered and competitors were asked to ear it in mind as a feature.

One thousand pounds were offered in rizes, and this, added to the magnitude f the job and the exceedingly interesting haracter of the planning involved, ttracted a demand for particulars from ver 130 architects. A bare 42 elected stand the rather gruelling test which is competition proved to be. But it is vident that the promoters have had ood value for their money. In these ays of financial stringency a problem f this kind is bound to be largely overned by strictly economic considerations, and a perusal of the drawings ubmitted shows that such considerations did operate in the selection of the inning designs.

Briefly stated, the promoters asked for o flats, ranging from type "A" (one ving-room and one bedroom) to type F" (three living-rooms and four edrooms), to be grouped in two or more locks; a central hall, with services; unge, billiard- and writing-rooms; parate quarters for staff and porter, arages, laundry, drying-room, and round laid out with tennis courts, etc. he elevations were to conform to the omestic character of the suburb, and ere not to exceed three stories in eight. The cost was to work out at s. 3d. per cubic ft. Emphasis was laid n the architectural treatment and also n the advisability of keeping the cost own. The site, beside being very regular in shape, had a drop of nearly 2 ft. from north-east to south-west. ltogether a pretty problem. As is ound to happen, a few competitors ent in obviously futile designs, but, on he whole, ingenious resourcefulness was hown. Naturally the consideration of dividual flats and even of the communal centre was dictated by the *arti* adopted, and it is astonishing o see the variety of grouping for the ifferent blocks.

The three winning designs face the eath extension. All three have plenty f ground bound within their buildings, nd all three make fine use of it. This as considered by their assessors the ight solution, but others are also worthy f notice. Nothing could better show the reedom left to competitors than the study of, for instance, the design submitted by Messrs. Lanchester, Lucas, and Lodge (No. 40), and the design of Messrs. Curtis, Hardy, and Garrard (No. 25). Messrs. Lanchester, Lucas, and Lodge elected to develop their buildings as near the edge of the site as possible, with a wide gap between the buildings nearest Hampstead Way and with the central hall on the highest level, facing south-west. Messrs. Curtis, Hardy, and Garrard, on the other hand, put their central hall on the lowest level, in the wing nearest Reynolds Close and facing north-east. But where the latter scheme is superior to the one already mentioned is in the simplicity of its massing. Their outside walling, and therefore their roofs, are plain and run along undisturbed.

Another design, illustrating yet a different part, is that of Messrs. Wyville, Home, and Shirley Knight (No. 42). Here orientation and low cost must have been the slogan; but we cannot help thinking that it went too far, and any such scheme, with such a decided perimeter, would sooner or later court trouble in its roof line, the ground fall being decidedly too substantial. This criticism, in fact, applies to all those schemes where the run of the buildings goes boldly either east and south-west, or east and north-west.

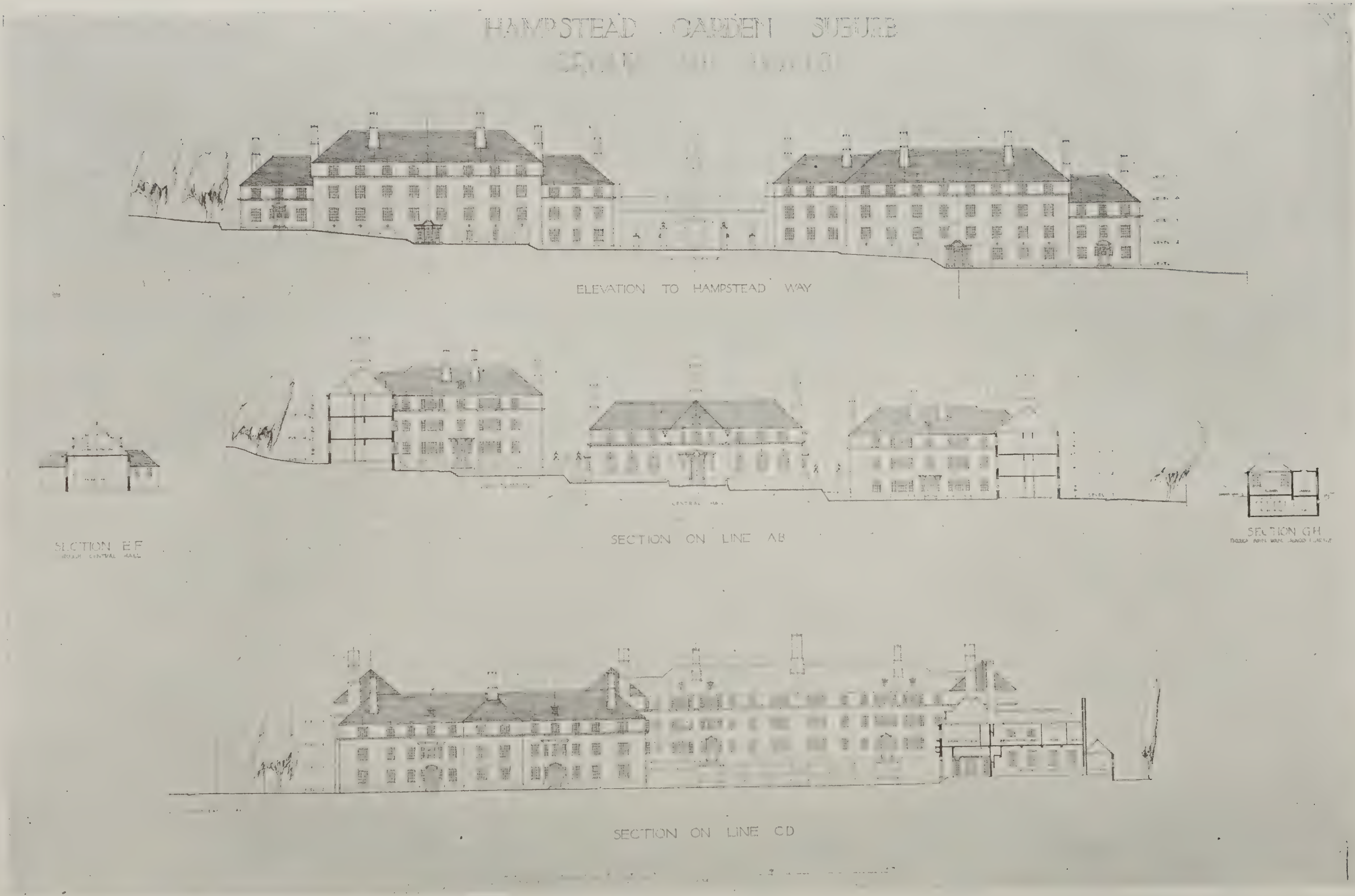
Many competitors did feel that depth-runs were needed to utilize the fall of ground, and that, of course, leads towards parallelogrammatic forms. Mr. Dunbar Smith (No. 38 and No. 36) tried this overmuch, and one cannot help feeling that both the nature of the flats to be erected and the ground configuration have been ignored and that the elbow-room available has not been made proper use of. Mr. Wontner Smith (No. 33) also felt the need of having long and short lengths at right angles to one another, but it is a pity he closed his left and right courts. Obviously cubical content compelled him to it. It is unfortunate that his scheme is so involved in plan, because his elevations, most admirably drawn, held promise of very fair prospects. The same adverse criticism must also be applied to Messrs. Morgan, Armstrong, Dawson, and Shearley's design (No. 39).

A likely and workable scheme is that of Messrs. V. O. Rees and G. Holt. It offers two large courts opening to the Heath, with a central block, facing south, and connecting them in the centre. As with a few other competitors—including the winning design—flats, or parts of flats, have been put in the roof, thus appreciably bringing down the cubing.

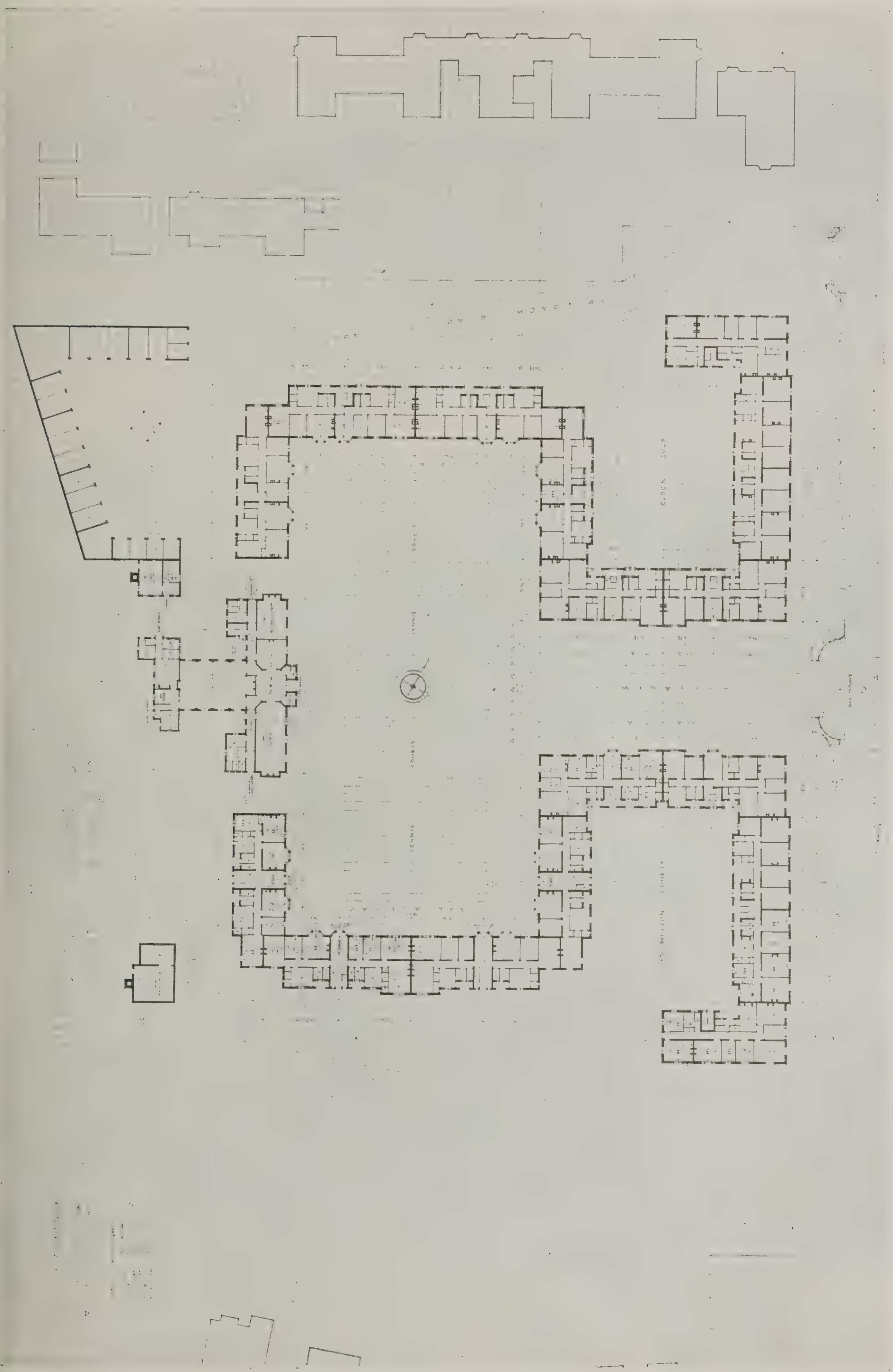
Let us come to the winning designs. Mr. J. B. F. Cowper, A.R.I.B.A., the winner, whose scheme is being carried out, and whom we congratulate, has certainly evolved a very able solution. His plan is extremely compact, but almost ruthless methods of compression have had to operate in order to bring down his cubing to the remarkably low figure of 1,177,760 cub. ft. This is the source of his strength with regard to the economic considerations and the source of his weakness with regard to good planning considered *per se*. He has sacrificed the opportunity of a straightforward central hall on the ground floor by squeezing it in the basement under the right-hand wing. He has further eliminated most of the communication between the flats and the communal centre, and he has established a whole floor in his roof, with the result that all the rooms on that floor, including living-rooms, will have sloped ceilings, the roof cutting into the rooms at a height of 4 ft. 6 in. There are also pleasanter elevations than his; but, this said, there is no denying that he most successfully faced all the demands put upon the competitors for an economical and workable scheme. His buildings are so planned that eight tennis courts, two Badminton courts, and one croquet lawn are provided. The space to be allotted to the open inner court is ample. The porter's office, prams, bicycles, and telephone exchange are gathered in one small central building next to the Heath, an excellent arrangement. All the flats are fed by sixteen staircases, the best flats nearest the Heath, yet facing south. Generally speaking, all the large flats are identically planned on ground and first floor, the smaller ones being put in the attic. Those troublesome party walls, by vertically running throughout, create units which in this case are given expression to.

The porter's flat, staff quarters, and box-rooms are also tucked away in the basement. Most of the flats are well lit. The fireplaces and flues have been carefully grouped, and the general planning is, indeed, very efficient. The walls will be made of Luton grey bricks, with dressings of red rubbers, the floors to be of Armoured Tubular construction. One of the points emphasized in the conditions was the labour-saving aspect of the flats. Mr. Cowper's devices in this respect are largely of a portable nature, and would be supplied by the tenants, but he provides for electric lifts in his main staircases. Cupboards to hold dustpails are provided on every landing. In other instances outside hand-lifts are provided direct to kitchen windows. The total cost of the buildings proper is brought down to the remarkably low figure of £74,000.

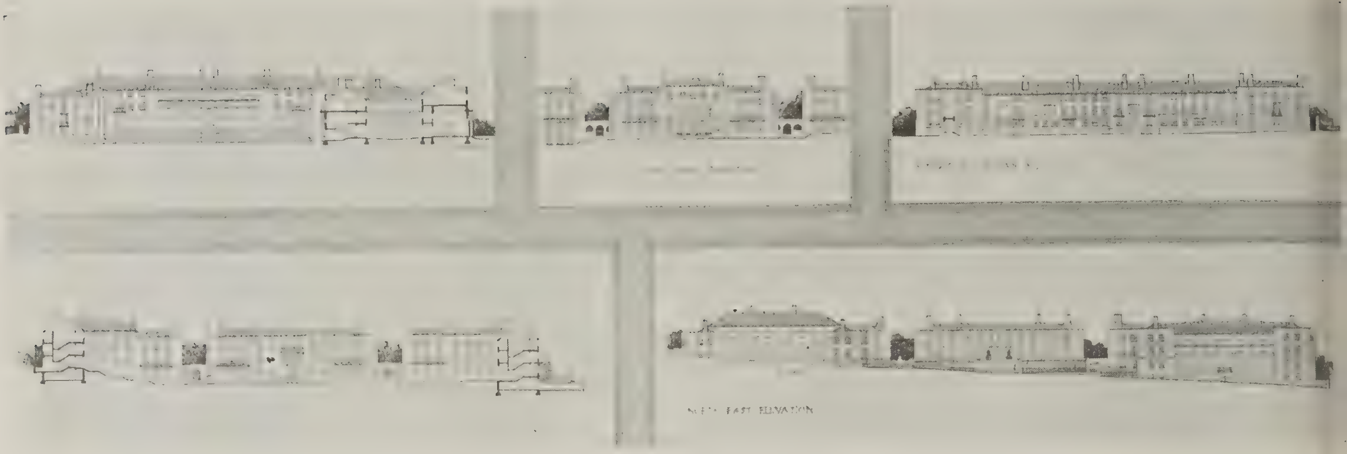
The second prize, awarded to Messrs. George A. Rose and A. V. Farrier, AA.R.I.B.A., has its large open court at the back, also facing the Heath, with four tennis courts. We observe that here the longest lengths of the buildings are designed along the contours of the land, and the shortest lengths possible across the fall, an arrangement preventing waste space in basements and avoiding expensive foundations. The garages and dust-shed are put away in the S.W. corner of the site. The laundry is wedged in between the service part of the central hall and the garages, with the boiler-house under. This is rather out of the way.

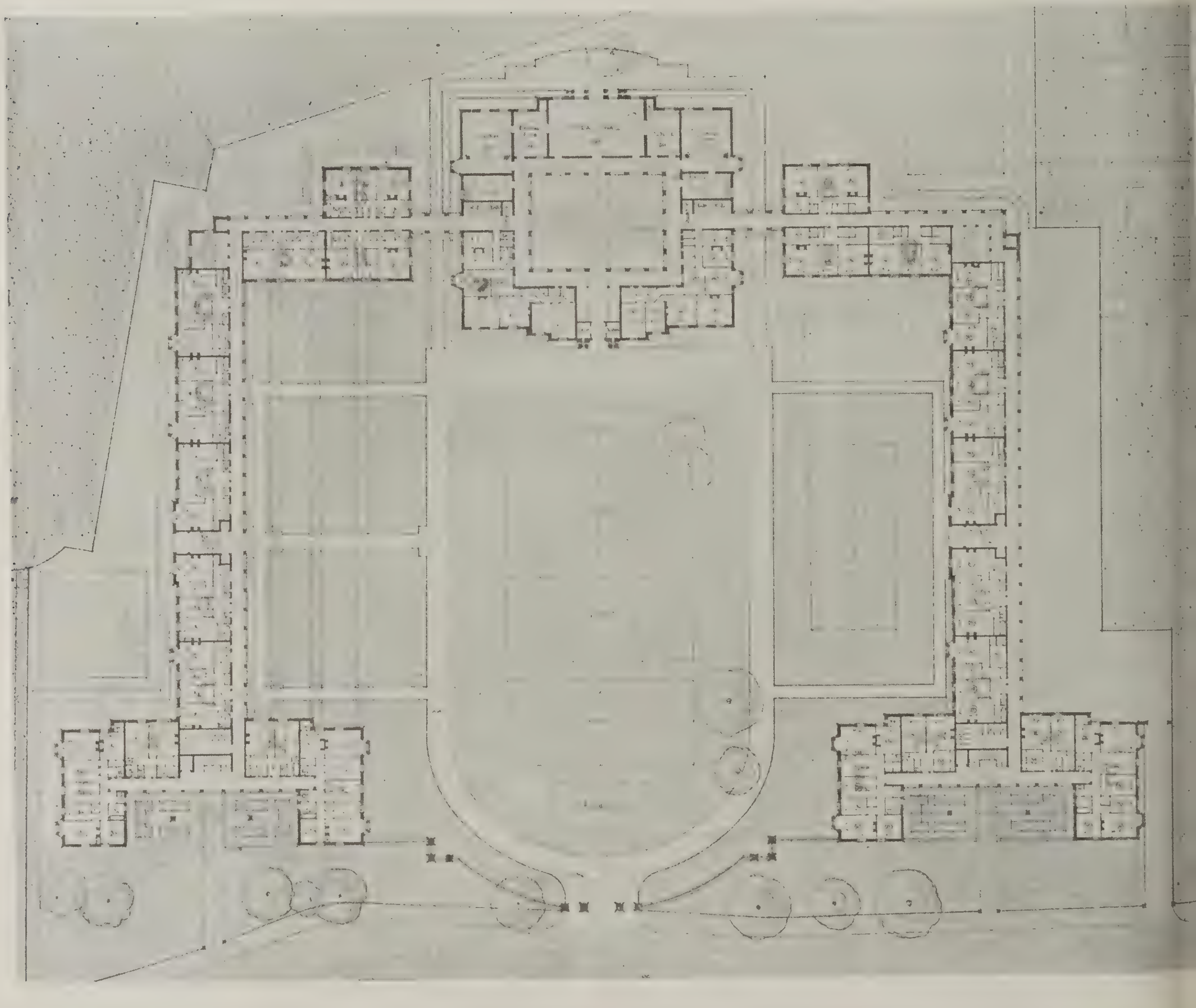


HAMPSTEAD LABOUR-SAVING FLATS COMPETITION: SECOND PREMIATED DESIGN. GEO. A. ROSE AND A. V. FARRIER, A.A.R.I.B.A., ARCHITECTS.



HAMPSTEAD LABOUR-SAVING FLATS COMPETITION: SECOND PREMIATED DESIGN. GEO. A. ROSE AND A. V. FARRIER, AA.R.I.B.A., ARCHITECTS.





HAMPSTEAD LABOUR-SAVING FLATS COMPETITION: THIRD PREMIATED DESIGN.

CYRIL A. FAREY, A.R.I.B.A., AND C. EVELYN SIMMONS, L.R.I.B.A., AND A. TRYSTAN EDWARDS, A.R.I.B.A., ARCHITECTS

cycles and prams take their chances
the entrance landing of each large
rcase, of which there are nineteen, so
nged that each performs the dual pur-
of serving the main entrance to flats
also to kitchen door. Tradesmen's
rcases only occur in connection with
largest types of flats, which are placed
hest from the central hall, their ten-
being least likely to use the hall.
ood point is the grouping together of
baths, w.c.'s and kitchen sinks on
side. Storage room is provided
asement and roof. The façades in
rgian style are very pleasant, and
scheme is, indeed, a very useful
ribution towards the planning of
flats.

The third prize, won by Messrs. Farey, A.R.I.B.A., Simmons, L.R.I.B.A., and Edwards, M.A., A.R.I.B.A., is on the whole the most architectural scheme submitted. It faces the Heath too, and has an almost too elaborate central block, which builds itself round a small open cortile. The flats are mixed together, and are fed by only seven staircases, those in the side wings feeding four flats each. We commend the clever way in which the larger flats, such as "D," have been put over and above the smaller ones, such as "C," by having the communicating corridor running throughout on the ground floor only. The central block is certainly a little extravagant, and it is doubtful if the two "F" flats get very much good light; their southern aspect is seriously interfered with by the other side of the Central Hall. The staff quarters are on the second floor, next to the kitchen.

A good view of the Heath can be obtained from all living-rooms. Sixteen flats facing S.E. have in addition sunparlours. The elevations have a very pleasant reticence of treatment, the effect being obtained by good proportions and fenestration. At first sight the rather flat pantile roof seems a little out of keeping with those of adjoining houses, but it has the great advantage of reducing the cubing.

G. H.

[The first premiated design was illustrated in our last issue.]

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# Contemporary Art

## e Degas Sculpture at he Leicester Galleries

he Degas show is a little world unto
f in the midst of London; a little
d of paradox and contradiction.
women are ugly; all sculpture is
ing; all drawing is sculpture; a
tor must be judged by his drawings;
holomé is a great sculptor because
as first a painter! I wonder if Mr.
ter Sickert, who writes the delicious
ce to the Degas catalogue, would
it that he is a great painter because
a great wit.

e old æsthetic demanded two things
e all others in sculpture: a static
and calm, unruffled beauty. There
no such things in the Degas show,
very piece, whether horse or woman,
ancing or dancing, rising or falling,
ing or leaning. There is no such
as gravitation now, or it might be
that these figurines defy it. Degas
e Einstein of sculpture.

r sculptors will—if they visit the
ition—look in vain for nuances
echnique; the nuances of feeling,
ment, esprit they will miss be-
they care less for these things.
is sculpture with anatomy sacrificed
e cause of something greater: free
ty; muscular and bony form sacri-
for movement, but movement
ing form which transcends anatomy,
et is true to nature all the time.

ere are people who say they value
ick water-colour sketch more than
ture because it registers an effect,
of movement of clouds or rain on
ing water. They are justified. They
he people who will see the beauty
ese sketches and models.

gas turned his figurines this way and
so that Mr. Sickert could see the
ettes of them thrown by candle-
Not so that the things themselves
be seen, but so that the shapes of
could be seen in a greater modula-
than any static pose, however mar-
sly modelled, could present them.
s knew the secret of projection, and
iscovery of the value of the silhou-
was the principle of his sculpture.
a discovery that is too little appre-
l; it is the basis of the plastic line.

Medardo Rosso, the Italian sculptor who drew Rodin into impressionism, claims for each of his sculptures that it is a moment's monument, and Degas must have had the same inspiration, but as he was in the direct line from Manet of the impressionists, he, as painter and sculptor, had a dual interest in the principle.

The value of this exhibition, for the artist, is in the evidence it provides of the interpretations by Degas of Manet's doctrine. It is obvious from these figurines that he did not follow Rosso, who realized impressionism as a matter of light and shade in sculpture, for Degas went direct for pure form in any light, in contradistinction to his practice in his painting.

There are about seventy pieces of these bronzes cast by Adrien Hébrard, the friend of Degas, of the Hébrard Gallery in Paris, of women and horses; of studies of movements and gestures.

## Nevinson Etchings and Drypoints

C. R. W. Nevinson is a tonic. His exhibition at the Leicester Galleries makes you feel well, and it makes you feel hopeful for English art. It astonishes, too, not because you did not expect Nevinson to justify himself, but because he has done so, for the expected, as has so often been said, seldom happens. I always thought that the level attained in previous exhibitions would be raised in the future. I believed when I saw the artist's first etching that there was the making of a fine future there. This was soon after the armistice, and I am delighted to find my belief justified in so full a fashion. There are nearly fifty prints on show, and the mere number of them is startling when you remember recent exhibitions of paintings and drawings; when you recall Nevinson's journeyings in America, his interviewings at home, his manufacture of epigrams, and his general activity. It must be ceaseless, and it reminds me of the grand style of production by which the old masters, and the new masters like Brangwyn, achieved so much.

The level of the previous exhibitions has not only been maintained, but the general level of the present show is very high. The show is full of accomplished things both in biting and in point work, and the architectural plates open up a new field; a new way of treating architecture; of seeing it; of recording it; and Nevinson's sensing of American architectural genius is true and his exposition of it effective. His translation of nature scenes is admirable, but this was to be expected from his work in this direction in colour.

There are a few cubist or post-impressionist things here, but the excursions of the artist into the realms of the future have done no harm to his style in rendering the things of the present.

## The Royal Society of Portrait Painters

There are lots of good pictures in this show and very few bad ones. A society cannot have as president Sir James J. Shannon without making itself worthy of the honour. The Royal Society does very largely and its standard improves. You cannot have members like George Harcourt, W. B. E. Ranken, R. S. Eves, Archibald Barnes, G. L. Brockhurst, and Sir John Lavery without having a good president, so the reaction is complete. Some of the younger members are coming on splendidly: Stanley Mercer is commanding a style of his own, Mrs. Granger-Taylor is justifying her originality, Bernard Adams is making good, T. C. Dugdale in making Fanny smile, certainly makes the beholder smile too, it is so compelling, and Bernard Minns introduces a new scheme of feeling into his two portraits with neo-primitive backgrounds. The stablemen, the men that can be always relied on for sound work, form the strength of the exhibition: James Quinn, with his conscientious treatment and his acute vision, and George Coates with his fine rich quality of paint and felicity of placing, prove themselves very worthy members of the splendid Australian group of artists in London. Ishibashi does more than credit to Japan; he is a portrait-painter of the first order; he has the secret, and knows how to use the knowledge. W. E. Webster gets better and better, and Alfred Priest holds well to his reputation, as do also Chas. W. Ward and John Crealock.

## The Lefèvre Galleries

There is a fine feast for the print collector spread out for his edification at the Lefèvre Galleries: etchings, dry-points, aquatints, and mezzotints. The two latter forms of engraving are too rarely practised by the painter-etcher, and the examples by Percival Gaskell are all the more welcome on that account, especially as they happen to be very good examples. It is refreshing, too, to find that a "Punch" artist is so much of an artist that he finds himself, like J. H. Dowd, compelled to express himself otherwhere than in the pages of our only humorous journal. Dowd's dry-points of children are delicious, the Boy Scout, indeed, has become famous. Robert Spence's Fox series is a *tour de force*. There are twenty plates of splendid quality, and a rare rigour of subject and vigour of accomplishment. The legends in old-fashioned print beneath each picture add greatly to their effect. John Barclay is a young etcher, and his prints here are of considerable promise.

## Sir Ernest George, R.A.

There is a display of the faculty of direct observation in the water-colour and other drawings of Sir Ernest George at the Fine Art Society which is very unusual. It reminds one of the same faculty in Ruskin. Both George and Ruskin saw things in a flash and recorded them with enthusiasm. In the drawings of both there is much more love of beauty than of picture-making. Neither were "artists" in the first place: Ruskin was a professional writer as George was an architect by profession, but both were very talented master-amateurs in their drawings, and so these have a character denied even to the drawings of a painter or sculptor. They have no technique, their character lies in their joyous discovery and recording of things that seemed very beautiful to their authors. The display of these 150 drawings is in itself a wonderful thing, for there is not a bad one amongst them: you have to imagine Ernest George sitting down promptly on his sketching-stool and doing the subject the moment he discovered it, in a calm passion of sustained enthusiasm I think. This he did, time after time, for year after year, until he was over eighty years of age, and this exhibition is a monument to the sense of beauty as it was developed during the Victorian period, a sense which seemed to distil the essence from the objects upon which it was exercised. It missed many things, but those it found it thoroughly exploited.

In the case of Sir Ernest George it was exercised upon many subjects, mainly architectural—bridges, houses, palaces—in many lands.

## Other Exhibitions

There are nearly a hundred oil-pa ings by Henri Harpignies at the Fre Gallery, large and small, and the bes them is a small painting of rocks.

A delightful set of water-colour dr ings by Turner, Cotman, Girtin, Pr Cozens, de Wint, William Hunt, Bi Foster, and other masters of the Eng school form the first of a series of proje exhibitions at the Cotswold Gallery.

Messrs. Connell's annual show etchings by contemporary artists incl Affleck, Whydale, Turkingham, R bury, Eyre Walker, and others.

At the Greatorex Gallery there is exhibition of early etchings of E. Lumsden, R.E., and some woodcuts Lepère of great interest.

A pleasant set of works by P. Jowett in water-colour is on exhibi at the St. George's Gallery.

Receiving days for the Royal Acad Exhibition are March 29 (drawings prints), March 31 and April 3 (oil-p ings), and April 4 (sculpture).

Sotheby's are selling a representa selection of works by Nelson Dawso Friday, March 16, and on the 22 small but very choice collection of d ings of the French eighteenth-cen school. Illustrated copies of both t events are on sale, as well as the o modern etchings and water-colour the 14th.

KINETON PARK

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# Correspondence

## Professional Publicity

*To the Editors of* THE ARCHITECTS' JOURNAL.

SIRS,—I join with you in congratulating the enterprising firm of contractors who at so reasonable a cost and in so artistic a manner are attaining much deserved publicity by their display outside a building in course of erection in one of London's busiest thoroughfares. This is, as you say, one way of making a new building of interest to the public. I was passing this building in company with a member of the public the other day, and her first remark was: "Why do not the architects display their names? It would be still more interesting to know who they are." I had to explain that architects, being artists, are too modest to seek this form of publicity, and in any case in the best architectural circles this sort of thing is not done. I was rather taken aback a little farther on when my friend drew my attention to another building in an equally busy thoroughfare on which was displayed a notice to the effect: "This building to let. For plans, etc., apply to ——— Architect." Again I had to explain that if this were known in the circles in which this architect moved he would be called to account.

My friend expressed the view that architects were "a funny lot." She may or she may not be alone in that opinion.

This morning on opening my newspaper I find a full-page announcement by another enterprising firm of contractors, who have also erected several buildings in prominent positions in London, some of which are illustrated in the advertisement. In this case I am glad to observe that the architects of these buildings share, if only in a lesser degree, in the publicity thus obtained inasmuch as their names are attached to the illustrations of the buildings which they designed, so that my friend will have no cause for complaint that the names of these architects are unknown to the public who read this newspaper.

C. MCARTHUR BUTLER.

Secretary of the Society of Architects.

## Landed Property Practitioners (Registration) Bill

*To the Editors of* THE ARCHITECTS' JOURNAL.

SIRS,—It would appear from a statement in your columns that it is anticipated that this measure will be introduced into the House of Commons next month, and that it will receive the support of a large number of members of Parliament. The attention of the Society has been directed to certain clauses of the Bill which would seem to affect the interests of architects engaged in work within their calling as set out in the Bill. The Society of Architects is one of the bodies mentioned in the second schedule of the Bill as being one of those whose members would be exempted from the operations of the Act, but there remains the possibility that architects who are not members of these organizations might suffer if the Bill becomes an Act, and as the Society of Architects does not exist for itself and its members only, the Council is watching the developments of the measure with a view to taking ever action (if any) may be found n sary at a later stage.

C. MCARTHUR BUTL

Secretary of the Society of Archit

## Registration

*To the Editors of* THE ARCHITEC JOURNAL.

SIRS,—I have made no suggestio implied by Mr. Sadgrove in the s paragraph of his letter, publishe you on the 28th ult. The Regist Committee approached him last Ju a representative of the Society of tects: I can think of no other r for asking for an interview. The ment in my letter, published by y the 21st ult., is quite correct, and also quite true that at the intervi the Registration Committee with Sadgrove everything was informal, was agreed that nothing should b to bind either party. That w approach the Society of Archite amply confirmed by Mr. Sadgrove letter, particularly in his seventh graph. Mr. Sadgrove states "the S knew absolutely nothing of the co of the Bill," and when the draf approved by the Council it was forw to the Society of Architects. It wa on January 23rd.

SIDNEY PE

P.S.—I am sure your readers are ested to hear from Mr. Sadgrov he "did not stay to tea on A 10th"; but we hope for bette next time!—S. P.

## he Architecture Club Exhibition

rchitects and laymen rallied in force
the opening of the first exhibition
the Architecture Club, and the
ms of Grosvenor House were crowded.
rd Crawford, in his opening address,
l that an exhibition representing
rent average architectural work would
rm and in some cases shock. He
aded that the Architecture Club should
e its full share in shaking up our com-
cency. Referring to Sir Christopher
en, Lord Crawford expressed the hope
t Wren's influence, great as it was
lay, would continue to grow here-
r. Wren did not attain achievement
denly, without effort and training, he
led. Although his early training was
ociated from architecture as such,
vas all of such a character as contri-
ed to the full manifestation of his
ius. Others would do well to-day if
y could emulate the catholicity of
n's training.

## The R.I.B.A. Ball

n the night of Friday, March 9th, the
itectural students of London held a
in the Galleries of the R.I.B.A. to
brate the bi-centenary of the death
ir Christopher Wren.

his was one of the most successful
ces the architectural students of
don have ever organized. Everybody
eared to enjoy it enormously, and
y startling creations in fancy dress
e there to bewilder the eyes of those
wished to recognize their friends
enemies. Harlequins, columbines,
tes, duellists, dancers, Chinamen, and
inds of queer birds and animals and
igners were the order of the day. The
ards, who were dressed appositely in black as Fascisti, kept a hawk-like watch on all those who endeavoured to misbehave, and several hapless Bolsheviks who came in perfectly harmlessly with bombs under the arms were expelled with extraordinary rapidity.

Tut-ankhamen was here in many forms. There were several Egyptians to give a spice of atmosphere to the proceedings, and one enterprising lady, dressed as a Royal Queen—Cleopatra possibly—carried a genuine mummified head several thousand years old under her arm, the teeth still hanging to the mouth: a somewhat gruesome reminder of the brevity and uncertainty of life.

To quote now from the programme: "On XII ſtrokes of the gong at midnight enter the CITY FATHERS for ſpecial fitting to receive a deputation requeſting the uſe of the Guildhall for a Ball, and to expreſs horror thereat, followed by the moſt timely appearance of SIR CHRISTOPHER," who proclaims that the Guildhall is eminently satisfactory for a Ball and puts the city fathers incontinently to flight.

The rest of the evening was used for dancing by some and for refreshment by others, and proceedings did not hesitate or falter until the early light of dawn came creeping into the ballroom.

A word is due to those who produced the decorations, which were exceedingly beautiful, especially the fine decorative painting of St. Paul's, which was worth careful study as a work of art.

## Bigger Selfridge's

The tender of Messrs. F. D. Huntingdon, Ltd., has been accepted at £115,610 for another extension to Selfridge's. It will involve sweeping away nearly all the old buildings between the main Selfridge block and Orchard Street, and putting up in their place a section exactly similar in design to the present one. This will still leave a gap of 80 ft. in the middle of the 170 yd. Oxford Street frontage. That gap will be tackled, if all goes well, in sixteen months' time, and in about four years from now the whole of the island site will have been dealt with. A feature of the completed Selfridge's will be the courtyards in the very centre of the site. Mr. Frank Brangwyn, R.A., has been engaged for some time upon designs for decorating these courtyards, and he is also doing the internal decorations of the new section. Sir John Burnet, A.R.A., is the architect of Selfridge's, working in association with a Chicago firm, Messrs. Graham, Anderson, Probst, and White.

## Competition News

### *The Cairo Hospital Competition.*

The result of the final stage of this competition—perhaps the greatest architectural competition of an international character that has ever been organized—repeats the triumph of British architects which was so marked a feature of the first stage.

It will be remembered that in the first stage, open to the architects of the world, five places out of six were won by British architects.

In the final stage there were twelve competitors, and the first and second places have been won by London architects—Messrs. Nicholas and Dixon-Spain, of Hanover Square, and Messrs. Lanchester, Rickards, Lucas, and Lodge, of Bedford Square. All are Fellows of the R.I.B.A.

### *Manchester Exhibition Competition.*

The following awards have been made in the competition promoted by the Manchester Building Trades Exhibition

MR. CHARLES NICHOLAS, F.R.I.B.A

MR. J. E. DIXON-SPAIN, O.B.E., F.R.I.B.A.

THE WINNERS OF THE CAIRO HOSPITAL COMPETITION.

in conjunction with the Manchester Society of Architects, for architectural students:—

Class 1: Measured Drawings.—First prize: Mr. R. A. Cordingley; second, Mr. R. Briggs.

Class 2: Sketches.—First prize: Mr. R. A. Cordingley; second, Mr. G. G. Quarmby.

All the competitors are students at Manchester University.

*Bournemouth Pavilion Competition.*

The Corporation have resolved to grant to competitors an extension of time, beyond May 12, of one month. A number of questions have been received and the answers will be circulated to the competitors in due course.

[*For List of Competitions Open see last week's issue.*]

## Coming Events

*Thursday, March 15.*

Edinburgh A.A.—"Town Planning in Edinburgh." By T. B. Whitson, C.A. 7.30 p.m.

Birmingham Town Planning Lecture: "The Scheme in Operation." By F. C. Minshull, LL.M. 5.30 p.m.

R.I.B.A.—"Architecture: A Necessity or a Luxury." By H. S. Goodhart-Rendel. 5 p.m.

Grosvenor House.—"Architecture and the Theatre." By Nigel Playfair. 5 p.m.

British Museum.—"Excavations at Babylon." By Claire Gaudet. 3.15 p.m.

Inc. Inst. of British Decorators.—"Decoration: Past Examples and Present Trend." By John Scott. 7.30 p.m.

*Friday, March 16.*

Art Workers' Guild.—"Churchyard Monuments."

Birmingham Municipal Technical School.—"How White Lead is Manufactured." By James B. Duncan, M.Sc., F.I.C. 7.15 p.m.

*Saturday, March 17.*

A.A. Visit New Church at Acton, by Robert Atkinson, and New Pensions Office, Acton.

*Monday, March 19.*

R.I.B.A.—"The Hammersmith Housing Scheme." By B. E. S. Streatfield, O.B.E., D.S.O. 8 p.m.

*Tuesday, March 20.*

Liverpool Architectural Society.—"The Architecture of Freedom." By Major H. C. Corlette, O.B.E., F.R.I.B.A.

Grosvenor House.—"Fashion and Style in Domestic Architecture." By Sir Lawrence Weaver, K.B.E.

## South Wales Architects

At the general meeting of the South Wales Institute of Architects (Western Branch), held at Swansea, the following officers were elected for the ensuing year: Chairman, Mr. Charles S. Thomas, F.S.Arc.; hon. treasurer and librarian, Mr. H. C. Portsmouth, F.S.Arc.; hon. secretary, Mr. J. Herbert Jones, F.S.Arc.; Committee, Messrs. Glendinning Moxham, F.R.I.B.A., C. Russell Peacock, F.S.Arc., J. Cook Rees, F.S.Arc., Thomas Gibb, F.S.A., G. R. U. Rogers, G. L. Crocker, W. T. Lloyd. Mr. Ernest E. Morgan, A.R.I.B.A., was elected hon. auditor. The following were elected to the Council of the South Wales Institute of Architects: Messrs. Charles S. Thomas, H. C. Portsmouth, J. Herbert Jones, Glendinning Moxham, J. Cook Rees. Associates' representative, Mr. G. L. Crocker.

## The Lighting of Picture Galleries and Museums

A discussion upon a paper, "The Lighting of Picture Galleries and Museums," read before the R.I.B.A. by Mr. S. Hurst Seager, F.R.I.B.A., some time previously, took place at the Institute on Monday evening last week. The president, Mr. Paul Waterhouse, was in the chair, and among those present were Lord Crawford, H.M. First Commissioner of Works, and Sir Charles Holmes, curator of the National Art Gallery.

Mr. Seager re-introduced the subject with the remark that he proposed to illustrate only a line of that which would include the contrast seen in the types of double and single glazed galleries. By means of lantern-slides he then proceeded to give illustrations showing types of top-lighted galleries—as at Birmingham, Dulwich, Hertford House, Christie's, etc.—galleries where attempts had been made to overcome defects in lighting, and examples designed on the principle of shielding the spectator—at Munich, Berne, the Ryke Museum, Amsterdam, and elsewhere—top side-lighted methods where it was designed to carry out the principle that the picture wall must be the best-lighted part of the room; examples showing how present side-lighted rooms might be converted into top side-lighted ones (with an interesting and successful experiment at the Louvre); and the various expedients which might be adopted for overcoming defects in irregular galleries, or for the proper illumination of individual pictures.

He pointed out that, in spite of all that has been written and said on this subject, especially in the United States, it is a curious fact that very few modern galleries are lighted in an entirely satisfactory way. The necessity for covering pictures with glass has created the problem of reflections, and the pleasure of looking at pictures is frequently marred by the image of the spectator in the glass of the picture, particularly—as the lecturer pointed out—in the case of bald-headed men, as he had found from personal experience.

The remedy, according to Mr. Seager, is to adopt a system of top side-light, and he showed by a very fine series of slides and photographs the defects in many of the leading European galleries, and in some cases the improvement already effected by adopting his suggestions. Speaking generally his idea is that the spectator should stand in the shadow, while the bright light should fall on the picture.

Mr. Seager advised that in winter, when we needed all the light possible, and the sun had not enough power to do harm, the skylights should be exposed each in turn on the sunny side; in summer they should be closed on the sunny side.

All blinds should be opaque, and if reduction of light were required it should be gained by the reduction of the size of the skylight by partially covering it, when a pure daylight would still be obtained.

"May I venture to express the hope," Mr. Seager concluded, "that you consider my papers and the experiments of the National Physical Laboratory, and those made by H.M. Office of Works, under Sir Frank Baines, have proved beyond ques tion that the remedy for getting rid the irritating and harmful reflections see in pictures on the walls of the gallerie the world over, lies in the hands of the directors and proprietors."

Mr. Wm. Woodward, F.R.I.B.A., sai that all would agree with him that th present lighting of picture galleries was very unfortunate thing. What could more vexatious, not only to the archite of the gallery, but to the general publi to be able to see, not the picture itsel but the reflection of your own forn Consider two important galleries London—the Tate and the Nation Gallery. One had only to enter either these to arrive at the conclusion that th lighting was hopeless for seeing the pi tures in a proper manner. With all o wealth, science, and art, we had n got a gallery where you could see th pictures that were in it.

Sir Charles Holmes said that th National Gallery had quite rightly be used as a whipping post. But he wou like to remind them that the proble there was extraordinarily difficult. Wh you had pictures that were painted very dark oils, and they had to be e hibited, as in London, in very dangero climes, they had to be glazed. And wh you once put glass over a picture you h at once something approaching a mirr and nothing would eliminate reflectior

If the nation possessed only 100 p tures, it would be possible to show the in separate bays as isolated examp of art, but it would be impossible to house such a large collection as that in t National Gallery.

The lighting of the National Galle was frequently criticized. But when y got rooms 20 ft. to 30 ft. high—and some cases 30 ft. to 40 ft. high—short pulling the building down you could do away with the diffused light wh was responsible for the reflections.

Lord Crawford expressed himself not caring for any of the remedies forward by Mr. Seager. And with reg to reflections on pictures in the Natio Gallery, he went there constantly a did not see them. And that was beca he looked at them as a human bei while the camera with which Mr. Sea had taken many of his illustrations sho ing "glare" had looked at them a machine. Mr. Seager's pictures w entirely misleading.

In a public art gallery it was v necessary to have the pictures glaze not only because of the climate, but cause of mischievous people. They had as many as twenty injuries in day to the glass upon pictures in National Gallery.

Mr. Dunbar Smith, F.R.I.B.A., Arthur Bolton, F.R.I.B.A., and Arthur Keen, F.R.I.B.A., also spoke.

Mr. Seager, acknowledging a vote thanks for his paper, said that he despondent that the seed he had tried sow should have fallen upon such h soil.

## An Acknowledgment

The photograph of "Wrencote," Cr don, published on page 456 of our issue, is the property of Mr. Natha Lloyd, whose name was inadverten omitted from the reproduction.

# The Week's News

### *Shardlow Infirmary Extensions.*

t is proposed to build a new infirmary rd at a cost of £2,500.

### *posed Winter Palace for Colwyn Bay.*

proposal is afoot to construct a ter palace at Colwyn Bay.

### *House Shortage at Coventry.*

t is estimated that 2,500 houses are uired for Coventry.

### *More Houses for Nuneaton.*

scheme for the erection of 200 ses will shortly be placed before the poration.

### *Change of Address.*

Ir. Eric Hayman, M.A. (Camb.), has ved to 44 Bedford Row, W.C.1. Tele- ne: Chancery 7058.

### *Croydon Air Terminus.*

he Civil Aviation Advisory Board mmend the enlargement of the Croy- aerodrome at a cost of £250,000.

### *Lincoln Cathedral Restoration.*

he Dean of Lincoln has raised nearly oo in America and Canada towards restoration of Lincoln Cathedral.

### *Dudley's £320 House.*

number of municipal houses are to erected at Dudley at a cost of £320 .

### *tbourne Cricket Club War Memorial.*

war memorial dining-hall is to be ted by the Eastbourne Cricket and tball Club.

### *More Houses for Eastbourne.*

further scheme for 100 municipal ses, estimated to cost £59,396, has approved.

### *Municipal Offices for Nuneaton.*

he Nuneaton Corporation have under ideration a proposal to build new icipal offices.

### *New Cinema for Worthing.*

new cinema is to be erected on the of Worthing Lodge, Chapel Road. new building will provide accom- lation for 2,000.

### *Wakefield Improvement Scheme.*

akefield City Council propose to olish 100 houses in areas near Kirk- and to erect houses on Portobello te for the displaced tenants.

### *Slum Clearance at Blackburn.*

lackburn Corporation are to clear a ber of slum areas. The displaced nts will be accommodated in model .

### *Doll's House in Titania's Palace.*

the nursery of Titania's Palace is a ature doll's house which is four inches . It is a copy of the doll's house by Sir Neville Wilkinson.

### *Bank of England Rebuilding Scheme.*

view of the fact that the rebuilding e Bank of England is to be under- n shortly, the Corporation of the City ondon have put forward a scheme the widening of Princes Street. It timated that the scheme, including pulling down and rebuilding of the r wall of the Bank, will cost about o,000.

### *New Midland Road.*

The Dudley Town Council have agreed to contribute a sum not exceeding £20,000 towards the cost of the Birmingham to Wolverhampton road.

### *Oxford Women's Colleges.*

An appeal is being made for funds for the erection of more buildings and the installation of more equipment for the four women's colleges at Oxford.

### *Housing at Birmingham.*

The Estates Committee propose to sell 104 acres of land on the Billesley Common Estate for development for housing purposes. The purchase price is fixed at £18,500.

### *The Kitchener Memorial at Chatham.*

A block of four cottages for disabled sailors and soldiers is to be erected at Chatham as a memorial to Lord Kitchener. Mr. R. L. Honey, F.S.I., M.S.A., is the architect.

### *Southport War Memorial.*

The Southport Corporation are applying to the Ministry of Health for sanction to a loan of £2,000 for the lay-out of the gardens in Lord Street and for the new war memorial.

### *Pendower Development.*

The Newcastle Corporation Housing Committee have decided to apply to the Ministry of Health for permission to construct a further batch of houses on the Pendower Estate.

### *Gosforth Garden Village.*

The London and North Eastern Railway are to co-operate with the London and North Eastern (Gosforth) Garden Village, Ltd., in the laying-out of a garden village at South Gosforth. The site will hold about 200 houses.

### *House in which Leech was Born.*

A house at the corner of Bennett Street and Stamford Street, Blackfriars Road, in which John Leech, the celebrated "Punch" artist, was born, and where John Rennie, the builder of London Bridge, lived, is to be demolished.

### *Manchester Improvements.*

The Manchester City Council are considering proposals to spend £198,308 on main drainage, £64,000 on assisting private builders of house property, and £5,187 on forming tennis courts and bowling greens.

### *Malvern Hill to be Tunnelled.*

The Great Western Railway Company are about to construct a new tunnel through Malvern Hill at a probable cost of £1,000,000, to accelerate their service from Birmingham and Worcester to Hereford and South Wales.

### *R.W.A. School of Architecture.*

The Royal West of England Academy School of Architecture are holding an exhibition of the designs for a "stadium for international Olympic games," submitted for the Society of Architects' Victory Scholarship.

### *Art Gallery for Birkenhead.*

Viscount Leverhulme has given a site at Birkenhead to the Corporation for an art gallery. The building will be erected from the proceeds of legacies amounting to £30,000 left to the Corporation by Mr. John Williamson and Mr. P. A. Williamson.

### *The Wren Bicentenary Celebration.*

The secretary of the R.I.B.A. has received the following cablegram from the Royal Victorian Institute of Architects:

> "Melbourne.
>
> "Victorian Institute Architects tender hearty support Wren commemoration."

### *Dunwich Lost Churches.*

All that now remains of Dunwich Church, Suffolk, is an angled column of stone and flintwork. The remainder of the church has been gradually washed away by the sea. It is suggested that the remains should be re-erected inland as a memorial.

### *Stained Glass at the V. and A. Museum.*

The Victoria and Albert Museum has acquired, out of the funds of the Murray Bequest, four panels of stained glass from the recent sale of the Engel-Gros collection in Paris. Three of these are Swiss, and belong to the period of highest accomplishment; the fourth is South German. The panels are temporarily exhibited in Room 139.

### *Scottish Building Strike Settled.*

The building strike in Glasgow and the West of Scotland has been settled. The parties agreed upon 2d. per hour reduction on the wages of masons and bricklayers, and 1½d. an hour on the wages of labourers attending skilled workers, the terms to be submitted to a ballot vote of the workers, the votes to be returnable on March 15. Meantime the men have resumed work at the old rate.

### *West End Garage Scheme.*

The work of transforming the Poland Street workhouse, off Oxford Street, into a garage for West End motorists will probably be begun within a month. £35,000 is to be spent on alterations and restoration of the existing building. The London County Council have given provisional approval to the erection of a three-story building. The aim of the syndicate is to provide a garage which will accommodate several hundred motor-cars, and will meet the "parking" requirements of theatre-goers and West End diners-out.

### *The Lord Kitchener Chapel.*

The memorial chapel to Lord Kitchener in St. Paul's Cathedral, for which a chamber on the ground floor of the north-west tower has been given to the committee by the Dean and Chapter, will not be completed before May of next year. It will be known and used as "Lord Kitchener's Chapel," and is to contain a recumbent marble statue of the great soldier, a marble altar, surmounted by a carved "Pieta," and two life-sized statues of St. Michael and St. George. In a niche enclosed in a wrought-iron grille is to be placed the roll of honour containing the names of Lord Kitchener and some 20,000 of his comrades in the Royal Engineers.

## The House Shortage

The following resolution has been passed at a meeting of the Executive Committee of the National Building and Engineering Brick Federation held at London: "That in the opinion of this meeting the whole problem of the re-establishment of the house building industry, apart from that of unemployment, centres on the renewal of confidence in the investment of capital. It is submitted that the re-establishment of the house building industry to provide a sufficiency of houses of a present cost value not exceeding £400 is and will continue to be impracticable until the Government in co-operation with the local authorities put into operation a system of subsidies to operate until economic conditions of building costs and cost of living are brought down to a standard of reasonable permanency, and this Federation would welcome the opportunity of submitting to the Government a subsidy scheme. It is submitted that such re-establishment would tend to a return of confidence in the investment of capital, would encourage house provision in adequate quantity, be a considerable relief to unemployment, and reduction in national and local relief costs, would assist in removing the existing danger to national health and morality through overcrowded living conditions, would alleviate some of the despondency and anxiety consequent on unemployment, and would promote citizenship responsibility and interest by tenant ownership. This Federation is strongly of opinion that the facilities for tenant ownership available by the Small Dwelling Act of 1899, and the extended facilities provided by Section 49 of the Town Planning Act of 1919, are very little known to the people who might desire to become tenant owners, and that an extensive advertising of these facilities by the Government would be a worthy national Service." The Federation Secretary is Mr. G. Wink Wight, C.A., 22 Surrey Street, Strand, London, W.C.2.

The following suggestions for the amendment of the Small Dwellings Acquisition Act are submitted for the consideration of Members of Parliament in the monthly record issued by the Housing and Town Planning Council:—

(*a*) An annual subsidy should be given by the State to occupying owners purchasing houses under the Act. This State subsidy should be supplemented to an equal amount by the local authority. In both cases the subsidy should take the form of annual grants paid by the State and the local authority respectively over a term of thirty years.

(*b*) The subsidies described above should be given only in the cases of new houses actually built as a result of the operation of the Act.

(*c*) Advances in accordance with a scale to be determined should be made during the erection of the houses.

(*d*) The limit of 85 per cent. of the market value of the houses should be retained. But the local authority should be empowered to advance a sum in excess of the 85 per cent. of the market value.

(*e*) The security for this additional sum shall be found in the grants pledged to be given by the State and the local authorities together.

(*f*) The local authority should take special care to secure that the house and the estate on which it is built should conform fully to good modern standards of design and town planning.

## Clerks of Works at Dinner

Under the chairmanship of Mr. E. C. P. Monson, PP.S.A., F.R.I.B.A., F.S.I., the fortieth annual dinner of the Incorporated Clerk of Works Association was recently held at the Holborn Restaurant.

The King's Hall, in which the dinner took place, was filled to its utmost capacity, and among the guests present were Mr. Stanley Hamp, F.R.I.B.A. (President of the Architectural Association), Sir Henry Tanner, Lieut.-Col. A. C. Preston, V.D. (Past-Master of the Carpenters' Company), Mr. William Woodward, F.R.I.B.A., Lieut.-Col. R. J. Tasker, L.C.C., and Mr. H. C. H. Shenton (President of the Institution of Sanitary Engineers).

Including the toast of "The King," there were eight toasts in all, to say nothing of a very comprehensive musical entertainment (under the direction of Mr. Harry Briden).

Mr. F. J. Pitts (Vice-President of the Association), in proposing the toast of "The Architects," expressed the appreciation which the members of the Association felt for the interest taken in their organization by architects, surveyors, and builders alike.

In reply, Mr. Stanley Hamp, F.R.I.B.A. (President of the Architectural Association), said he fully realized the value of the clerk of works in the erection of a building, and held the view most strongly that at the present time, with building construction as complex as it had become, it was essential that architects should have the services of the clerk of works on all buildings, however small, to coordinate the work of the contractor and sub-contractors, and so avoid confusion and delay.

Lieut.-Col. R. J. Tasker, L.C.C., who responded to the toast of "The Surveyors" (which was proposed by Mr. W. Lake, PP.I.C.W.A.), urged that members of the architectural and surveying professions should gain first-hand experience of building work by spending part of the time allotted to their training on buildings in course of erection.

Mention was made by Mr. P. J. Luxton (Editor of the I.C.W.A. Journal) of the important work which is now being carried on by the Carpenters' Company at the Trades' Training College and elsewhere.

Mr. E. Schofield, PP.I.C.W.A., proposed "The Builders," and was followed by Mr. F. Shingleton, M.V.O., who, in referring to the present unsatisfactory position of the building industry, stated that builders were tendering at cost price, or under, in order to keep their staffs together. Improvements in the condition of the industry could only come about through lower wages, cheaper materials and a better output.

Mr. E. C. P. Monson, PP.S.A., F.R.I.B.A., in proposing the toast of the "Incorporated Clerk of Works Association," recalled that it was founded in 1882, and remarked that the rules were framed to ensure that the members were all men of the calibre required by the architects to superintend buil works. In referring to salaries, Monson said he was certain that possessing the necessary knowledge integrity for the proper discharge their duties could not be found who willing to accept such remuneration was sometimes offered by local auth ties.

The President of the Association H. W. Page), who responded, followed by several other speakers.

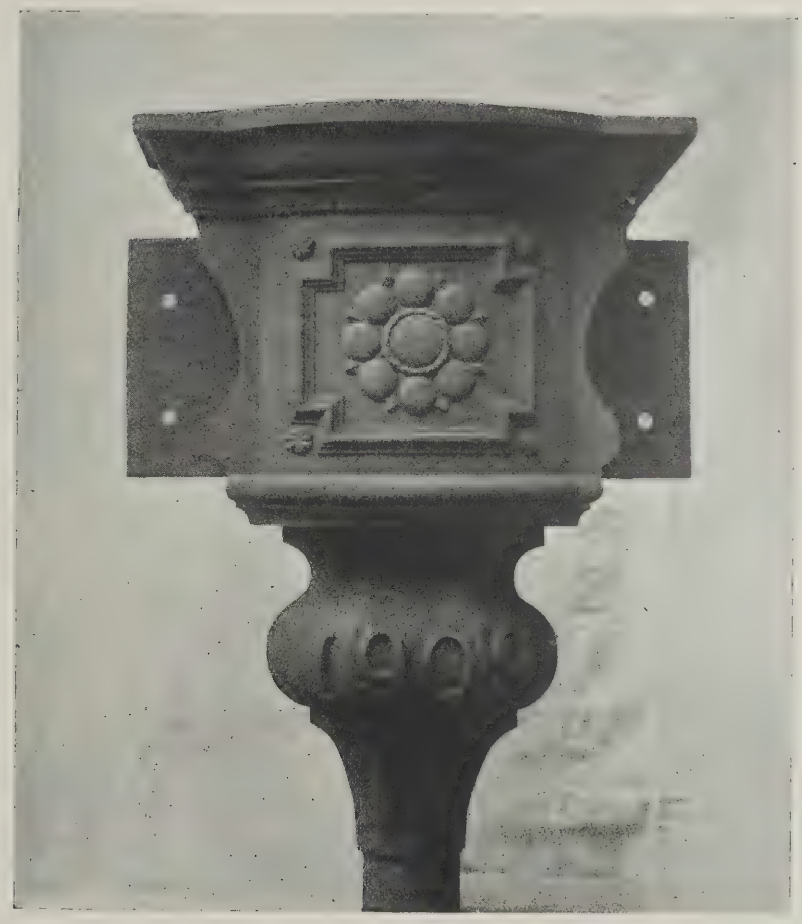
## Heating and Ventilatio of Buildings

In the course of a lecture at Uni sity College, on the subject of hea and ventilation, Professor A. H. Ba said that it was somewhat deli to address architects as to the relati which should exist between them heating and ventilating engineers, he would venture to do so as he thou the situation called for some comm In his view, unless the architect posse a special and unusual amount of kn ledge on the subject of heating ventilation he was taking on his shoulders a serious responsibility in b sole professional adviser to his client u the matter. Of course, if the installa was a simple one it would be ha necessary for him to call in a consult "Experience has shown that architects inclined to deal with complicated hea and ventilating installations with s assistance as they can obtain from fi of contractors who specialize in this c of work, with the result that nine ou ten, and probably nineteen out of twe of the installations which have rece been installed in important buildings such that if they were brought to him building owner he would decline to acc Frequently he is called in where procedure has been adopted and finds existing plant very bad and giving poor results." As to the training a should have to deal professionally this work he alluded to the three ye course provided at University Coll the curriculum of which embraces trical engineering, including elect design and a general knowledge mechanical engineering, as well a knowledge of building construction s cient to fulfil the requirements of a h ing and ventilating engineer. fessor Barker condemned the co adopted by so many architects of ca in half-a-dozen or more different firm contractors who specialize in heating ventilation work. "Much time is s by these firms in preparing schemes, it is really impossible for an archite say which of these is best. If six schemes were handed to him, as freque happens, he is generally unable to which is best, and usually it ends in scheme being abandoned and a scheme redrawn." The design of a hea and ventilating installation by an a tect was analogous to a private o who contemplated building a house ing in a builder and telling him rou his requirements and the builder c ing out these as best he could. It ne little imagination to know that the would be disappointing. He advoc close collaboration between the arch and the heating and ventilating engi

esday, March 21, 1923 Vol. LVII. No. 1472

# THE ARCHITECTS' JOURNAL & Architectural Engineer

With which is incorporated "The Builders' Journal."



RAIN-WATER HEAD
*Designed by Basil Oliver, F.R.I.B.A.*

27-29 Tothill Street, Westminster, S.W.1.

# Wells: Houses in the Market Place

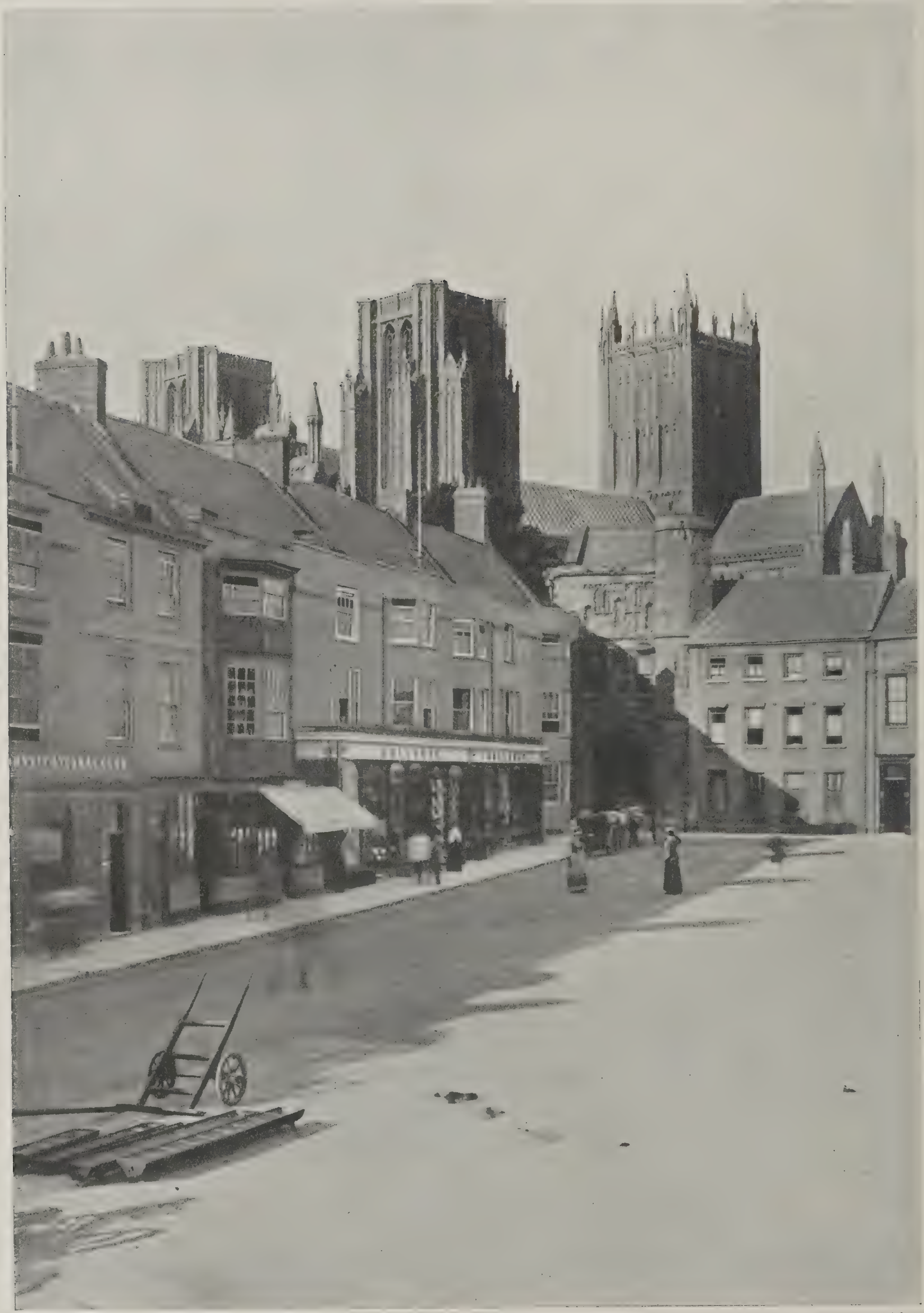


*Photo: E. M. Hick.*

This, the smallest city in England, looms large in the history of architecture. The three noble towers of the cathedral rising above the quaint old shops in the market square embrace in one glance 500 years of the builder's activity. No other city, it is safe to say, contains so splendid a collection of mediæval buildings in so small a compass.

THE
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# Hoardings

UNCH" once told a story of a Salvation Army
band which, when requested by a gentleman with
a headache to move on, "moved on" a few doors
and there prayed for his soul. "Punch's" readers
ubt saw the humour of the situation, but the gentle-
with the headache must have felt that the matter was
d a joke. He would have found redress at law. As
tter of fact, the L.C.C. are at the present moment pro-
g the abolition of *all* unnecessary street noises and
and especially the epidemic of street whistling, which
nfortunate London pedestrian has to encounter in
ion to the unavoidable roar of the traffic.

rd Newton the other day introduced his Bill for the
er regulation of advertisements (a Bill supplementing
Advertisements Regulation Act which became law
7) by insisting that the eye should be given the pro-
n which the law has already given to the ear. The
sity for some such Bill no architect will deny. What
n can be more heartrending than to erect a fine build-
nd have it ruined by the erection of great boards
g immense letters or pictures, breaking up the pro-
ns and obliterating the design? Of course, there is a
y to try to prevent these things (one has a suspicion
there is a society pro- or anti- everything if we only
), but what is wanted in a case like this is not so much
ety as an Act of Parliament. Of course, we have to
the former before we can get the latter.

Advertisements Regulation Act of 1907 "authorized
authorities to make by-laws for regulating, restricting
eventing the exhibition of advertisements in such
or by such means as to affect injuriously the ameni-
f public parks or pleasure grounds, or to disfigure the
al beauty of a landscape," which last would be diffi-
o define for legal purposes, and, brought to court in
tempt, would have given point to the fact that great
rarely think alike. And as Mr. John Bailey, the
treasurer of the Society for the Control of Abuses of
Advertisement (the Scapa Society), has elsewhere
d out, it left the general amenities of the towns and
s quite unprotected. The Bill now carried through
rds by Lord Newton proposes to enable local authori-
make by-laws not only with respect to particular
apes, "but generally to the rural scenery of their
t; also for the preservation of the amenities of towns
illages and places frequented by the public on account
ir beauty or historic interest." But, it will be noticed,
rchitect remains unprotected against the disfigure-
of his buildings, and must still rely upon all his clients
the good sense and tact of Mr. Gordon Selfridge.

even from the layman's point of view it is high time
ster nuisance was stopped. One day, of course, we
e left regretting their disappearance as much as we
the old London cries, but that we are willing to risk.
e a street in London which has not been made hideous
nouncements of patent pills? Is there a village in
d where the glaring red and yellow of somebody or
soap advertisement has not plastered all the walls?
en by night is the nuisance hidden. The sky-signs of
lilly Circus have made it the most foolish place in
Surely no one with mind grown beyond the fire-
age can care for this sort of thing?

Row after row of drab, depressing houses have more excuse (though a Ministry of Fine Arts will assuredly be asked to deal with them, too, one day). And they are less irritating because they are not in the first place put there to catch the sight. But the advertisement hoarding is intended to address itself directly to you, "Busy salesmen for twenty hours a day." Not even by keeping your eyes steadily cast down upon the pavement is there any escape. Reflections of mutton chops and pencils are cast before you upon the very footway. The clouds, too, reveal the delicate tracery, wrought in smoke, of somebody's patent washer or syrup.

We can rail against the abuse of the system without saying a word against the system itself. Primarily, the advertisement poster is intended as an announcement. If the announcement interests and concerns us, it is something we should be pleased to read. Nobody can object to the quiet, black-lettered announcements, for instance, which tell of the sale of Farmer Hayseed's stock. Rather are these part and parcel of the countryside. And in many of the advertisements placed on the railway—and especially the London Underground Railway—stations, the eye takes a delight. Here they are in keeping with the bookstalls and refreshment-rooms, and without them waiting for trains would be worse than it often is.

Only two towns in England have taken a stand against the abuse. They are Edinburgh and Dover. But a clean sweep could be made of most of the things that offend in the open country if county and district councils would exercise the powers conferred upon them under the 1907 Act. Field-boards and roadside display, as well probably as the more blatant signs on business and other premises (outside urban limits), can be forbidden by by-laws framed under the Act, and it is said that the Home Office has shown itself ready to confirm such rules when there is clear evidence of local desire for relief.

Under a law passed by the French Parliament in 1912, hoardings are taxed at £2 per square yard if not over 6 yds. in area, a graduated scale of taxation up to £16 per square yard applying to advertisements larger than 20 sq. yds. The object of the measure is avowedly that of taxing such advertisements out of existence.

At Potsdam no advertisement hoardings are allowed within 400 yds. from a railway. Further legislation might be cited—legislation passed even in the United States of America themselves.

The poster nuisance has spread widely during the last twenty-five years. One big billposting firm in London advertises proudly as having "over a million sites." Well, it is safe to assume that three-quarters of a million of those sites are in their wrong places, and ought not to exist. That is, three-quarters of a million places have been rendered residentially the worse. The rich can protect themselves against the eyesore; the poor have it thrust before them at every street turn. They should be made aware that the remedy is in their, and their council's, own hands. At Hampstead, Ealing, Letchworth, Welwyn, and elsewhere, where garden cities have been laid out, no advertisements of any kind are allowed except on a proper notice-board put up for the purpose. This means that in these new towns or estates, at any rate, architecture will at last be given a fair chance.

# Notes and Comments

## The Housing Subsidy

It is by no means certain that the new Government subsidy of £6 per house per annum for twenty years will produce the 500,000 houses which are still required. Critics of the new policy maintain that the sum is inadequate to ensure a reasonable return on capital outlay. If it were larger, or the period of the subsidy longer, the outlook might be more reassuring. The alternative proposal that new houses should be tax-free for fifteen or twenty years (which, we note, is being advocated in "The Daily Mail"), seems to have distinct possibilities. The experiment has proved a success in New York, and is now being tried in Italy. The method has, of course, obvious disadvantages, chief of which is the creation of a privileged class of property. But preferential treatment would be required for a limited period only. It is important to remember that no matter what form the subsidy may take, it must ultimately be debited to the national exchequer; whether it takes the form of a money payment or of abatement of taxation is, from a broad point of view, immaterial. If the "tax-free" method will more readily produce the houses (and it certainly offers a stimulus to private enterprise) it should be boldly adopted.

## Our Itinerant Monuments

Monuments, especially statues, are notoriously peripatetic. They have a way of changing their sites that, while it adds much to the gaiety of our conventional scenery, must surely be rather disconcerting to the tracker. A stranger, who is also an admirer of our military history, goes to Waterloo Place to do homage to the great Napier, only to find that he has been ousted by King Edward VII. Or a denizen of our Indian Empire comes to honour the memory of Clive, who was wont to stand in Whitehall. Some well-informed Londoner may possibly be at hand to direct the pilgrim to Charles Street. The Crimean Guards, it is to be noted, have never deserted the post of duty; they merely took six paces to the rear on the approach of Florence Nightingale and Sidney Herbert. And then there is James II who delights in dodging about among the Westminster palaces during his intervals of disinterment. In Manchester they propose to erect a war memorial in Albert Square, but unfortunately the site is already occupied by a monument. What shall they do? Obviously, remove the offending monument. This it is decided to do. A correspondent of "The Manchester City News" suggests (ironically, we fear) that public monuments should be set up on wheels to facilitate removal from time to time. An excellent idea. Let London follow the example of Manchester. It is rather unexciting to see the Nelson Column so regularly in Trafalgar Square. Why not trundle it down to Parliament Square for a change? And there would be no harm in a cross-over between the Griffin at Temple Bar and Eros in Piccadilly Circus. But there is danger in the suggestion. The Anti-Public Monument Society might one dark night wheel the whole lot into the Thames.

## The Charing Cross Bridge Exhibition

The London Society has done an excellent work in getting together the Exhibition of Designs for a New Bridge at Charing Cross, which is now being held at the old County Hall, Spring Gardens. Most of these designs have been seen separately before, but, assembled, they have a special interest, showing in how many different ways the problem may be handled. Over and beyond this, the exhibition renders invaluable service by keeping the Charing Cross Bridge project in the public mind. We do not believe that the public is indifferent to the civic interest; it is merely unorganized and has no adequate means of giving expression to its wishes. It is by interpreting the public mind and
giving it forcible expression that the Press may hel
enormously to get such essential improvements as th
Charing Cross Bridge carried into effect. That the imp
ment is one of vital urgency is admitted by every
(with the possible exception of the directors of what
until recently the South-Eastern and Chatham Rai
Company). So long as Charing Cross Station and rai
bridge exist, so long will the development of Londo
held up. On the south side of the river (and let it b
membered that Waterloo Station is roughly at the
graphical centre of London) there are many square mi
ground, of enormous potential value, at present occupie
small and sometimes semi-derelict property. Here
that London must develop in the future; the north
of the river is already developed to capacity. But no
can be done until cross-river communications are gr
improved. The distance between London and South
Bridges is 480 yards; between Waterloo and Westmi
1,200 yards. This enormous gap must be filled in. W
ing either Waterloo or Westminster Bridge will be of
use, and to the widening of the former, in any case,
are definite æsthetic objections. That "ugly red
Behemoth," as Mr. John Burns called it, must go; it st
in the way of progress and spoils the view. The pro
is one that must be dealt with in a big way. There mu
no parochialism or small-mindedness—no petty pric
prejudice on the part of the different authorities concer
The scheme must be regarded as a London improven
not merely as one that relates to Westminster or Lam
and we hope that the City Fathers will view it in this
Of the exhibition itself we have no space to say any
this week. We propose, however, to deal adequately
it in our next issue. In the meantime we offer our h
congratulations to the London Society on this very
and stimulating exhibition.

## The Late Earl of Plymouth

The death of the Earl of Plymouth will be widel
gretted. For many years he had been closely assoc
with works of public benefit, and always unobtrusivel
without personal ambition. Essentially was he a man
believed in deeds, not words, and all his deeds were
well and with as little publicity as possible. He wa
tensely interested in the welfare of London, and one
most notable works in this regard was the saving o
Crystal Palace from the hands of the speculative bu
at great financial cost to himself. He helped to esta
the London Society, of which he was president, and i
early years of the century held, with distinction, the
of First Commissioner of Works. His humanizing infl
in public affairs will be greatly missed.

## Charging for Admission to the Museu

The proposal, which is now before Parliament, to c
for admission to the British Museum and the Natural
tory Museum must be vigorously opposed. As a mea
raising revenue it is negligible, since the yield expec
only £9,500 a year. Even if it were a hundred tim
much, the charge would still be unjustified. Already
difficult enough to get people into museums—pos
because of the fact that they are called museums. If
were known as "Fashion Fairs of Other Days" or "
at the Past," the public would probably flock to th
thousands. As it is, they only go into them on very
occasions—when country cousins come up to see the
of town, or when excavations in the East stimulate a
sient interest in mummies. To charge for admissio
stop their going in altogether. Thus, the only effect
proposal would be to penalize students and those
use the museums to get a living. Parliament must se
that this Bill is rejected.

# As We See Ourselves

## An Architect on Architecture

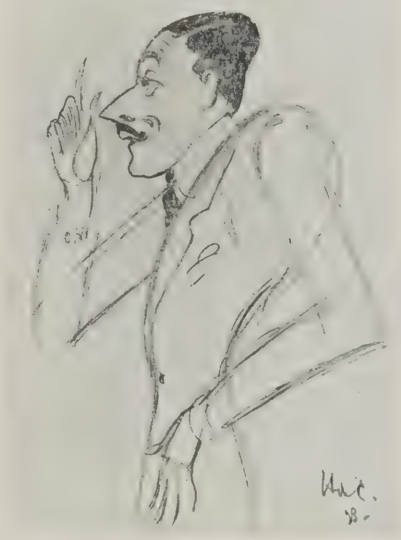
A FORTNIGHT ago the architectural profession heard the unvarnished criticism of a layman; last week (at the R.I.B.A.), a section of the laity listened to the other side of the question.

In discussing the question of "Architecture, a Necessity a Luxury," Mr. Goodhart-Rendel flatly, if uncon- ously, opposed the doctrines expounded by Mr. Frankau the Architectural Association, and, were the two speakers meet in debate, one could imagine a very pretty quarrel king place.

By "Is Architecture a Necessity?" said Mr. Goodhart- ndel, he meant "Is Architecture a thing which cannot done without?" and to that he added a subsidiary estion, "Is Architecture a thing we are going to get ether we can do without it or not?"

By luxury he meant a thing which was desirable but not dispensable; by "Is Architecture a xury?" he therefore meant "Is chitecture a thing which can be done thout, but which it is natural to nt to have?" Architecture was not easy thing to define. It could not described as a mere mitigation of brutalities of building, nor was its ction that of clothing and adorning at which would be ugly unadorned.

Bernard Shaw had said that some ople regarded art as "a costly ring the nose of Nature," and this was extremely accurate simile of a mmon mental attitude. Many peo- thought of Nature as the sort of imal that one would expect to wear ring in its nose, and the nose-ring art would frustrate its most dis- eeable propensities, and might even made a handsome thing in itself. e addition of ornament would often vert comely building into architec- e, but with uncomely building no ament would fuse and no amalgam ult. Perhaps the only absolute rule h which all works of art must comply was that of sistency; no work of art could be at war with itself.


MR. H. S. GOODHART-RENDEL.

Mr. Goodhart-Rendel took exception to the assumption t architecture was described by Wootton's familiar otation: "Well-building hath three conditions, fitness, nness, and delight." He instanced the Radcliffe Library Oxford, which was notably lacking in commodity, and arcades of the Alhambra at Granada, which were tainly not conspicuous for their firmness. Neither of m were examples of well-building, but nobody could y their claims to be architectural objects, since they re richly endowed with the third quality, that of "de- ht."

When all was said and done the fine art of architecture was t of appearances. He did not mean by that that it was art of deceit; true appearances were usually more irable than false ones, but the relation of appearances reality was governed by considerations not strictly hitectural. He wished to express his disagreement with theory held by some people that if a thing was perfectly pted to its use it was entitled to be called beautiful. ose who talked of the "beauty" of machinery ought to e about the beauty of the best-designed machinery in world, the liver and the stomach. He had no doubt t mechanical enthusiasts got more pleasure from looking the inside of a motor than from looking at the façade of Automobile Club, but that was not because they found the steam crane the more beautiful, but because their emotions were more readily touched by efficiency than by beauty.

Without this attribute of "delight," he contended, architecture could not be. It was of the essence of the art. Not only that, but the essence itself, for nothing else was necessary. The stage palaces of Bebrena, Inigo Jones, or Leon Bakst would often be inconvenient for even stage courts to inhabit, and in matters of construction their design was frequently optimistic; but surely they were works of architecture of a very delightful kind. He did not mean to say that anywhere save on the stage or in the field of pure decoration, architecture, thus distinguished from well-building, was self-sufficient; but he did mean that to build soundly and reasonably was not to make architecture, though it might be to lay a reasonable foundation for it. Physical needs demanded that the shelters we built for ourselves should be strong and convenient, but our emotions hungered for something more than security and comfort. We wished by art or artifice to intensify the secure appearance of that which we would should be secure, the comfortable appearance of that which we would have comfortable. Having done this, we generally wished also to exercise our fancy in adornment. And it was not until we did these things that we began to practise the art of architecture.

Architecture, as he saw it, was not the art of building strongly, or cleverly, or economically, but the art of building beautifully. It would generally be the better for a foundation of strength, or cleverness, or economy in building, but it could do without these things and exist on canvas and paint.

Architecture might run counter to the facts of building, or might simply ignore them. It would, however, do best if it looked among those facts for the raw material of its expression. Most architectural forms were constructive forms glorified, though they had seldom attained to their full beauty before their constructional significance had become obsolete.

The elimination of some appearances and intensification of others which could lift mere building into the estate of architecture was a process very much like that which the actor must practise. Just as the natural symptoms of various emotions, if they be unemphasized by art, might fail to convey their meaning to the onlooker, so without the aid of architecture a strong building would often give but little idea of strength, a big one but little idea of bigness; a gorgeous one but little idea of magnificence. The Grand Hotel at Charing Cross was covered with ornament, but looked incurably poor in contrast to the Kodak building in Kingsway, where every ounce of power in the building was emphasized architecturally, or the Royal Hospital at Chelsea, where every inch of plain brickwork contributed toward a noble effect of largeness. The expressiveness of these buildings and of all good architecture was due to the embodiment of forms which symbolized ideas which belonged not only to art but to life. Sir Joshua Reynolds said that one of the first principles of poetry, painting, and architecture was that of "affecting the imagination by means of association of ideas." Wren went beyond this and said that the ideas evoked by association might be ideas remote from art, ideas "pleasing to us from other causes."

This theory accounted for those general preferences for one form over another, which ruled the course and the development of art. Universal associations which were probably more inaccessibly buried in our subconsciousness than any others formed the mainspring of man's æsthetic impulse, and the whole human conception of beauty was probably nothing more than the idea of that which by means of these universal associations could afford us pleasure. Conversely, the human conception of ugliness was probably the idea of that which by these associations could give us pain.

Contrasting architecture and civil engineering, M Goodhart-Rendel said that "intensification" and ador ment were the natural processes of architectural creatic while the latter was that form of building which compli with the commodity and firmness, but was not concern with delight. Civil engineering was obviously a necessit but architecture was not. It was, however, an inevitabilit the impulse to make it and to demand it would out. M had desired, and would presumably continue to desire throughout the ages, and he, therefore, contended that might fairly be regarded as a luxury and not as an expensi nuisance.

# The British School at Rome Scholarships

## A Criticism of the Designs

COMPARED with former years the exhibition of works submitted for the 1923 scholarships, now on view at Burlington House, is a little disappointing. With but two or three exceptions what is shown is—considering the high standard expected of tried students—a mere simmering of promise. It looks as though, for all the indubitable benefits it confers, the school system does, at times, traverse and break up the streaks of strong individual self-expression to be found in promising students.

On a whole, the engravers this year maintain a solider front than any other. The selection for the final test seems judicious, Miss E. Fyle and Messrs. F. Medworth and Ch. Murray being especially good.

The ink and wash drawing of a mountain shown by Miss Fyle carries a rhythm of value, and Mr. Murray's wash drawing of an underground station, like his etched architectural fantasy and, above all, his "Christ on the Cross," herald an artist of sensitive perception. The sculpture is very disappointing, Mr. D. Evans being the less leanly equipped of all seven competitors. It is in the section of painting that an arguable slip of judgment on the part of the selective jury has been made. For all its wilfulness, the work of Mr. Edward Wolfe strikes a most potent note, and shows that here is a personality conversant with the less obvious laws of composition and balance of line and colour. If his portrait of Arnold Bennett is somewhat diffuse, on the other hand that of a Spanish dancer is a ripe accomplishment. His "Nude" may also appear overwhelming, but great skill is evinced in its elaborate building-up. How is it that the innate pungency and technical ability of this Mr. E. Wolfe did not fetch the asterisk of selection? All the cartoons for last year's final competition show interesting, if somewhat recondite interpretations of "Winter."

In the section devoted to architecture, twenty hapless youths elected to tread the arduous path leading to Rome. The route to be followed was so mapped out that instead of passing along beautiful buildings in the grand manner, it led them to a "Bridge" where difficulties were cunningly devised to test their fortitude and skill. The happenings in this section being probably of more interest to the readers of this JOURNAL, we will dilate at more length on them. Briefly put, this "Bridge" had to span a deep ravine, 130 ft. wide, and had to carry, at two different levels, a railway and a road, the railway following a straight tract, with the road 40 ft. below, making a troublesome S, and the total height being roughly 160 ft.

All manner of bridge-forms were tackled, but oddly enough, only three students felt themselves secure enough to design it in ferro-concrete, the others, excepting one with a *vif penchant* for steel, falling back on masonry. As in former years, the bulk of the competitors fought this battle royal under the banners of Liverpool University and of the A.A., the former sending forth ten "hopes," of which five got through, and the A.A. five, four of which succeeded. A careful survey of all the designs shows that while the selection was, on a whole, a just and considered one, y in one instance, a serious lapse of judgment occurred. Th criticism is not made in a carping or airy way; the jury, its composition, was as good as any jury could be, but jury is infallible, and here one does feel that a downrig mistake was made in rejecting the design numbered sixt three, by far the very best submitted.

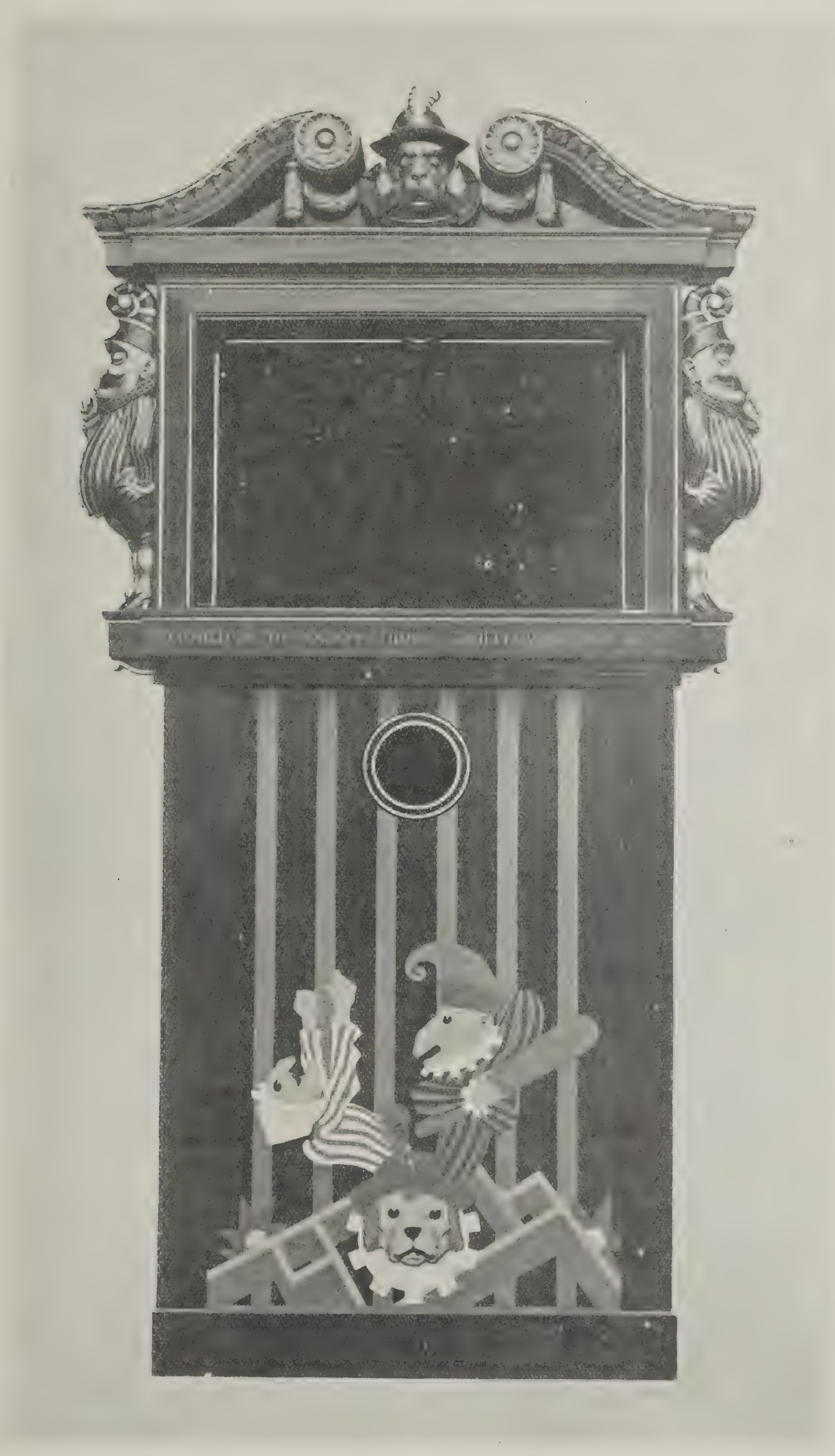
Structurally, it meets all requirements; from the poi of view of planning ("agencement" of road and railwa position of abutments, etc.), it is every whit as good as a other, unless one objects to the principle of suspending t roadway in the middle which, in this case, one can harc do with such a powerful and well-contrived central arc Or is it because ferro-concrete is used? These days fer concrete is an ideal material, durable, safe, economical, a lending itself more than willingly to bold and simple shap Again, if this design was rejected because some elusi æsthetic canon of balance of parts (such as the relati height and forms of its component arches) was deemed have been violated, then other designs shown, embodyi an almost identical use of such elements, should also ha been rejected, which they were not. Whatever reason it a poor one, and to allow the robust weaknesses of desi No. 60 (observe the clumsiness of the central arch in re tion to that stretch of roadway which it encompasse while ploughing design No. 63, with its many subtleties a excellences of design, construction, and even of present tion, is simply to undermine the confidence of futu students, in our eyes a most uncommendable policy to follo

Next to No. 63 (rejected), designs Nos. 55, 56, and 62 a the best. No. 62 is truly monumental; it has strength plenty, and would pile up indeed effectively. No. 56 h about the finest elevation; here, contrast of arch-forn comes off with an undeniable and welcome snap. No. is also a sound design and is the best rendered of the without fuss or hesitation. The lower central arch seem little flat, however, and the thickness between the parap and the intrados somewhat inadequate. The authors designs Nos. 64, 65, 66, 68, 69, 71, and 72 lack the necessa training, and suffer a turgid mind and a clumsy hand control their not ignoble ideas and enthusiasm, but th will no doubt do better next year.

The work submitted by the Rome scholars for 1921 a 1920 is full of interest. Mr. F. O. Lawrence (Rome scho 1920) sends photos of restoration of dwelling-houses Ostia. They bring home the curious analogy of ancie and modern treatment of dwelling-houses or tenemen under one roof. It is a pity the photos are so small. Rowland Pierce's restoration of the Temple of Zeus Girgenti is a serious contribution to this kind of resear work. Mr. E. W. Armstrong (Henry Jarvis student 19 sends a most winsome set of measured drawings of t Piazza del Popolo, Rome, well-drawn and well-colour though we venture to say that all the sun originally trapp in the rendering went out when the sky was sprayed darkly.

G. H.

# Architectural Designs. 20.—A Booth for a "Punch and Judy" Show



One of Liverpool's cherished possessions, the "Punch and Judy" Show beneath the podium of St. George's Hall, has been saved through the generosity of the Sandon Studios Society and the public. The booth, which is illustrated above, was designed by Mr. G. W. Harris. The wood-carving is by Mr. G. H. Tyson Smith, and the construction is by Mr. W. Burden. All are members of the Society. The decorated fabrics were supplied by Mr. Arthur Lee, of Bidston. The show has occupied its present position for at least seventy years.

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# Architectural Travel

### Edited by F. R. YERBURY, Secretary of the Architectural Association

## 1.—Paris: By HOWARD ROBERTSON, S.A.D.G.

*his series of articles has been compiled for the guidance of those travelling for the purpose of seeing and studying archi-cture. They do not set out to be exhaustive guides to any place or country, but it is hoped that they will be of service in nveying a general idea of the architecture to be seen and routes to be followed. They will contain various notes on conditions of travel and other points on which the would-be traveller generally requires guidance.*

TO great artistic achievement is attached a severe penalty. The artist has small beginnings—his work follows more or less the laws of growth; then suddenly he seems to have reached attain-nt—the public accepts and applauds his work. But while artist feels himself to have arrived at a maturity which nerely a stage in the eternal search, the public's craving satisfied. All that it desires in future is that the artist ould continue to produce repetitions of this manner of rk to which it has become accustomed.

rench art to-day is in the position of the artist who uses to rest on his laurels. The vitality which manifests lf in a search for a new expression naturally arouses ret in many of those who love the beautiful attainments the past. The architecture of the France of to-day, like painting and its sculpture, lies under the cloud which nost inevitably hangs over any period of transition.

The architect who wishes to understand contemporary nch architecture must above all things cultivate an open nd. He must bear in mind that French architecture has ssed through phases and periods in each of which something n to perfection has been attained; and he must ask him- whether French design is not now on the point of enter- on another such phase, which, like all beginnings, is ended with a mead of tentative and sometimes abortive eriment.

The knowledge of principles which resulted in the finest nch architecture of the past is handed down by continu- teaching in the great French school of architecture. less knowledge of these principles is submerged by fashions the increasing complexities of modern design, there is reason to believe that French architecture will not ain its vital force, triumphantly refuting those who so quently say that French art to-day is completely dead.

Paris, as a city, holds for the artist a unique position ongst the capitals of the world. France is the most roughly centralized nation on the globe, and no other y is such a perfect mirror of any one nation as Paris is of nce. And besides this, Paris reflects France only; she not cosmopolitan in anything but her visitors. For this son her architecture has an intense interest resulting as does from the expression in building of her national tory.

The very plan of Paris reveals in its structure the gradual wth from its origin, for it has, passing through its very rt the natural feature which has really made Paris— River Seine. The Seine flows round the two islands of a Cité" and "St. Louis," which the Romans converted m being a village of fisherfolk and watermen into a man city. The Emperor Julian liked the soft water of Seine, the figs and the local wines, and so he built, on ill overlooking the two islands, a palace and thermæ, the nains of which are still to be seen in the Latin quarter, the gardens of the Musée Cluny.

The old Roman Lutetia was traversed by two parallel in streets, one of which still retains its importance in general plan of Paris as its main cross axis. This is Boulevard St. Michel, the main artery of the Latin rter, which crosses the centre of the Ile de la Cité in front of the Palais de Justice, and continues northwards as the Boulevard Sébastopol, laid out as part of Haussmann's scheme. The Boulevard St. Michel, like the other old Roman street parallel to it, the rue St. Jacques, takes the name of a patron saint of France; St. James the Apostle is said to have reached Lutetia by what is now this rue St. Jacques, a continuation northwards of the road from Rome.

At right angles to this transverse axis, and crossing it in what is nearly the centre of gravity of the plan as a whole, is the main longitudinal axis of the city, the rue St. Antoine, continued west by the rue de Rivoli, the Champs Elysées, and so out into the Bois de Boulogne. A magnificent succession of avenues, laid out in axial planning, and yet so arranged as to provide buildings as climaxes to each section, without in any way interrupting the flow and direct circulation of traffic. The second main feature of the Paris lay-out from the town-planning aspect is the chain of concentric boulevards which form more or less regular figures round the two main axial arteries. "Boulevard" really means bulwark or rampart, and these streets occupy the sites of the ancient fortifications which they have replaced. These boulevards are fine features of the plan, being rarely less than 100 ft. in width, but it cannot be denied that the great beauty of Paris fundamentally lies in the Seine around which the town is grouped.

The architects of Paris have revealed real love and respect for this river. It receives nearly everywhere the splendid architectural setting which its natural beauty of flow and curve demand. To stand on the Seine bridges in the daytime is to be able to feast the eyes on architectural dreams come true. To see the river at night with the winking lights of its bridges reflected in the water helps one to understand the lyrical side of French expression in art.

Paris is still a city of convenient dimensions; it is only now beginning to collect around it suburbs and "dormitories." It differs from London in this respect, that there is far less travel from distant residential quarters to a main central congested area like the "City." It is the possibility of easy distance from home to shop or office as opposed to our long journeys which accounts for the continual animation in the streets and the fact that Paris is never "dead." The recent growth of the suburbs is, however, beginning to bring with it the same difficulties of circulation which are so apparent in London.

As a work of artistic beauty it is France which is responsible for Paris. The French people have made Paris the expression of their national pride, and in turn Paris makes beauty for the rest of France, through the artists trained in that Parisian atmosphere which is still unique.

The teaching of Paris is expressed in her architecture, in the fine planning, the knowledge and delight in geometry as an art. In the appreciation of a scale which is not huge but nearly always fine and true; in architectural moderation and discipline, the subordination of the imaginative individual to the requirements of a general harmony.

These are the qualities uppermost in the architecture of Paris, qualities which are often decried and yet imitated by other countries, and which, one must admit, run the risk of gradually disappearing in Paris itself in the inevitable war between the commercial and the artistic.

Although the general character of Paris architecture is maintained throughout the city as a whole, there is a distinct cleavage between the atmosphere of the streets and buildings on the two sides of the Seine, the right and left banks. The left bank, with the Boulevard St. Michel and the Boulevard St. Germain as its main arteries, contains the greater part of what is either picturesque, graceful, or stately in simple dignity and restraint. It contains the hotels of the old French families, the aristocracy of blood. On the right bank the vestiges of the old régime are less apparent, and Paris has flowered out into display and glitter, magnificent avenues lined with the homes of another class, the aristocracy of wealth. Each phase is interesting, but the left bank should be explored first by the architect in the order of the evolution and growth of the city.

The chief charms of Paris to the architect naturally enough do not lie in the direction of archæology. The Musée de Cluny holds much of delight to the mediævalist and the Church of St. Germain dés Près will interest those who wish to see one of the most ancient buildings in Paris. The great attraction, however, of the left bank of the river undoubtedly lies in the Quartier Latin and the area extending as far west as the Chamber of Deputies.

On the highest ground in the Quartier Latin, over the site where Ste. Geneviève, one of the three patron saints of Paris, lies buried, stands a big building whose dome is insistently dominating, the Panthéon of France's great men.

Louis XV, in his fear of an approaching demise, vowed to erect this shrine to the patron saint, incidentally paying for it out of his lotteries. History describes the death from a broken heart of Soufflot, the unfortunate architect, who saw public applause change to imprecation when the great mass of the building caused its foundations to settle and its walls to crack. The danger was averted, but Soufflot never lived to see his work finished, nor the church secularized in 1791, and devoted to the memory of "les Grands Hommes." The interior of the Panthéon has oil-paintings in canvas fastened to the walls as its main embellishment; especially interesting are those of Puvis de Chavannes. It is well worth while to climb up to the dome lantern and see how ingenious the structure of a triple dome may be, with a wonderful view of old Paris as a reward of inquisitiveness.

The Church of St. Etienne du Mont in the Place du Panthéon is charming in its mixture of Gothic and Renaissance. It has within it a rood loft in carved stone of exquisite design. It is said that Biard, the designer, did all the work himself; at any rate, he has shown with grace how to entwine a spiral staircase round a pillar.

The name of Labrouste, who built the Bibliothèque Ste. Geneviève hard by, is fairly familiar in England. The façade is the perfect library-type, a model of direct expression. McKim, Mead, and White and many other Americans have found its inspiration of value. The reading-room inside has the bold motive of a row of slender steel columns down the centre, supporting the airiest of metal cupolas. The effect is frank and successful.

Perhaps still better known to us as an architect is Nénot, who is responsible for the able and learned design of the Sorbonne in the neighbouring rue des Ecoles. This building has a splendid staircase and a great amphitheatre, and is laid out with masterly planning. Its façade appears as the rather heavy expression of a French scholar. The way in which varying street levels have been handled is well worth noting.

As a relief from the task of digesting large buildings, it is pleasant to turn into the Luxembourg gardens and occupy a prim iron chair on the tree-shaded gravel. The typically formal lay-out of the gardens is relieved by terraces and steps, and most of all by the swarms of children, to whom the gardens are a paradise as well as to their nursemaids. At one's back is that marvel of Stalactite Rococo, the "Fontaine Medicis," and in front the sturdy rusticated pile of the Palais du Luxembourg, French in spite of its strong flavour of the Medicis and the Pitti. There sits the French Senate, somnolently calm in contrast to the Chamber o Deputies, in a Salle de Séances which is well worth seein with its top-lit hemicycle and sober colonnade. The centr pavilion of the Palais, on the street façade opposite th rue de Tournon, is an effective and solid piece of massin which used to be a continual inspiration for "esquisses" t the "aspirants" of the Ecole des Beaux-Arts.

Like so many parks and open spaces, the Luxembour gardens have suffered the encroachment of building development. Extending some fifty years ago as far south a the Observatoire, of that portion there only remains to-da the grand central Allée de l'Observatoire, an extremel useful example of what can be done in the formal architectural treatment of a promenade. Leading through quarter devoted chiefly to important schools and lycées it reaches its climax with Carpeaux' fountain of the glob supported by four allegorical figures. The sea horses i the basin below are supplied with liquid nourishment b waterspouting dolphins and tortoises in abundance.

From the fountain of Carpeaux can be seen Mansart' satisfying dome which crowns his church of the Val d Grâce, now merely the appanage of a military hospital. Fo the great Benedictine nunnery of the Val de Grâce suffere in the Revolution like so many of the conventual establishments, which at the time occupied the best sites and nearl one-third of the area of Paris. With the disappearance o the convents has almost faded also the memory of th Duchesse de La Vallière, dear to Louis XIV. Close by th Val de Grâce, at No. 284 of the rue St. Jacques, stands i insignificance the entrance of the former Convent of th Carmelites, where La Vallière gave up the splendours o Fontainebleau and St. Germain for repentance and the veil

A direct contrast to these souvenirs is provided close a hand by the Bal Bullier, familiar to every artist and ever model who has ever danced in the Quartier Latin. Th Bullier is open once more, but with much of its old flavou departed.

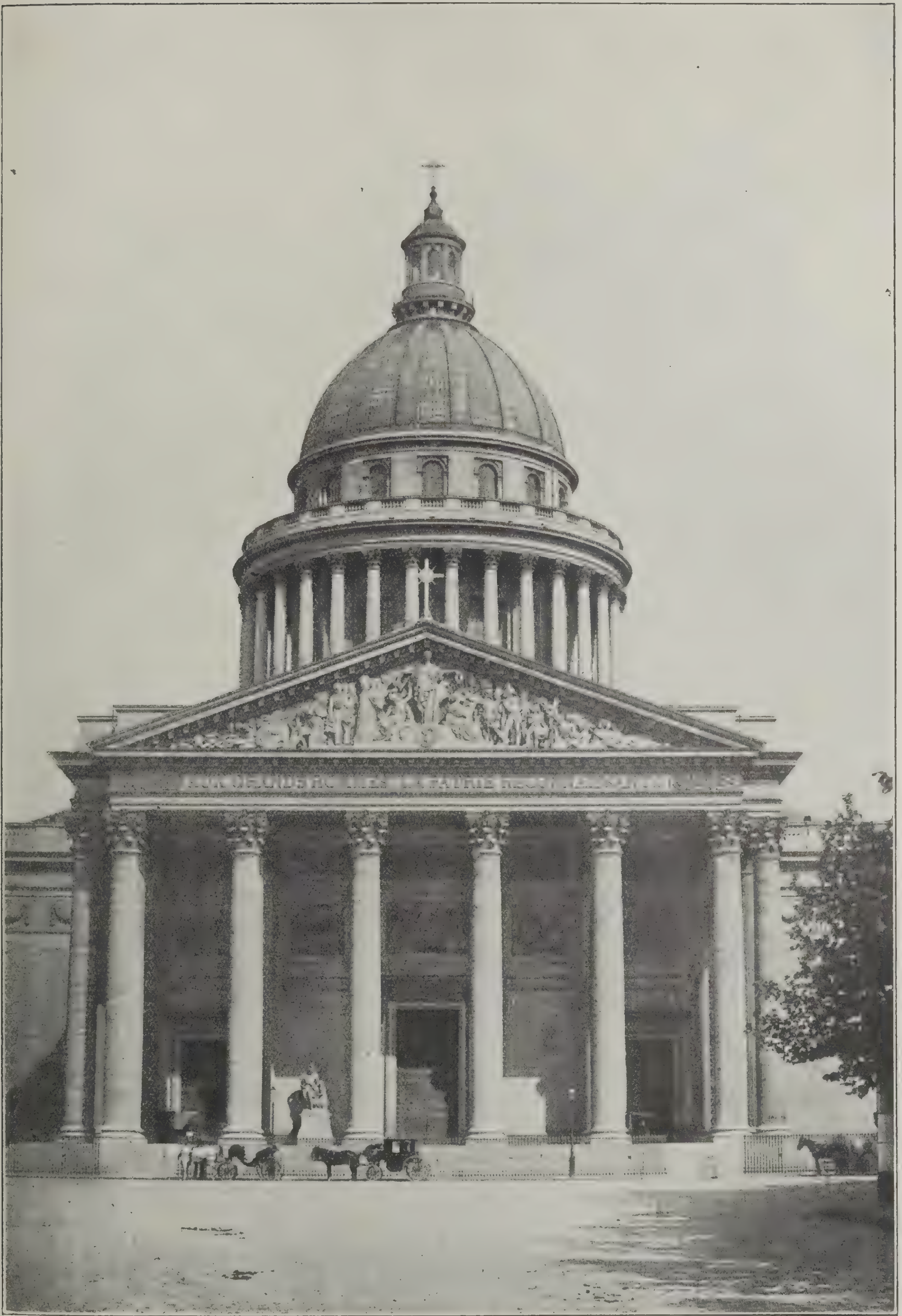
The Boulevard du Montparnasse which runs west fron the Place de l'Observatoire leads through the centre of quarter dear to the fraternity of artists. Painters an sculptors galore live and work in this neighbourhood. A the corner of the Boulevards Raspail and Montparnass is the Café de la Rotonde, frequented by artists, especiall Russians, Bolshevist and otherwise. And on the othe side leads off the rue de la Grande Chaumière, where ar two or three favourite painting academies, where architects may compete with painters in doing *croquis* i twenty minutes from the life.

Looking south from this corner one can just see the Plac Denfert Rocherean, with Bartholdi's huge bronze Lion d Belfort, and two little classic customs pavilions which hav really charming Roman friezes. And in the opposite direction the Boulevard Raspail stretches, broad and bourgeois bordered with up-to-date apartment houses which flou the traditions of the Louis, but are well worth studying They reach their climax in the Hotel Lutetia, a really well studied example of the "carved cheese" type. The interio of this hotel, in which colour and form are cleverly blended would create considerable interest if carried out in London

The quarter between the Boulevard Raspail and th Luxembourg gardens does not contain very much of architectural interest. But the Luxembourg Galleries, full o modern painting and sculpture, are worth seeing, and clos by is the Théâtre de l'Odéon, a grave and steady desig with covered arcades sheltering stalls where can be purchased books and music and "articles de bazar." Fron the Odéon one may go west to St. Sulpice, a church b Servandoni with a colonnade of enormous scale which ye fails to link together towers of unequal design. St. Sulpic has been for years a mecca of music lovers, attracted theret by the magic of Widor, composer and organist.

The Fontaine St. Sulpice, in the Place, is charming i scale and detail. It is the work of Visconti, and the fou great men who adorn it are famous French preachers of th eighteenth century.

Every architect will wish to see Napoleon's tomb in th



THE PANTHÉON, PARIS. SOUFFLOT ARCHITECT.

Invalides, and should push on a little further to look at Gabriel's quarter-mile-long façade of the Ecole Militaire; but before doing so there is to be visited a charming quarter full of retiring aristocratic hotels, most of which, alas, hide behind a fine street wall and sculptured gateway, "entre cour et jardin."

The most interesting streets are the rue de Varennes, the rues Barbet de Jouy, Vaneau, de Grenelle, St. Dominique, de l'Université, and rue de Lille. On the last named fronts the beautiful courtyard of the Hôtel de Salm, now the Chancellerie de la Légion d'Honneur. At one end of the rue de Lille stands the Chamber of Deputies, the rear façade of which is far less strained than the river front, and at the other end lies the Ecole des Beaux-Arts, the courts of which reveal much pleasant and restrained architecture. At the beginning of each month there is usually held at the Ecole some exhibition of students' work, and the *gardiens* in uniform are always accessible for information—and a coin.

The façade of La Monnaie (The Mint) has a really excellent cornice and very good doors and windows, and adjacent is the Institut de France, housing the five academies, the members of which rejoice in the soubriquet of "The Immortals." The guide book may refer to the Institut as a "clumsy edifice," but its curved façade and end pavilions are naïve and graceful. The absence of keystones to the arches, the vase finials, and roofs which really belong to the building, are refinements which appeal to a taste for restraint and nicety in design.

One should really cross the river to see these buildings, which, like the Gare d'Orsay Station, need perspective. The latter, by the way, provides good but expensive meals, and includes a view of a steel interior which is still one of the architectural wonders beside which even the American stations appear bombastic. The big nave is so airy, so simple, and so expressive. But, of course, it is only the use of electric locomotives which makes such a concourse feasible.

For those who wish to buy second-hand architectural books the Quai des Grands Augustins beyond La Monnaie still appeals. Many of the booksellers have better wares in their attics than on their stalls; and one should have a fairly definite idea of what one wants if bargains are to be picked up. At No. 51 on this Quai is the Restaurant Lapérouse, where can be got the best cooking in Paris; but Lapérouse is only for *prosperous* architects.

In the Place St. Michel at the end of the Quai one turns one's back on a successful but somehow uninspiring fountain and crosses the bridge to the Ile de la Cité, which is so full of architecture that no descriptions are required. The Palais de Justice and the Sainte Chapelle whet the appetite for Notre Dame. One should go boldly into the former in spite of natural qualms.

As to Notre Dame, each visitor will enjoy his own intimate sensations. The visit to the roof is splendid.

The Ile St. Louis, back of the cathedral, is almost deserted save as the rendezvous of anxious lovers. Its old houses are redolent of genteel decay, with here and there a balcony of charming ironwork.

Across the river on the right bank lies a huge quarter which requires courage and ambition to explore. The Place de la Bastille to the east is worth seeing from a town-planning viewpoint, and the Gare de Lyon really is a notable achievement in railway stations. But one should on no account miss the Place des Vosges off the rue St. Antoine, a spot which few foreigners visit. This deserted old square, with its brick and stone fronts and high-pitched roofs was built by Henri IV, and it is hard to believe that under Louis XIII it was the very mecca of fashion. So many familiar names are associated with this square, from Richelieu, Madame de Sevigné, and Victor Hugo to Ninon de Lenclos and Marion Delorme.

The Musée Carnavalet is interesting inside and out if one has the time, and one should pause to look into the colonnaded courtyard of the Hôtel des Archives, a charming eighteenth-century building which used to be the old Hôtel de Soubise.

Before proceeding to the almost unfailing disappointment of St. Eustache, so large and yet so dull a mixture o Gothic and Renaissance, there is refreshment for the ey in that little gem of architecture by Lescot, the Fontain des Innocents, just back of Les Halles (Central Market) One remembers this little fountain when others ar forgotten, for it is of pure quality.

The Bourse and the Bibliothèque Nationale are interesting as fine examples of fairly modern work. The former which is based on the temple of Vespasian in Rome, wa completed about a hundred years ago, and the Bibliothèqu has frequently been added to and enlarged up to ver recent years. Labrouste and Pascal are principally responsible for the design.

Most architects who are fond of music will find their wa to the Opéra Comique, rebuilt by Bernier after its destruction by fire in 1887. Those who wish to feel something c the lyrical appeal of student Paris before the war shoul try and hear Charpentier's "Louise," a love poem of Montmartre with music which can hardly be appreciated in th Covent Garden atmosphere. The theatre itself is interesting, with its vestibule under the auditorium and a pla conceived more spaciously than circumstance permitte in its actual execution.

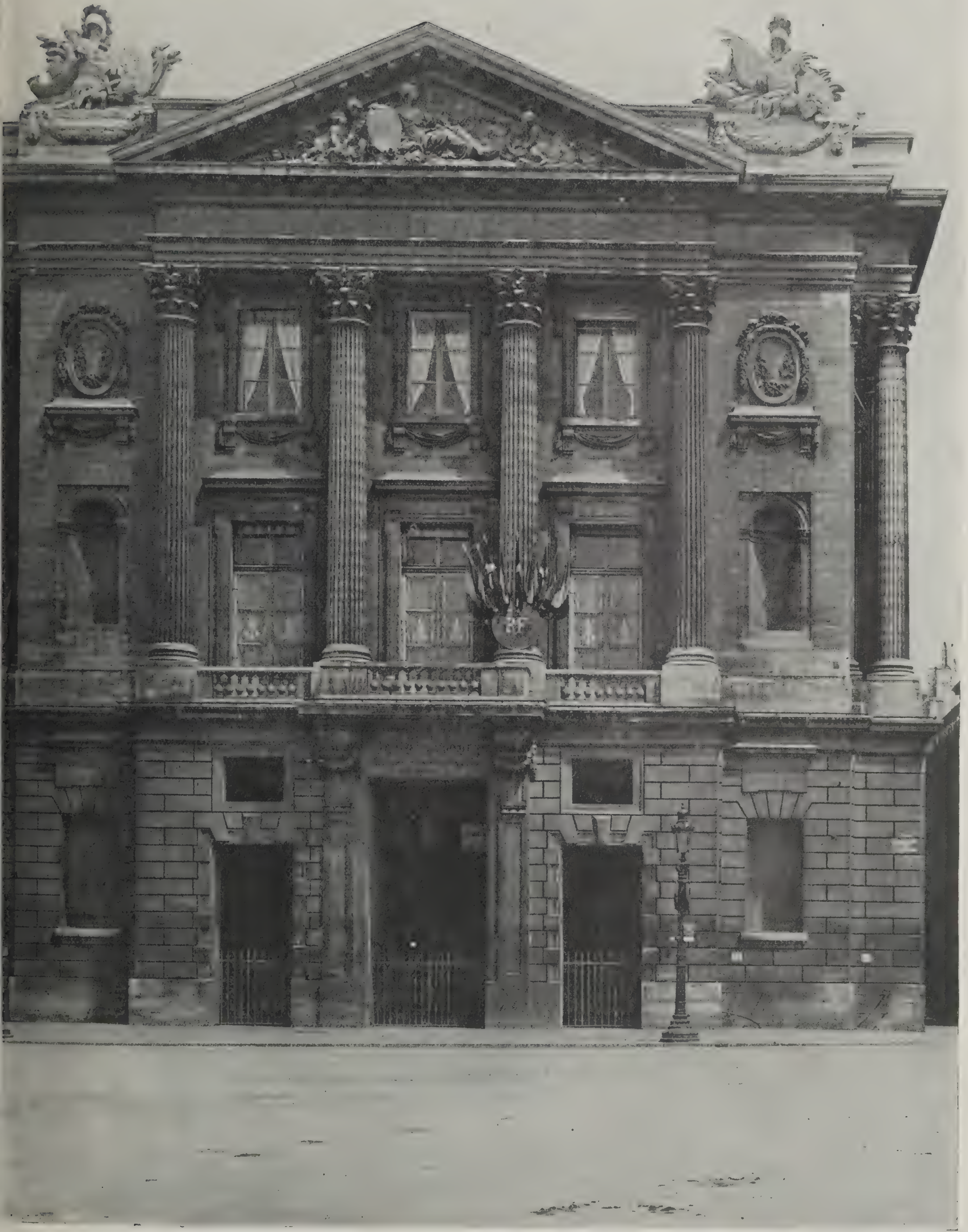
Montmartre itself does not disappoint. The lower slope of the Butte are in the grip of the tawdry attractio invented to give the foreigner what he is expected to wan but above it all rises the glimmering white mass of th Sacré Cœur, a monument to the faithful whose generou subscriptions erected it. The Sacré Cœur is designed to seen from afar, and its interior and detail are hard an disappointing; but there is no concession to triviality fashion in this building, which stands solid and dominan above Paris on its enormous caissons of concrete. As on approaches it by the steps which climb the Butte there a views of Paris less superb but more homely than from an vantage point of the Eiffel Tower. To sit towards evenin and dine on the terrace of the little restaurant in the Plac des Reservoirs is to be at peace with the world.

As one descends from the Butte the whole quarter of th Grands Boulevards spreads before one, with the great att of the Opéra dominating the lower roof of the office buil ings surrounding it. This quarter of Paris is full of interes and surprisingly compact. There is scarcely a street in which does not contain some buildings, old or new, interest to the architect. There are some excellent mode shop-fronts here, in the avenue de l'Opéra, the rue de Paix, and the rue Royale, but the few very recent offi buildings are rather disappointing, and do not rank wi some of the apartment house buildings on the left bank, Passy, and the quarters near the Bois and Champs Elysée

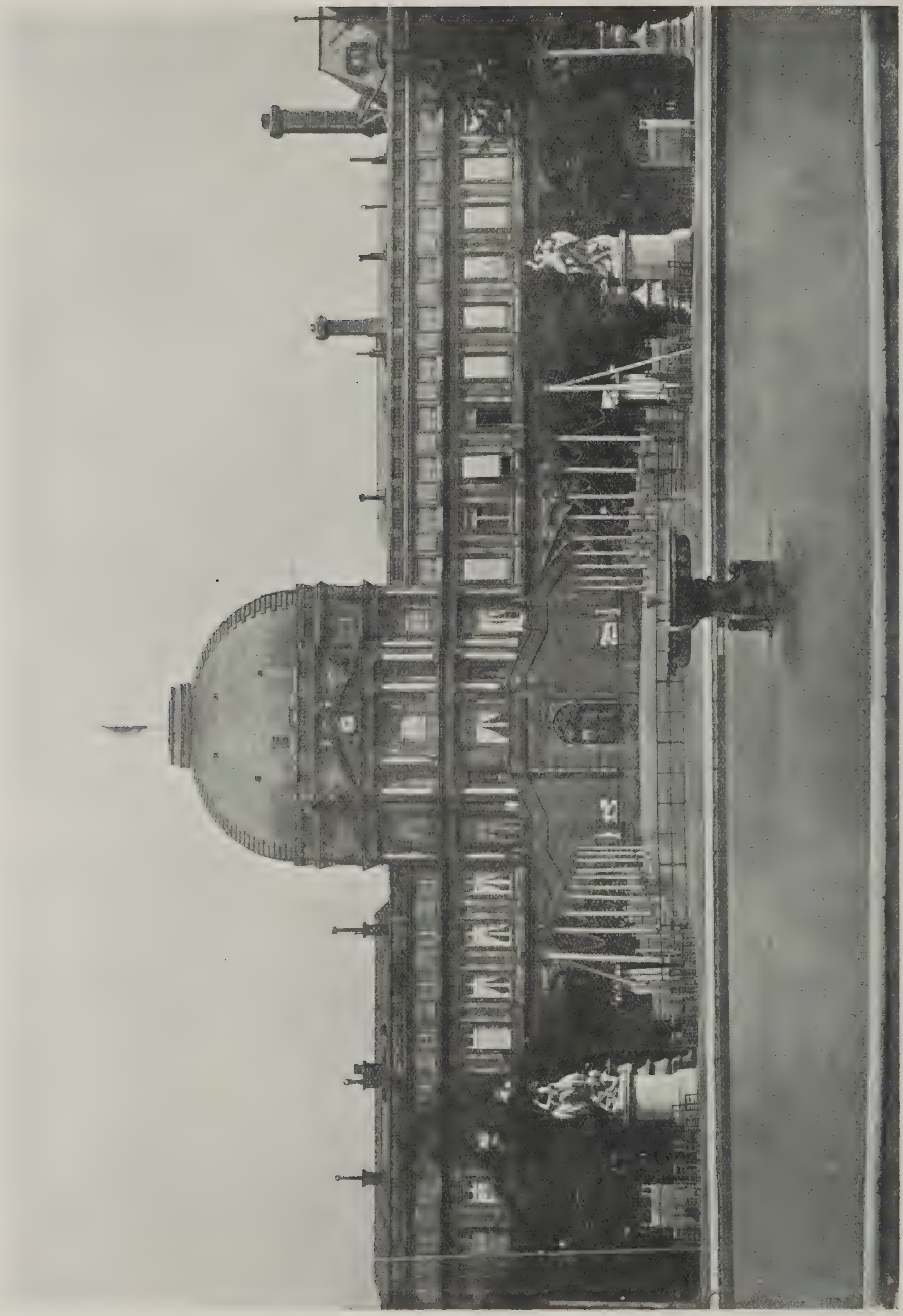
The Place Vendôme is a splendid continuous treatmen with its historic column which has served as a pedestal f two emperors and which in 1871 was cut to the ground an angry Commune. Its bronze has a total weight well over two hundred tons, and the inhabitants of th neighbourhood were compelled to line their windows wi paper bands in real air-raid fashion in anticipation of t shock of its fall.

The Church of the Madeleine has a fine interior, and the favourite bogey of those who above all insist on façade expressing the internal structure. But its Cori thian columns are in friendly touch with those of t Chamber of Deputies facing it on the other side of the riv while more columns of the same order form a connecti link in Gabriel's finely proportioned façades facing t Place de la Concorde, behind which lurk the Ministry Marine, the Automobile Club, and one of the most expe sive hotels in Paris.

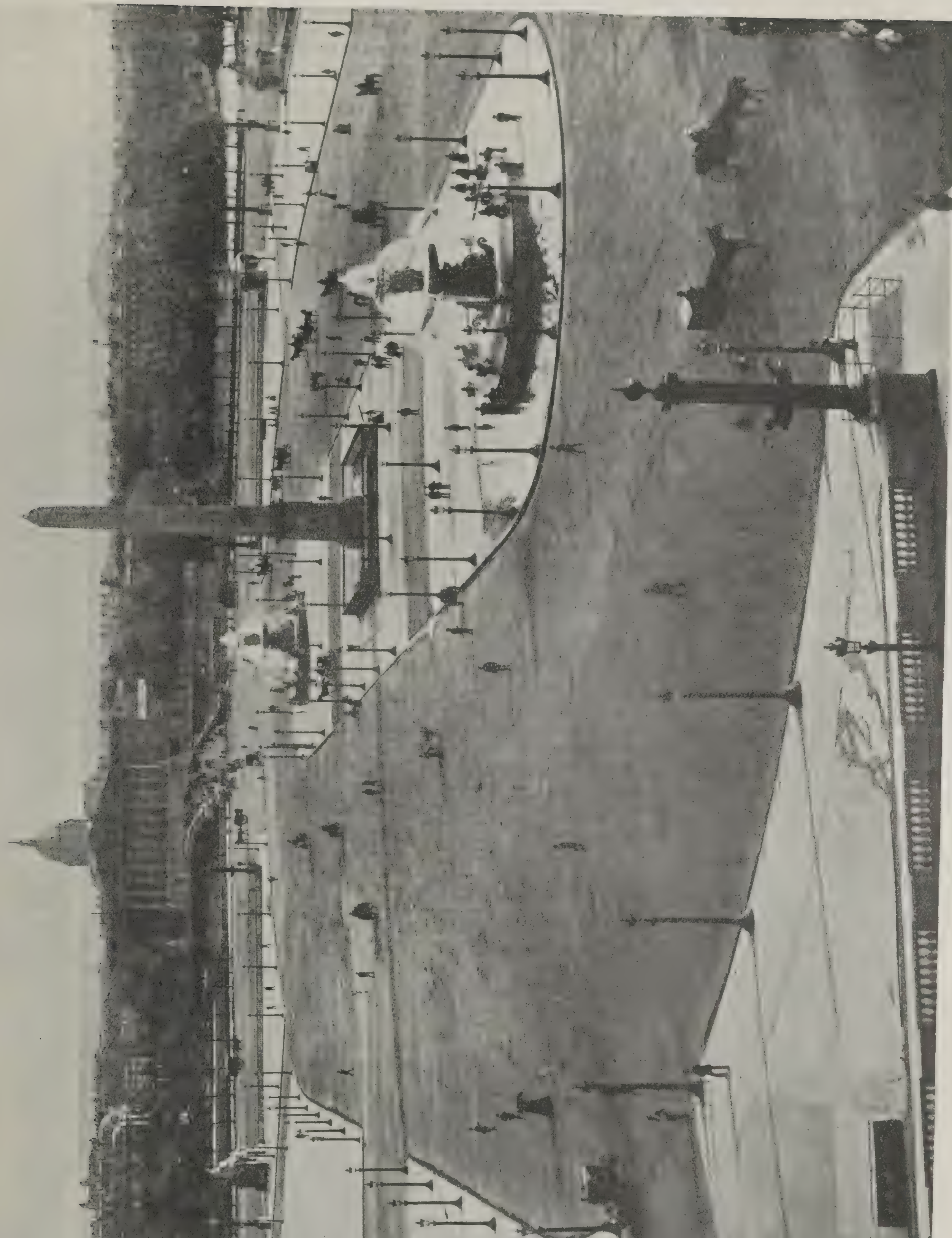
The Place de la Concorde has seen two big tragedi One in 1770, when a terrible panic during public festi ties caused the death of over 400 people, and the seco twenty years later, when the guillotine was first erect for Louis XVI, curiously destined to serve later for Dant and Robespierre. The obelisk is sister to our own on t Thames Embankment.



END PAVILION OF THE MINISTRY OF MARINE, PLACE DE LA CONCORDE.
JACQUES ANGE GABRIEL, ARCHITECT.



THE WEST FRONT OF THE PALACE OF THE TUILERIES. (DESTROYED DURING THE COMMUNE).



THE PLACE DE LA CONCORDE; VIEW LOOKING SOUTH.

Towards the setting sun rises Chalgrin's Arc de Triomphe de l'Etoile, linked to the Concorde by the broad ribbon of the Champs Elysées. The side walks of the Champs Elysées are broad, and the trees are planted far out from the houses so that their façades can be seen from the pavement below. Most of these big buildings are modern, but there is a charming little Louis XVI hotel on the right at the corner of the rue la Boëtie; there are also some fine hotels in the Avenue Gabriel and the adjacent Faubourg St. Honoré, including the British Embassy, which is close to the Elysée, official home of the Président de la République.

The Avenue du Bois de Boulogne, the Avenues Henri Martin, Marceau, Président Wilson, and many of the other big streets offer good examples of fairly recent work. In addition, this quarter houses the charming little Musée Galliéra, not far from the Trocadéro, and the "Style Louis XVI" Chapel in the rue Jean Goujon, erected to commemorate the terrible fire of the Bazar de la Charité.

The Cours la Reine, laid out in gardens which contain some quite good suggestions in treatment, lead back towards the Pont Alexandre III, with its single steel span and flamboyant pylons whose winged horses gleam so astonishingly in the Paris sun. It is said that Charles Garnier was not without having an influence in this design of Besnard's.

The Grand and Petit Palais are much discussed and much criticized. The former is the work of at least three architects who were responsible for its different façades; at any rate, its plan and lay-out are very fine. The Petit Palais by Girault (who recently received the Institute Gold Medal) cannot be passed by with a shrug. It contains an internal court in the form of a hemicycle which juggles amusingly with the orders and is distinctly refreshing.

So far one has only touched the fringe of the beautiful buildings of Paris, and even this tour has not yet included the Louvre and the Palais Royal, and the Hôtel de Ville.

The Louvre is so vast that it is a city of art in itself. Its architecture is a dictionary of design and its contents a dictionary of architecture including all its subsidiary arts. Its history is familiar to most of us, and its plans are published in many a volume. The Tuileries are perhaps less familiar, and it is perhaps not generally understood that until the Communards destroyed the Palace of the Tuileries in 1871, Delorme's façade linked together the two present end-pavilions facing the gardens. These t pavilions (de Marsan and Flore) are actually the c Tuileries pavilions restored.

The Arc de Triomphe du Carrousel is by Percier a Fontaine, to the glory of Napoleon I. It has weather pleasantly, but is curiously tiny in relation to its bro surroundings.

The Palais Royal, which lies hidden back of the Coméc Française, is pleasantly intimate after the Louvre. narrow arches and tall pilasters have an archaic charact in spite of their elegance which must have been so pe fectly in tune with the spirit of Richelieu, the builder this one-time Palais Cardinal.

The Palais and its garden has fallen on the same ha times as the Place des Vosges. The gardens where the b Louis XIV used to practise *la chasse*, where Cami Desmoulins preached revolt, and where *les élégants* the Directoire indulged in every pleasure, have becor to-day the home of the lesser shopkeeper and the hau of the dubious. There have been projects to open out t Palais Royal and bring back its former glory, but t architect's ambitious schemes remain on paper.

We wend our way back from this little tour of Pa past the proud roof of the Hôtel de Ville, a building er blematic in every sense of the civic pride of a great nation capital. Paris, like many another noble city, offers almo too much to the eye and senses. One's joy in all that seen is tempered by the feeling that many corners rema unexplored, hiding beauty the more rare for its mode reticence.

*Note.*—There are comparatively few shops on the rig bank of the Seine which deal in architectural books drawing materials. Second-hand architectural books c be picked up on the stalls on Quai des Grands Augustir and in the quarter near the Ecole des Beaux-Arts are sor good bookshops—M. Vincent, 4 rue des Beaux-Ar between rue Bonaparte and the rue de Seine, publish architectural books of all kinds and specializes in t published work of the Ecole des Beaux-Arts. There a plenty of dealers in artists' materials, photographs, po cards, etc., in the rue Bonaparte, and the rue de Sei and the Maison Chapron, No. 34 rue de Seine, specializ in architects' drawing materials. A small shop, Mais Renard, No. 101 in the rue de Rennes, has an excelle collection of architectural postcards.

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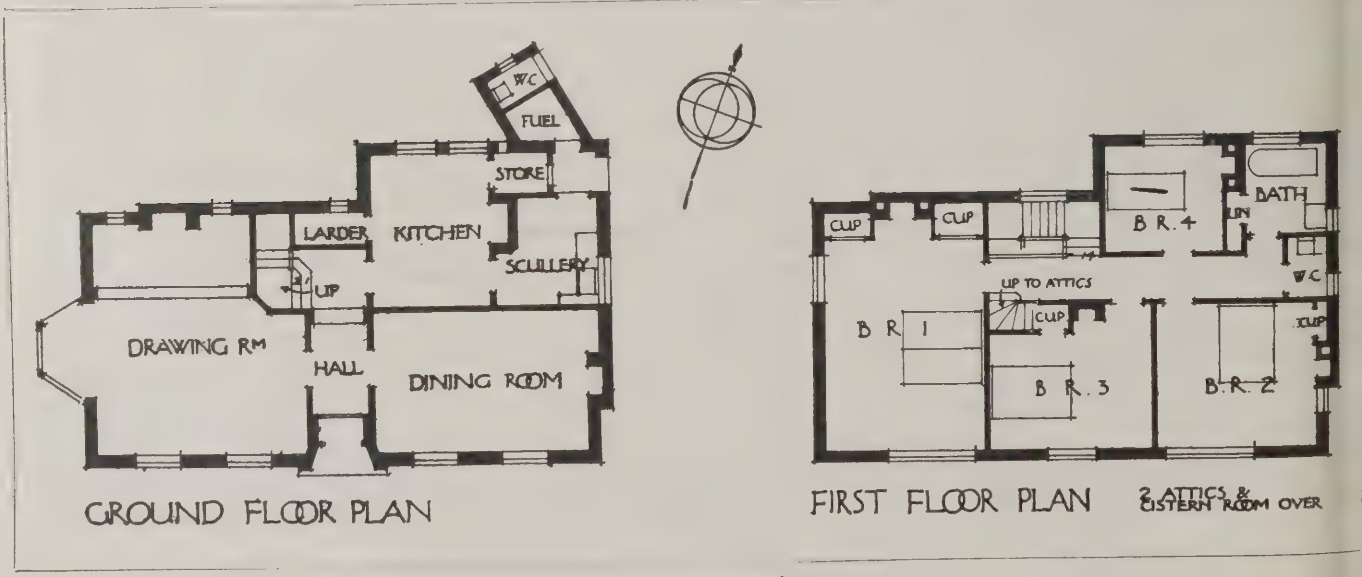
# The Brick House, Ruislip

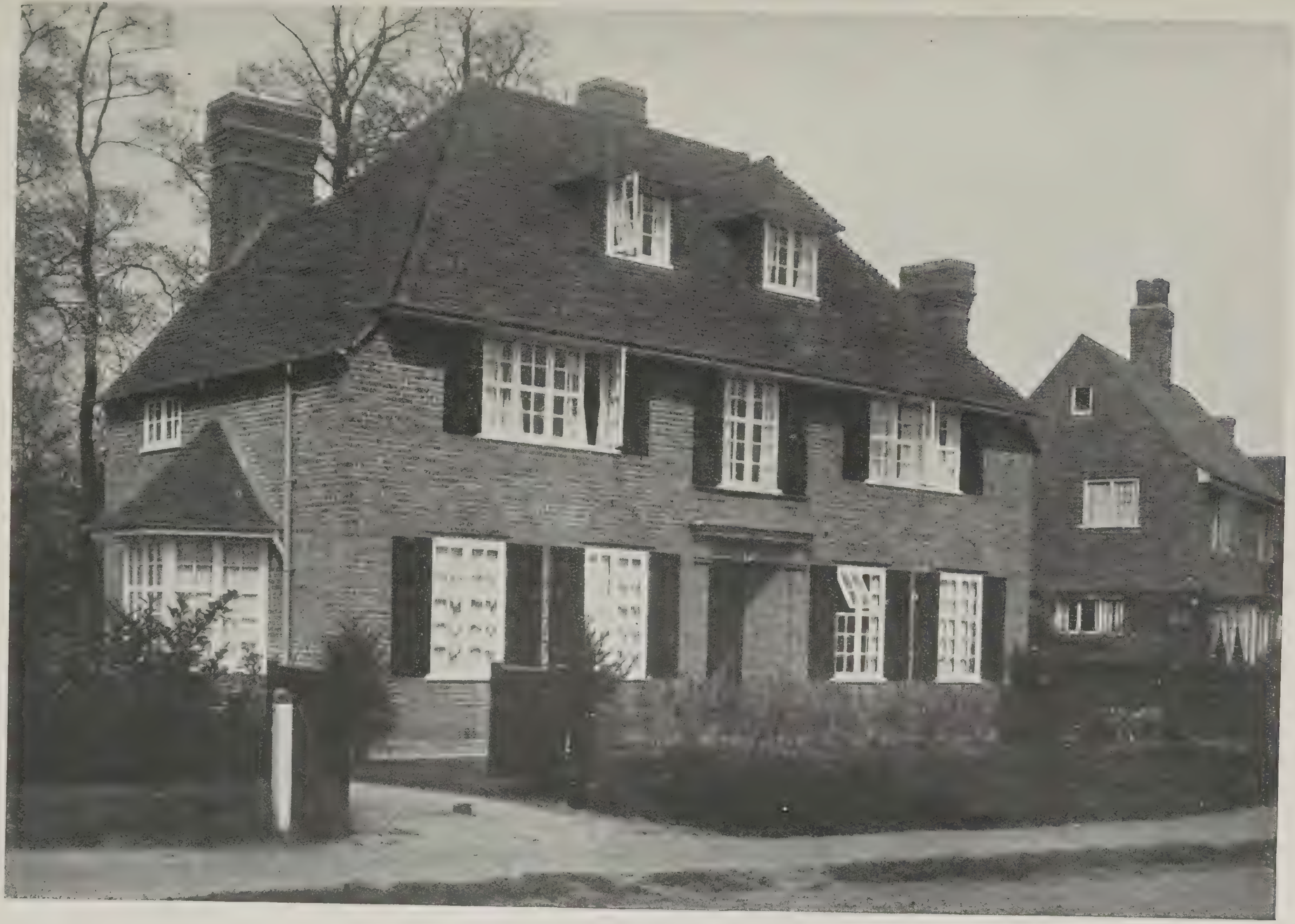
EDWIN GUNN, A.R.I.B.A., Architect



(*See opposite page*).

## The "Brick" House, Ruislip

Edwin Gunn, A.R.I.B.A., Architect



Effect is here obtained by the fenestration and careful proportions. The placing of the dormers is particularly pleasing.

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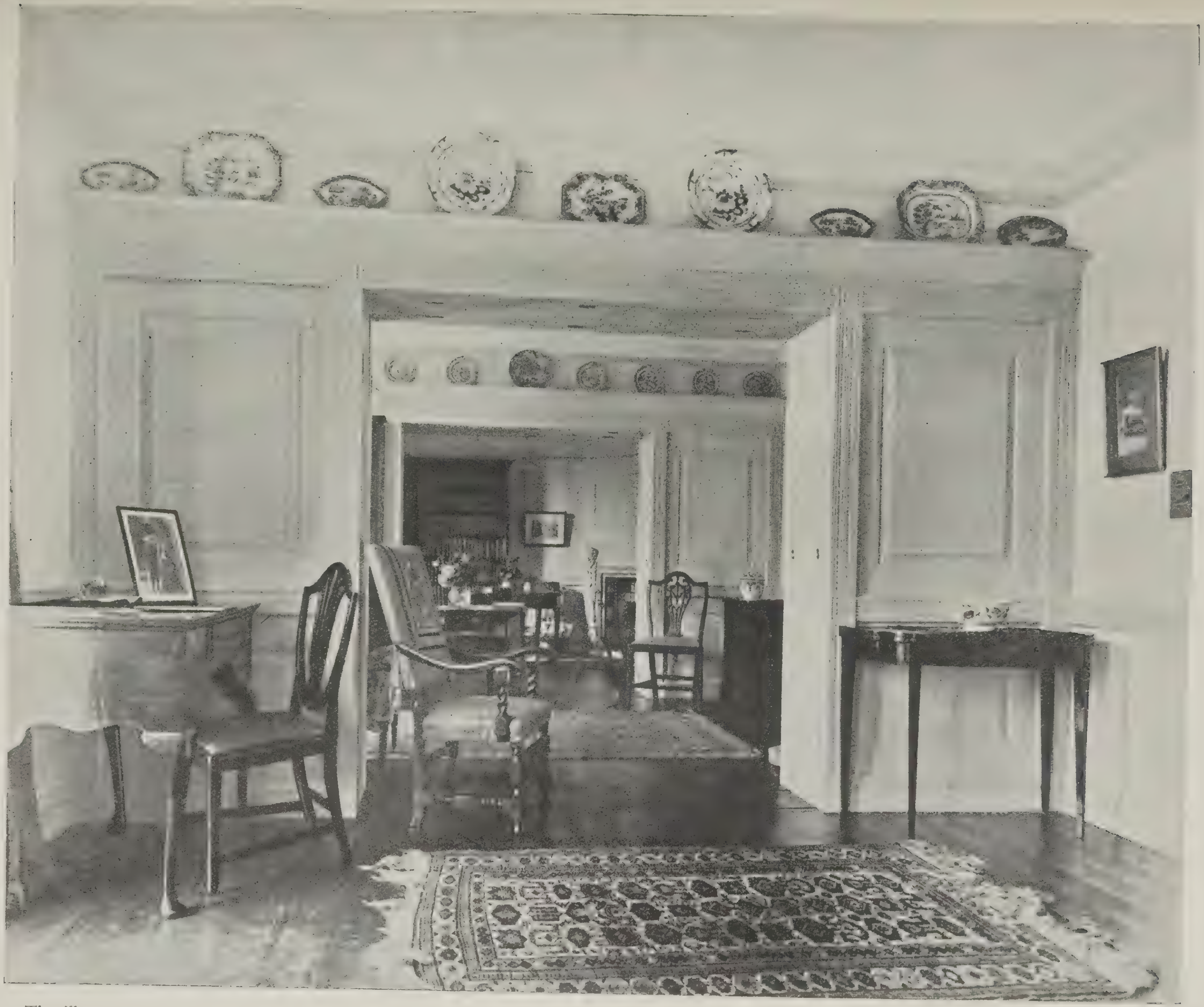
## The Late Capt. A. Winton Rose, M.C., Architect



The illustration is one of the exhibits at the Architecture Club Exhibition, at Grosvenor House. It shows a vista through the sitting-room, with the library beyond.

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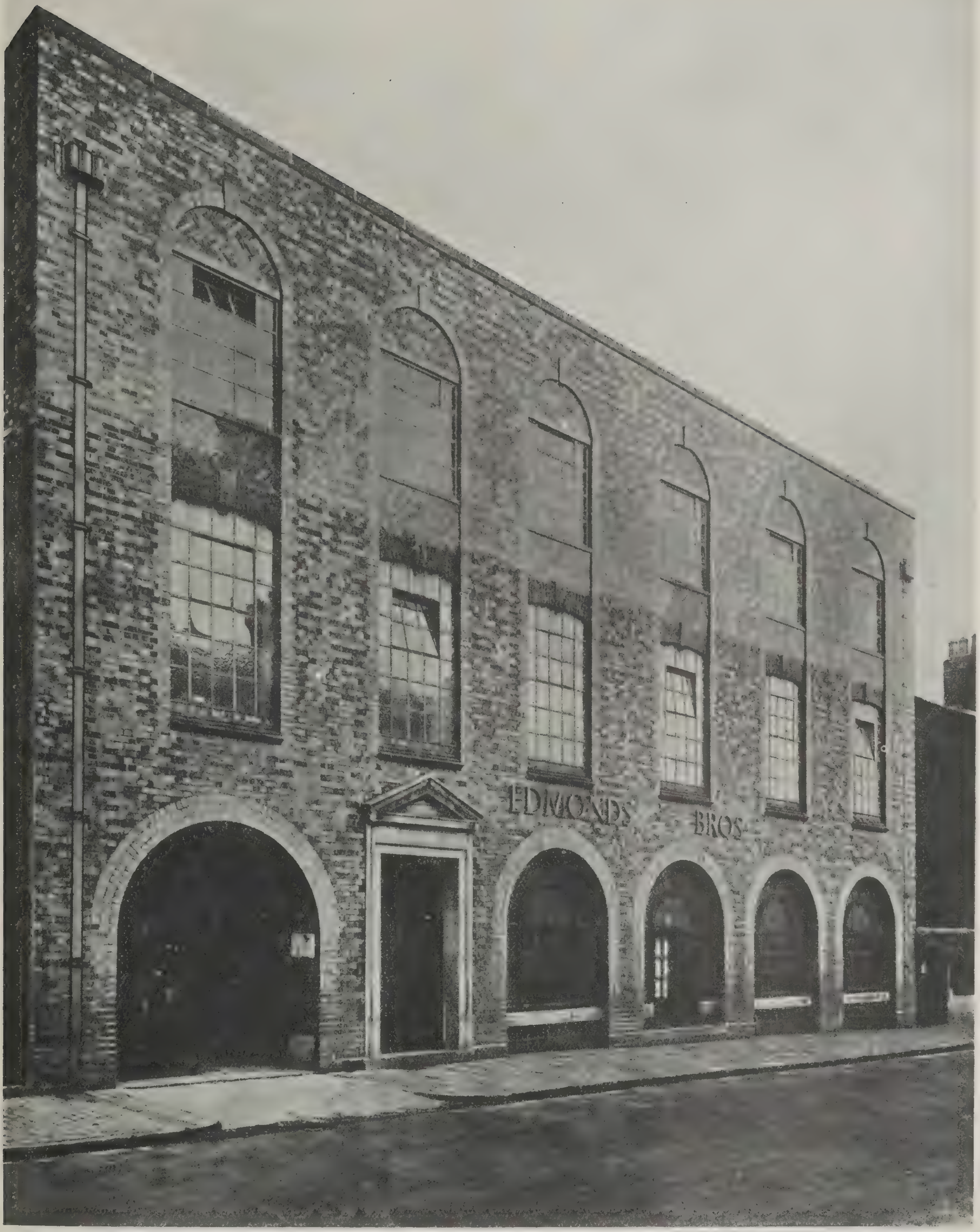
OF THE
UNIVERSITY OF ILLINOIS



MANUFACTURING PREMISES, BIRMINGHAM.
MESSRS. HARVEY AND WICKS, F. AND A.R.I.B.A., ARCHITECTS.

Business premises, though the prose of design, can be very good prose, and at times attain to almost lyrical beauty. The above, a photograph of which appears at the Architecture Club Exhibition, is an example.

# The Chapel, Trinity College, Dublin

By WM. N. SPENCE, A.R.I.B.A.

AMONGST available historical records of Dublin architecture it is difficult to trace any detailed information of the chapel.

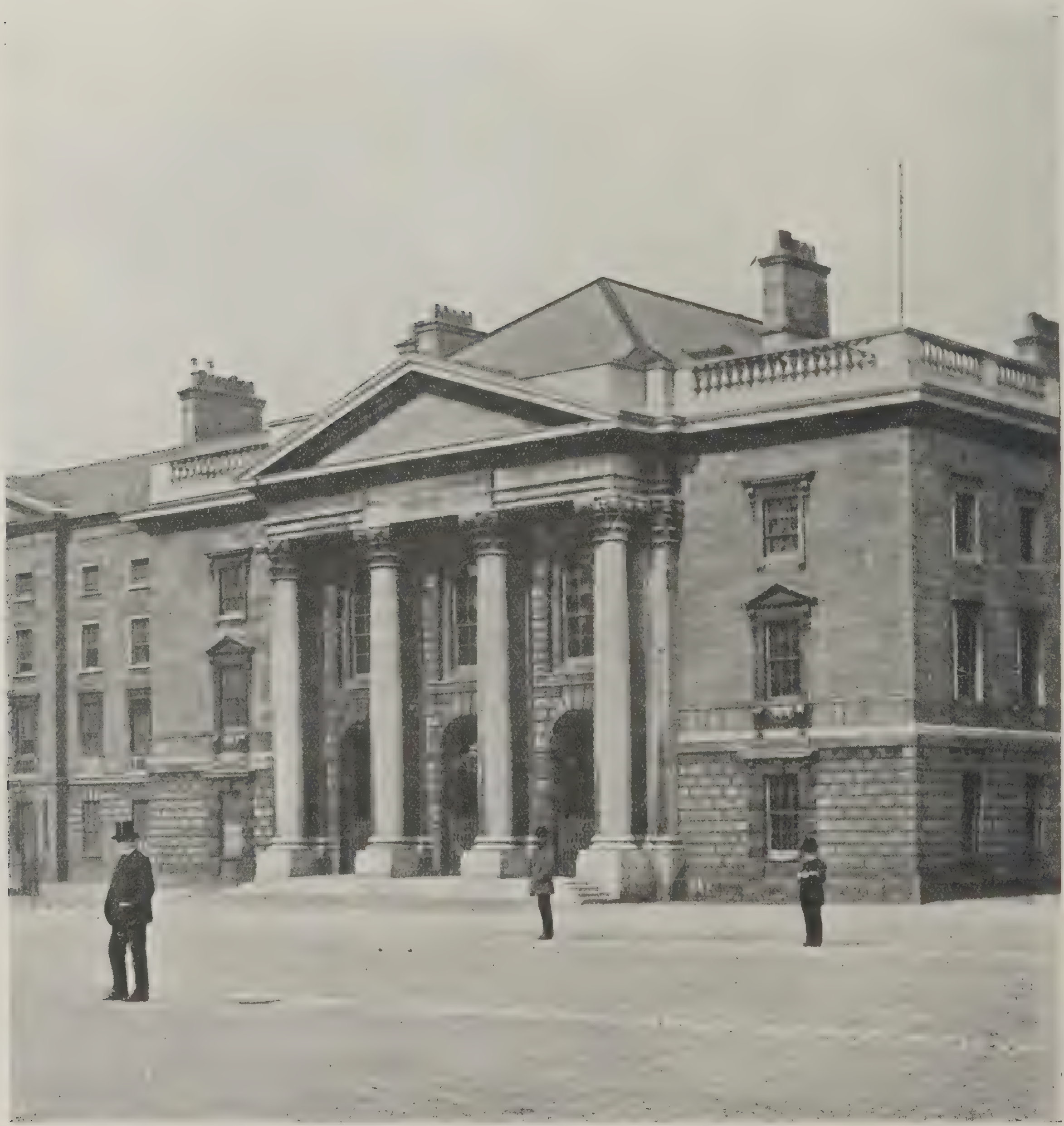
In 1759 Sir William Chambers was first called in to extend and modernize the old college (originally an Elizabethan brick building), but apparently the first portion to be rebuilt was the west front of the quadrangle facing College Green. The chapel is situated on the north side of the quadrangle and is balanced on the other side by the examination hall. According to records the cost was about £12,000.

It is interesting to note that Sir William Chambers never visited Ireland to supervise his work, but sent a sketch model of his design (which can still be seen in the college), working drawings, and specification; his remuneration for this being the customary 2½ per cent.

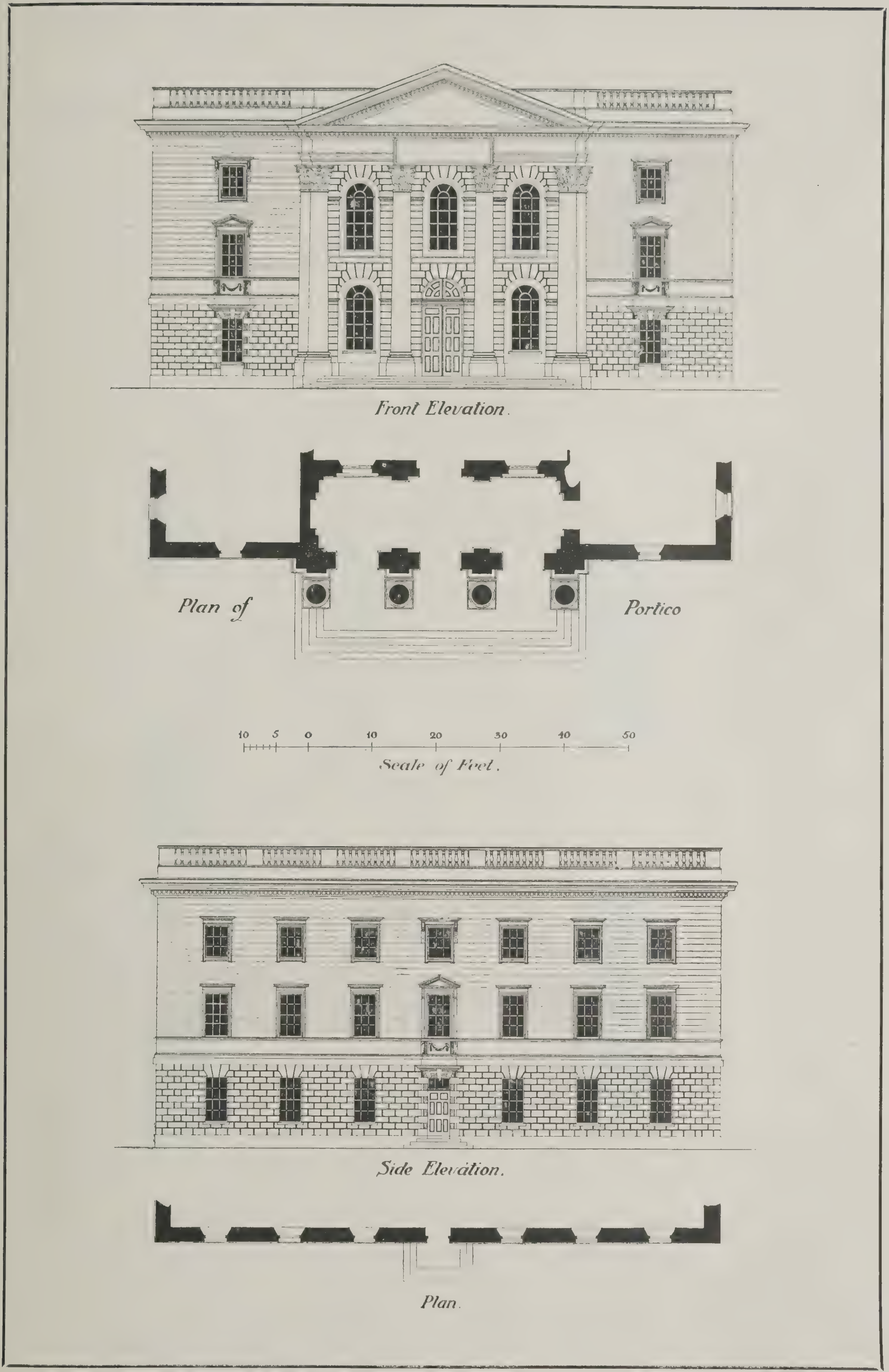
The interior of the chapel is beautifully panelled in oak up to the sill level of the semicircular-headed windows the upper portion is treated in plaster with coupled Ioni pilasters supporting a richly ornamented cornice. Abov this is an elliptical ceiling of groined vaulting which i pierced over each window by a semicircular lunette.

The apse at the east end, which is semicircular on plan is an excellent piece of composition, and presents a pleasin termination to the vista between the oak-panelled pew which, being arranged so as to leave a central aisle, give th appearance of additional length to the chapel.

At the west end is the organ gallery, which is supported o six Ionic columns and is all in oak. The ceiling above th gallery is richly coffered, the centre of each coffer bein enriched by a large patera. The decoration in this pane of the ceiling is not successful, and is, in fact, rather over done and out of keeping with the dignified effect of th remainder of the work.

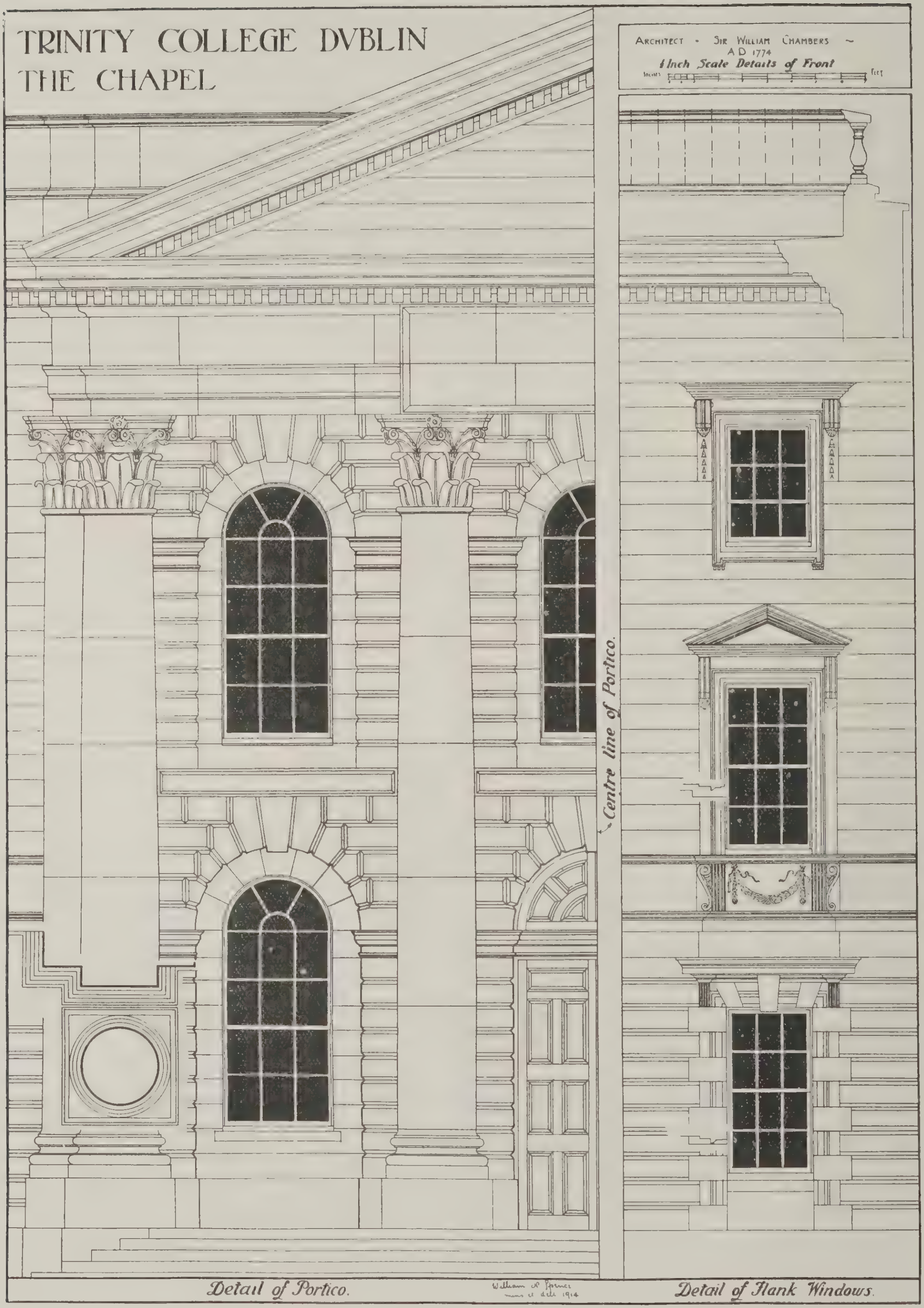


TRINITY COLLEGE, DUBLIN: PORTICO TO CHAPEL.



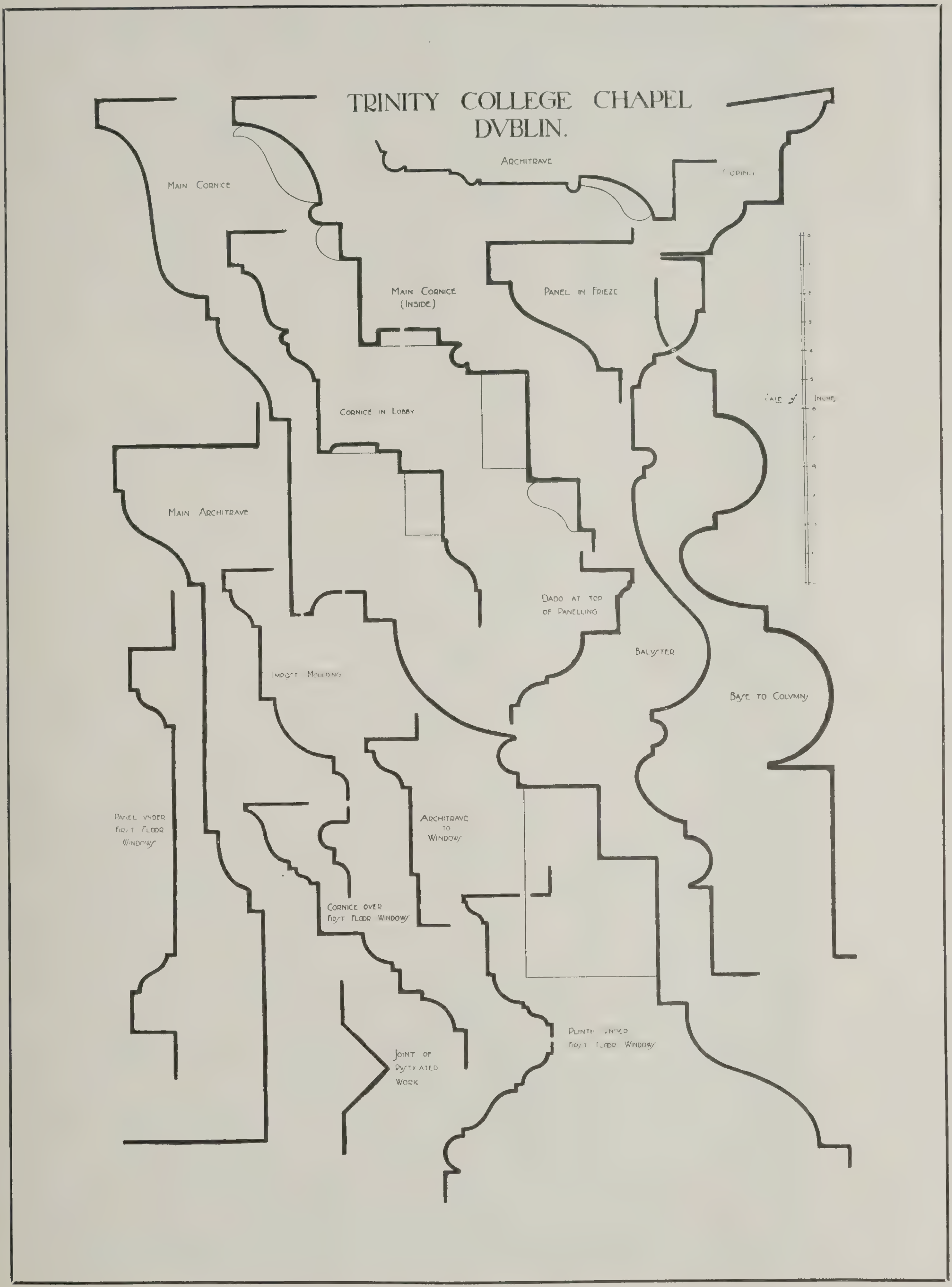
THE CHAPEL, TRINITY COLLEGE, DUBLIN.

*Measured and drawn by Wm. N. Spence, A.R.I.B.A.*



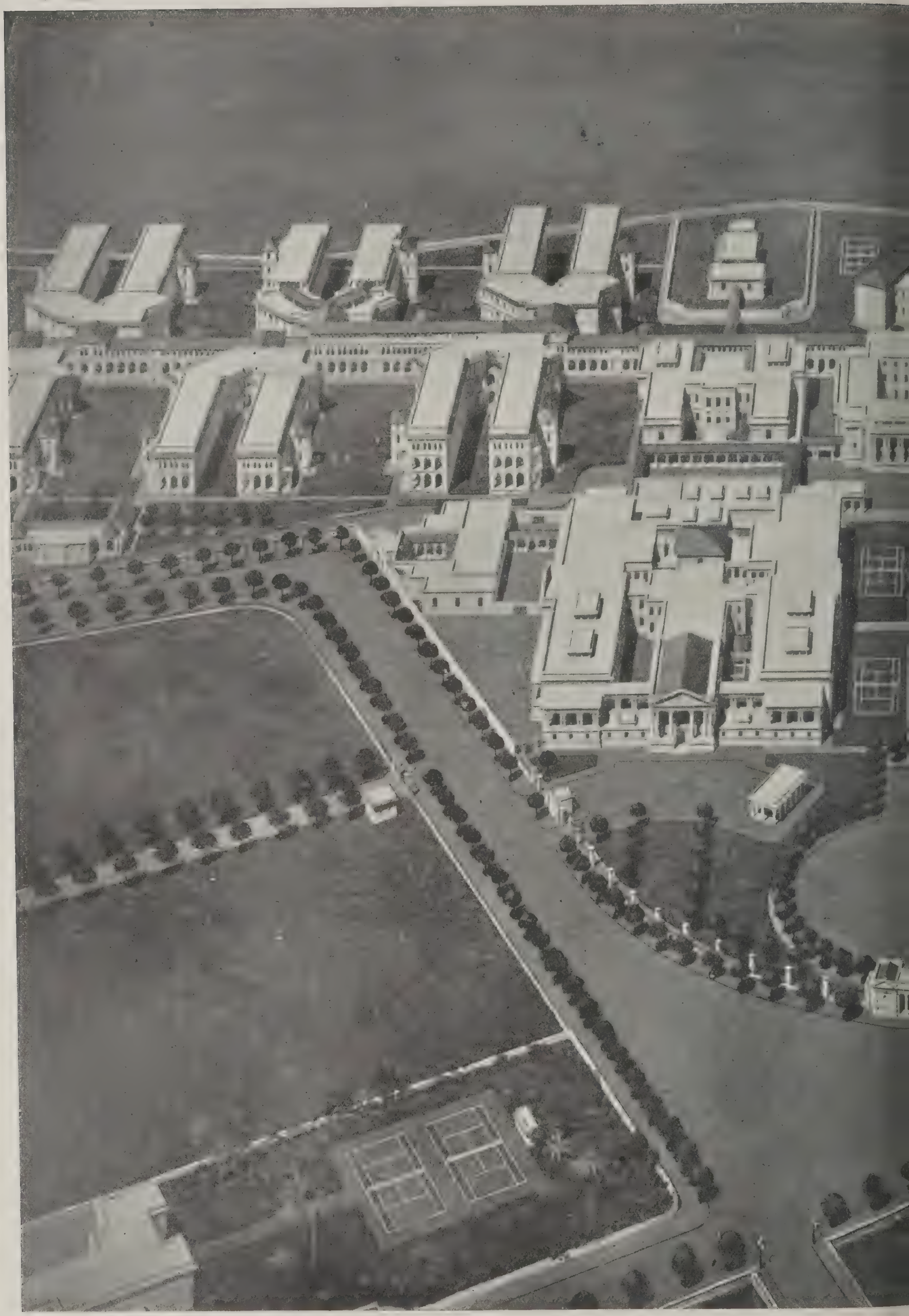
THE CHAPEL, TRINITY COLLEGE, DUBLIN: DETAIL OF PORTICO.

*Measured and drawn by Wm. N. Spence, A.R.I.B.A.*

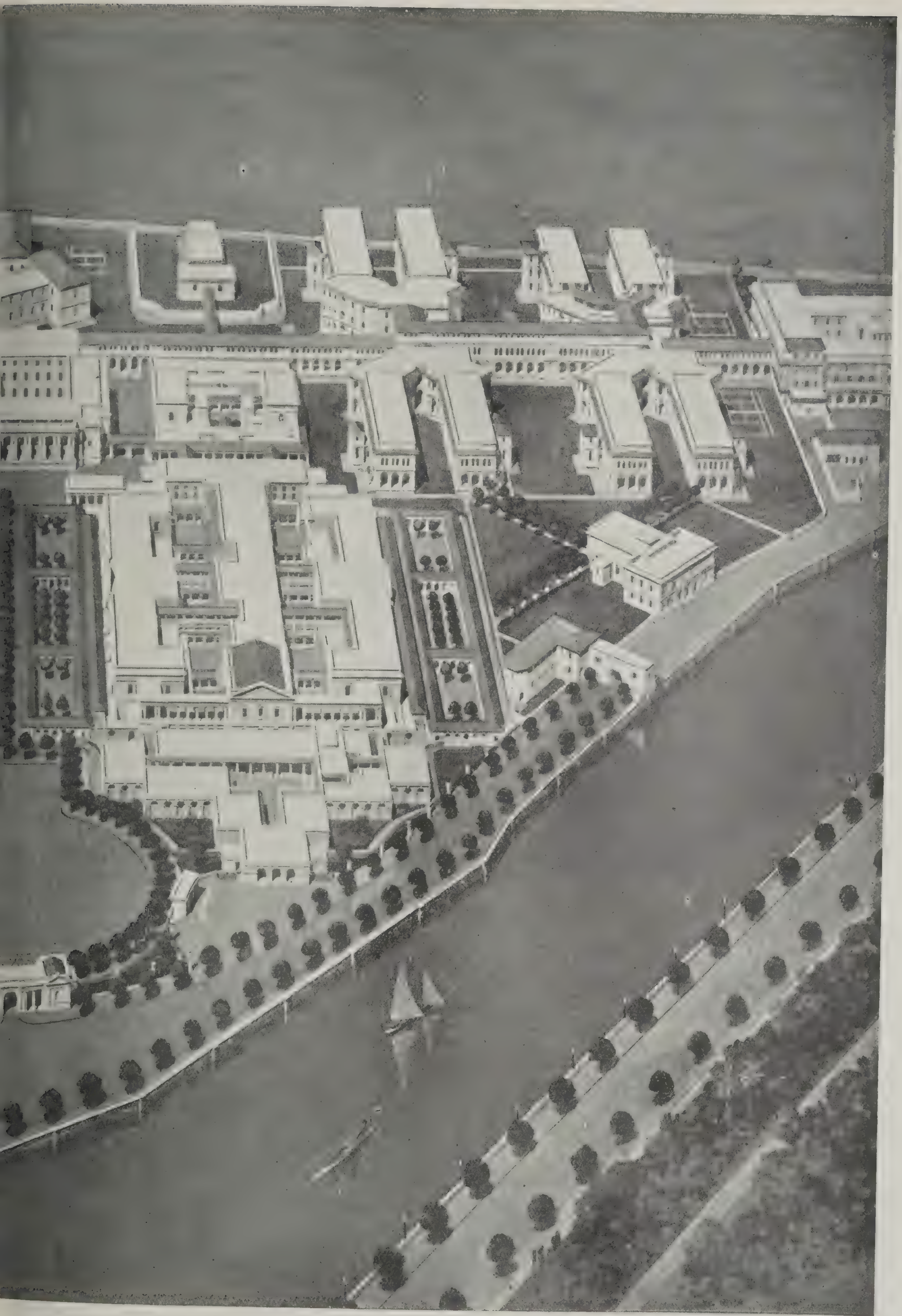


THE CHAPEL, TRINITY COLLEGE, DUBLIN: SECTIONS OF MOULDINGS.

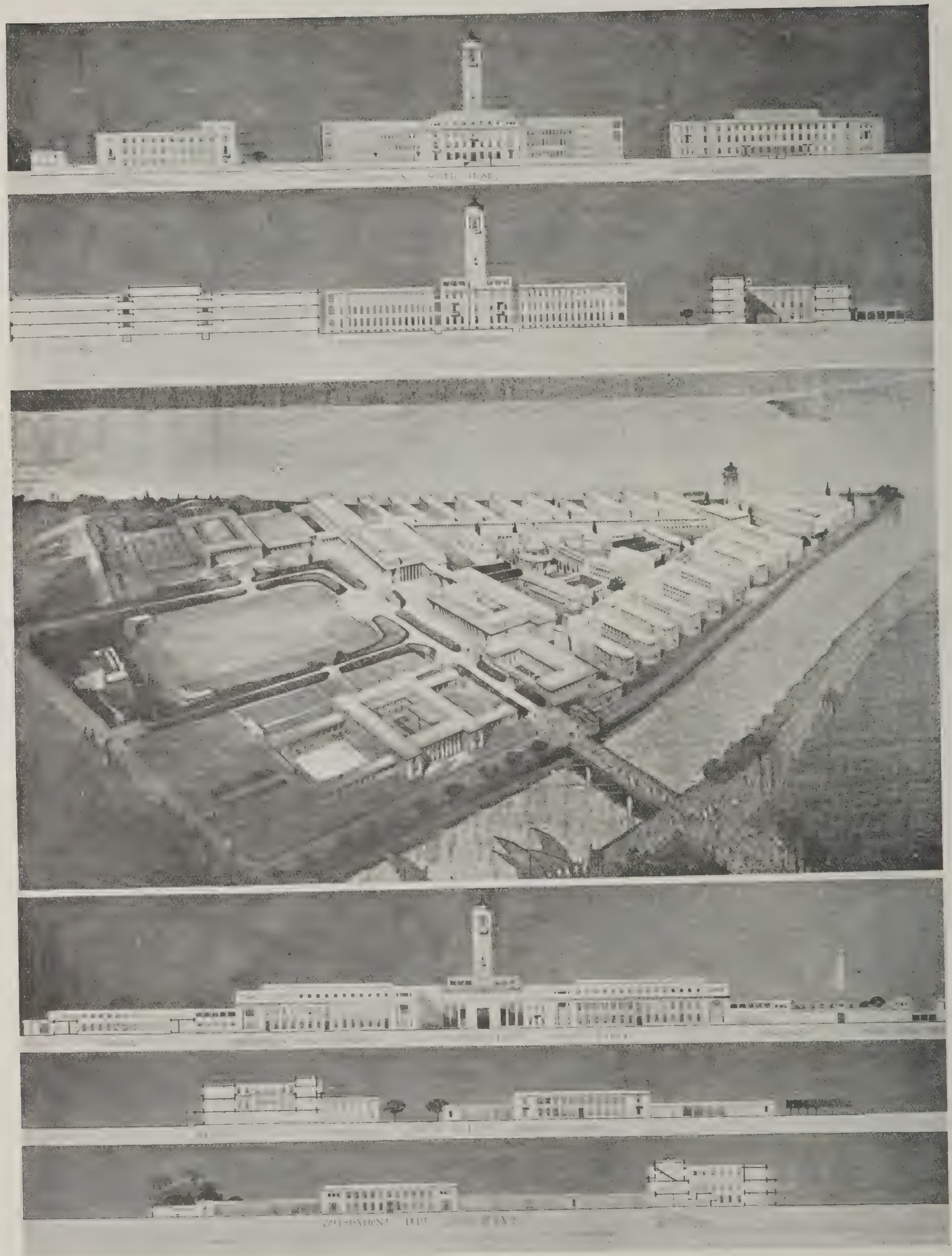
*Measured and drawn by Wm. N. Spence, A.R.I.B.A.*



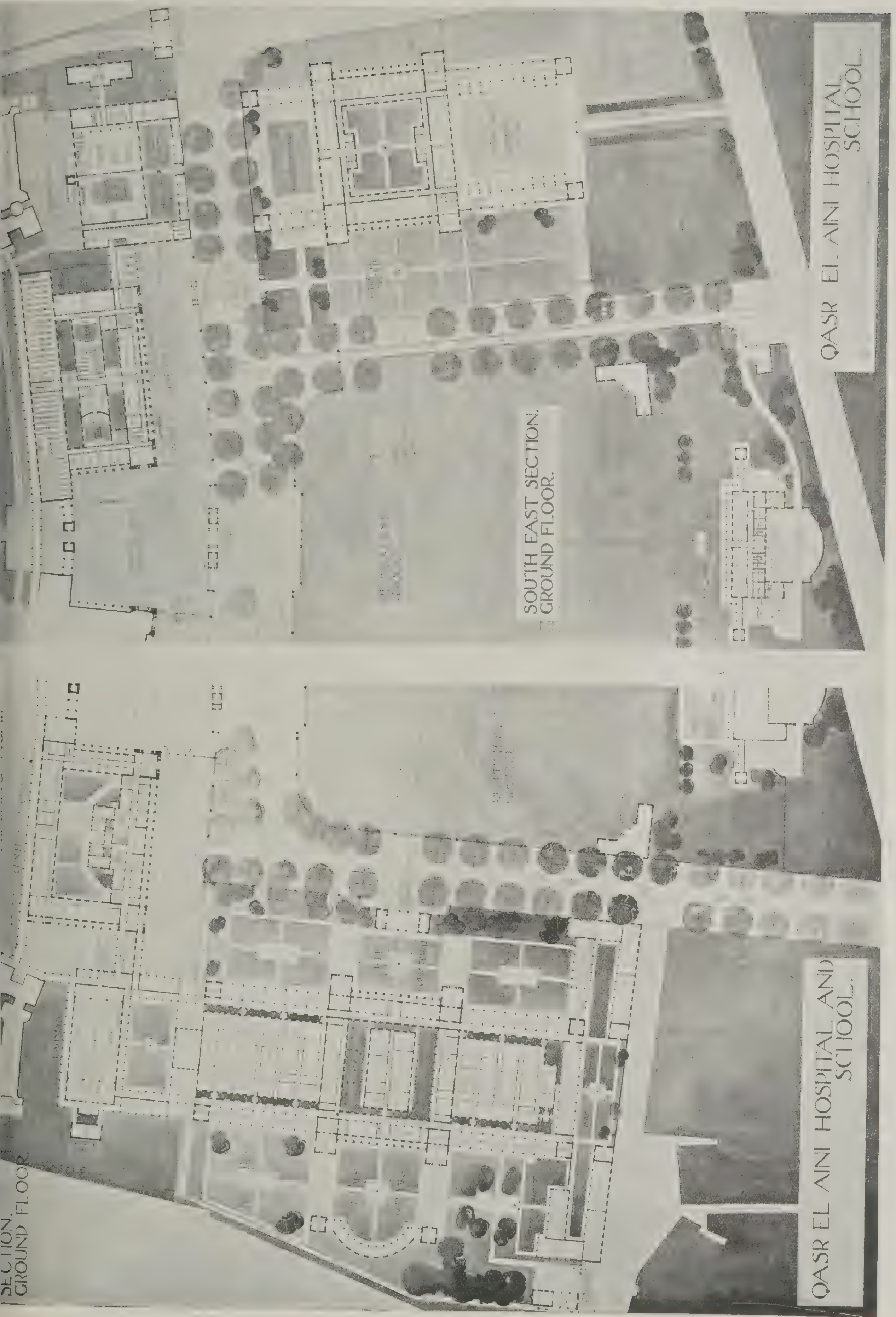
QASR EL AINI HOSPITAL AND MEDICAL
C. NICHOLAS AND J. E.
(*See*



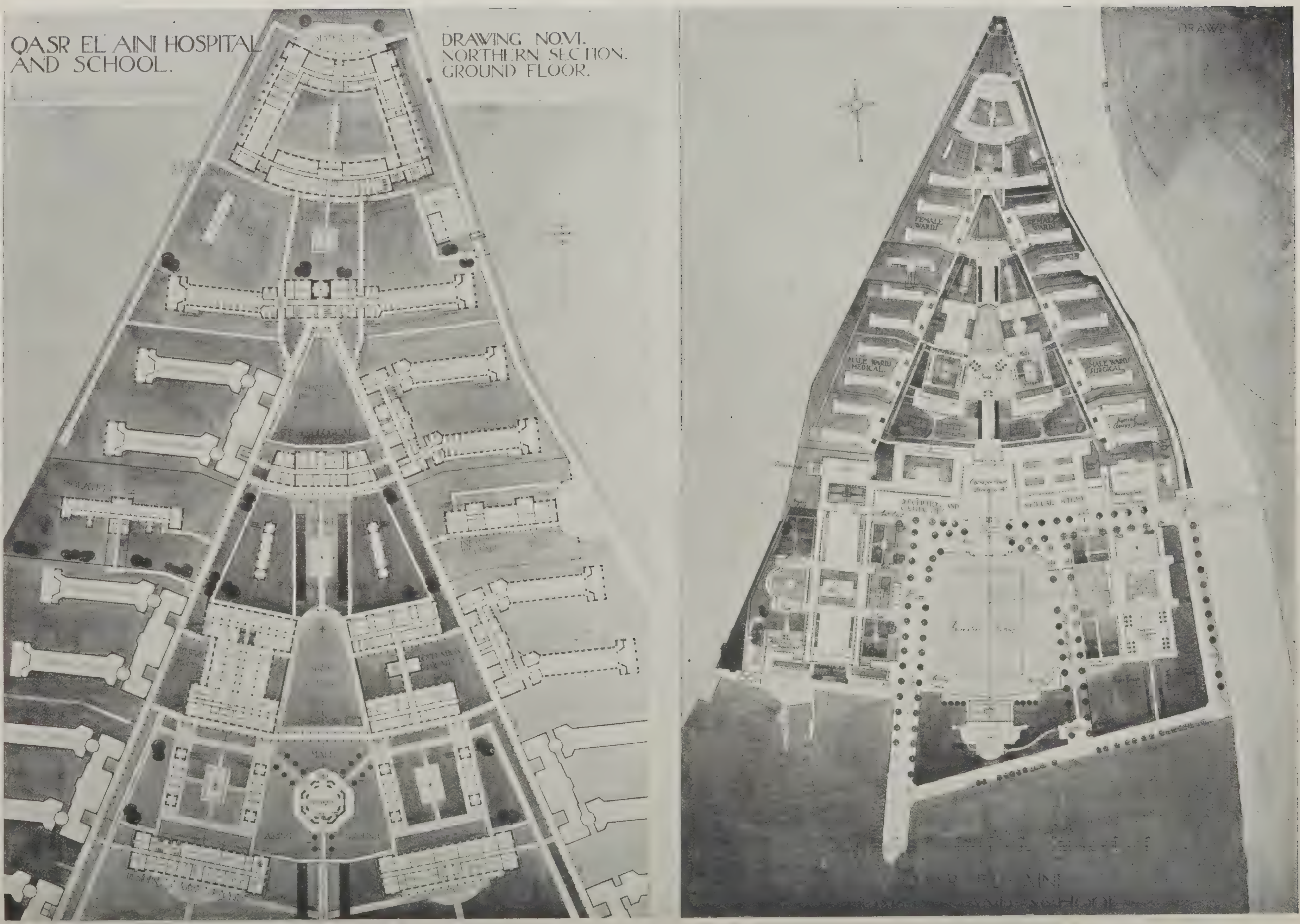
MPETITION: FIRST PREMIATED DESIGN.
FF.R.I.B.A., ARCHITECTS.
es.)



QASR EL AINI HOSPITAL AND MEDICAL SCHOOL COMPETITION: SECOND PREMIATED DESIGN.
LANCHESTER, RICKARDS, LUCAS AND LODGE, FF.R.I.B.A., ARCHITECTS.


SOUTH EAST SECTION.
GROUND FLOOR.
QASR EL AINI HOSPITAL SCHOOL.
QASR EL AINI HOSPITAL AND SCHOOL.
SECTION.
GROUND FLOOR

QASR EL AINI HOSPITAL AND MEDICAL SCHOOL COMPETITION: SECOND PREMIATED DESIGN.
LANCHESTER, RICKARDS, LUCAS AND LODGE, FF.R.I.B.A., ARCHITECTS.



QASR EL AINI HOSPITAL AND MEDICAL SCHOOL COMPETITION: SECOND PREMIATED DESIGN.
LANCHESTER, RICKARDS, LUCAS AND LODGE, FF.R.I.B.A., ARCHITECTS.

# ıe Qasr-el-Aini Hospital Competition

ondon Architects have achieved re-
kable success in the Cairo Hospital
ıpetition—one of the greatest archi-
ural competitions ever organized.
awards of the assessor, Mr. John W.
pson, PP.R.I.B.A., as announced last
k, are first Messrs. Nicholas and
ɔn-Spain, and second Messrs. Lan-
ter, Rickards, Lucas, and Lodge, of
ford Square. All are Fellows of the
B.A. In the first stage of the com-
tion open to the architects of the
d, five out of six places were won by
following British architects : Mr. John
inald Truelove, A.R.I.B.A. ; Messrs.
ɛett and Burns-Dick, FF.R.I.B.A. ;
srs. W. and T. R. Milburn, FF.R.I.B.A.;
srs. Lanchester, Rickards, Lucas, and
ge, FF.R.I.B.A. ; and Messrs. Nicholas
Dixon-Spain, FF.R.I.B.A., the sixth
e being secured by Messieurs. Pierre
Louis Guidetti, of Paris. In the
stage there were twelve competi-
among those accepting invitation of
Egyptian Government to take part
g Mr. E. Vincent Harris, O.B.E.,
I.B.A. ; Mons. M. A. Marcel ; Mr.
. Lisch ; Messrs. W. A. Pite, Son, and
weather ; Messrs. H. V. Ashley and
ton Newman, FF.R.I.B.A. ; and
rs. H. Percy Adams and Holden.

ıis week we publish illustrations of
designs placed first and second,
ther with portraits of the architects
secured second place. Portraits of
winners appeared last week. The
ital is situated at the northern ex-
ity of the island, its main approach
g from the bridge at the south side
e site. The hospital generally was
ɔvide beds for 810 males and 435
les.

### *The Winning Design.*

e winning design is admirably
ıed and is notable for its directness
simplicity. The hospital has wide
imposing frontages to the city, and
ıain entrance immediately faces the
of the Mahomed Ali bridge, over
ı the hospital traffic will travel.
the exception of the director's
ence and the students' hostel, all
ɔuildings are planned on the north
portion of the site. Access to the wards is obtained from a long corridor running parallel with the Nile. The main architectural motif of the design is a wide avenue terminating in the administration block and flanked by the medical school and the outpatients' block. It is interesting to note that the outpatients' block has been planned to the north of the main entrance to keep the large number of patients it will accommodate free from the Avenue de Rodah. This is a fine thoroughfare, but is not much frequented. It leads to Gizeh and the desert beyond, but the more usual route from Cairo to Gizeh is by way of the southern bridges.

### *The Second Design.*

In the second premiated design the female section of the hospital is placed at the north of the island, and the male section on the southern portion. The existing main road cuts the site into two pieces. The extreme southern end of the island is occupied by the home for sisters and nurses. Next to this is the harem division, separated from the male division by the isolation block on the west side, and by the extern work and the infant welfare block on the east side. The male division takes up the next section of the site with the two blocks for operating and the kitchens in a central position with access from both divisions. Facing the Avenue de Roda are the reception block and the laundry on the west side, and on the east side the medical school with mortuary attached and the power-house, the students' hostel and directors' house being placed on the southern portion of the site. The only difficulty that this disposition presented was that of providing access for women patients and visitors through the male division. This was met by the provision of a mezzanine corridor about 13 ft. above ground level, which could be screened from observation as far as necessary, this corridor serving also to give access from the female wards to the radiology department. The out-patients' department was placed in the garden area forming the south-west portion of the site, and a large central open space was thus secured for a recreation ground for the students. The buildings generally were to have been built in stone, with cornices and friezes in cement.

During the competition many of the most distinguished architects in the United States, Canada, Italy, and elsewhere, submitted designs and the result is an emphatic triumph for British architects.

# The Institute of Builders' Annual Dinner

The annual dinner of the Institute of Builders took place with its accustomed good cheer and good company at the Hotel Victoria, London. Mr. James Storrs, J.P., president of the Institute, was in the chair, and the company present numbered about 300.

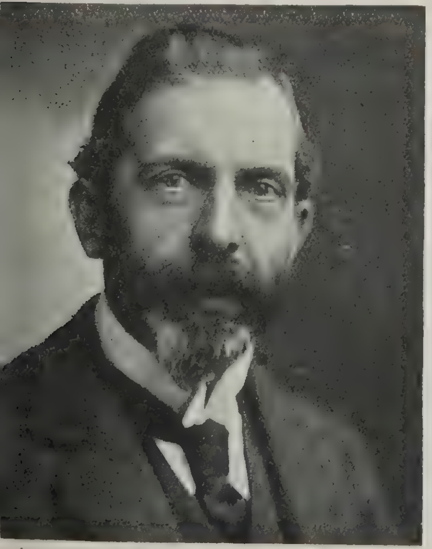
Excellent fare, brief and witty speeches, and a delightful musical entertainment combined to make the evening a conspicuous success.

Proposing the toast of the Institute of Builders, Mr. W. H. Nicholls said that from its buildings one could gather the history of a nation, and referred to famous buildings of every age and land. He paid a warm tribute to the work of the president, who, in reply, said that it was the function of the Institute to watch the interests of the trade as between architects and builders and surveyors and builders. They were particularly concerned with the better education of the employed, and hoped to establish a Chair of Building at one of the universities.

Mr. W. E. Collier proposed the Architects and Surveyors, and said that the I.O.B. had tried to establish good relationships with the professional bodies. They had had many conferences regarding the agreed form of contract, and there was every prospect that this would be brought to a successful issue. In connection with the Surveyors' Institution they had already achieved the issue of the standard method of measurement. There was a general desire that quantities should be invariably supplied as builders were not qualified in that direction.

Mr. Partridge, president of the Society of Architects, replied, and complained that they had on this occasion caught a partridge out of season.

Mr. Forsdike, Mr. Searles-Wood, and Mr. Denny also spoke.



Mr. H. V. LANCHESTER, F.R.I.B.A.

Mr. GEOFFREY LUCAS, F.R.I.B.A.

Capt. T. A. LODGE, O.B.E., F.R.I.B.A.

THE AUTHORS OF THE SECOND PREMIATED DESIGN, QASR-EL-AINI HOSPITAL COMPETITION.

# The First Atelier of Architecture

An exhibition of work executed by members of the First Atelier has been held in the Atelier and in the rooms of the Society of Architects, where a paper on "Colour" was read by Mr. R. G. Lovell, A.R.I.B.A., M.S.A., in the evening.

The Beaux Arts Committee arranged this exhibition and meeting in response to a request from a number of those who are interested in the aim of the Atelier and who have generously assisted the scheme as donors and subscribers.

It will be remembered that the First Atelier was founded in 1913 by a group of architects who had personal experience of the training of the Ecole des Beaux Arts in Paris, and who were impressed by the lack of system then prevailing in architectural education in this country. The First Atelier, after undergoing a somewhat difficult period at the start, proved a successful experiment, and many of the professors now teaching at home and in the Dominions were among its early members; and its methods have since been generally adopted as affording the best means to the architectural student for continuing his studies after completing the preliminary training of the architectural schools. It may therefore be of interest to re-state the principles for which the First Atelier stands.

It is considered that architectural design must be based on the purpose of the building, and the form of expression depends on this, qualified by the national and social factors. Only such traditions should be accepted as are appropriate to the expression of national character and local conditions.

The necessity of first analysing the components of a building and making the relative importance of these the basis of the composition is of great importance, and the disposition of the parts of the design (taking into consideration site, harmony, orientation, hygiene, durability, proportion and economy in the use of materials) can only be studied on a topical basis, after this preliminary analysis has been completed.

These studies evoke the imaginative faculty and at the same time subject all solutions to the control of a reasoned synthesis.

To put these principles into practice was and is the object of the Beaux Arts Committee.

It was felt that architecture would be most effectively influenced by inviting young architects and advanced students to join the Atelier and take part in the work, as it is essential to have sufficient members of tried ability to allow each one to profit by the knowledge of the rest, the Atelier being a common centre for free discussion on principles, methods, conditions and ways of seeing and acting.

The utmost freedom is allowed as regards modes and times of work, with the sole exception that the preliminary studies for each design must be prepared *en loge* on a given day. Such designs are carried to completion in the Atelier during the following month.

The Atelier is under the direction of M. Hector Corfiato, Médaille et Diplômé de l'Ecole des Beaux Arts, who succeeded the late patron, M. Chaurés, last year.

The designs, *esquisses* and *projets*, etc., are adjudicated on by a jury composed of Messrs. Arthur J. Davis, F.R.I.B.A., H. V. Lanchester, F.R.I.B.A., L. S. Sullivan, A.R.I.B.A., F.S.Arch., H. Corfiato, and Lieut.-Col. H. P. Cart de Lafontaine, O.B.E., A.R.I.B.A., who award marks and mentions in accordance with the merit of the designs. Medals and the Certificate of the First Atelier are awarded by the Beaux Arts Committee on the recommendation of the jury and Chef d'Atelier.

The work shown at the exhibition comprised selections from the work of students in pre-war days, during the period from the war until the appointment of the present Chef d'Atelier, and recent work. The latter was hung in the Atelier itself, and formed an excellent survey of the recent work of students; much of this reached a high level, and we particularly noticed some excellent designs for a "cinema" by Mr. Butler (awarded a "1st Mention"), and Mr. Murray (a "2nd Mention"), which were well planned and delightfully rendered. A decorative composition for a "Bank of England Note" also produced some able and interesting designs by Mr. Smith ("1st Mention"), Mr. H. L. Curtis ("2nd Mention"), and others.

A somewhat unusual subject for the Englishman was that of a "Police-Post on a Mountain Frontier," and no student has been entirely successful in their solution of the problem; but two interesting and well-drawn sets were shown by Messrs. B. George and J. Norburn, who also contributed some excellent holiday sketches.

Mr. H. L. Curtis showed a well-considered scheme for a "Civic Centre in a Workers' City," which was awarded a "2nd Mention."

The Chef d'Atelier (M. Corfiato) showed one of his own Beaux Arts *projets*—a design for a "Monastery on Mount Athos"—which was interesting in its planning detail. The designer has also kept in mind the climatic and local conditions, and his scheme was illustrated by a set of excellent drawings.

Mr. Lanchester prefaced his detailed criticism of the designs exhibited by a reference to an interesting composition for a Monastery on Mount Athos, executed at the Ecole des Beaux Arts in Paris by the Chef d'Atelier (M. Corfiato). He subsequently made a digression, during which he remarked that in the modern architecture of their cities it was probably unreasonable to expect that the design of every building would be a brilliant example of architectural composition; but they hoped the standard would improve, and as long as designs were honest and straightforward, they would provide a fair setting in which the more brilliant examples would be as jewels.

It was not to be expected that they could all be brilliant all the time, but he thought that the work hung on the walls showed great promise and justified their hope that the First Atelier would do much to raise the level of architectural design in this country.

Continuing his criticism of the various designs exhibited, Mr. Lanchester explained the reasons which had influenced the jury in making their awards, and concluded his remarks by expressing the
hope that progress would be maintain
and that in a short time they woul
bring new members to benefit by th
facilities for the study of architectur
composition which it was the aim
the First Atelier of Architecture
provide.

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# R.I.B.A. Council Meetin

Appended are notes from the minut
of the last Council meeting of th
R.I.B.A. :—

Annual Exhibition.—It was decid
to hold an exhibition of French archite
ture in the R.I.B.A. Galleries in th
autumn.

Architects' and Surveyors' Approv
Society.—A grant of £75 was made to th
approved society to assist in liquidatin
the deficit on the administration accoun

Housing Policy.—The report of th
R.I.B.A. Housing Committee on t
National Housing Policy was adopted a
ordered to be submitted to His Majesty
Government.

Building By-laws.—The report of th
Building Code Joint Committee w
adopted and ordered to be submitted
His Majesty's Government. This rep
recommended the periodical revision
by-laws, the establishment of an app
tribunal, and contained suggestions
a greater uniformity in local by-laws.

Empire Forestry Association.—Mr.
D. Searles-Wood, vice-president, w
nominated to serve upon the governi
council of the Empire Forestry Associ
tion as the representative of the R.I.B.

Reinstatement.—The following we
reinstated as Licentiates: J. Ross Wil
Ernest Sprankling, E. H. Wigley, A.
Barnes, C. Procter Sherwin.

Registration Bill.—In pursuance of t
decision of the special general meeti
on January 29, it was decided to inv
all the bodies which were represented
the Unification and Registration Co
mittee, and any others which may
affected, to consider the draft Regist
tion Bill, to indicate any points in whi
they think it might be improved
amended, and in due course to appoi
representatives to attend a meeting
the discussion of the Bill.

Academic Dress for Members of t
R.I.B.A.—It was decided to refer to
general meeting the question of t
adoption of an academic dress for me
bers of the R.I.B.A.

London Squares.—A communication
to be sent to the London County Coun
urging that steps should be taken
ensure the preservation of the Lond
squares.

South Africa.—Mr. E. M. Powe
F.R.I.B.A., was appointed hon. secreta
for the R.I.B.A. in South Africa in s
cession to the late Mr. Arthur H. Re
It was decided that the Association
Transvaal Architects be admitted as
allied society of the R.I.B.A. in place
the Transvaal Institute of Architects

Daywork Charges.—Mr. Max Clar
F.R.I.B.A., was appointed to repres
the R.I.B.A. on a Joint Committee
architects, surveyors, and builders to
formed for the purpose of reporting u
the question of daywork charges for d
work with a view to establishing
agreed schedule.

The Incorporation of Architects
Scotland.—The draft by-laws of
Incorporation of Architects in Scotl

vere approved under the provisions of y-law 78.

The Institute of Cost and Works ccountants.—It was decided to present petition to the Privy Council in opposiion to the petition of the Institute of ost and Works Accountants for the rant of a Royal Charter.

## Contemporary Art

*The Grosvenor Galleries.*

Harold Knight makes a brave show vith his portraits, but there is an element f restraint about his landscapes and seacapes, and their colour is sombre and heir drawing weighty. But the porraits are sane, naturalistic, both in drawng and colour; they have no affectations, ut only a self-respecting technique vhich is of great value in the portrait art f to-day.

The London drawings of Horace Mann ivens are on the sombre side, too, but hey have a warmth that is grateful and grace that is comforting.

Fairlie Harmar enjoys landscape, and, deed, all her painting. You get the npression that she does not stop to hink, but just revels in the feeling of leasure in reproducing the brightness of ature; there is no sombre aspect at all her work, but it lacks the sense of esign which is definitely present in the ork of Livens and Knight.

In the Italian and French landscapes f Charles E. Cundall a new acquaintance f a most pleasing character is made. undall is a young man, and his pictures ave the buoyancy of early years. He, o, seems to find joy in the bounty of ature and in that of man's handiwork, r to landscapes he adds architectural eatures of an unassuming character and roduces very satisfactory results.

*The Goupil Gallery.*

Few artists maintain so consistent a tandard as Wilson Steer: his two oilaintings at the spring exhibition of the oupil Gallery, "The Valley of the evern" and "In a Park," are just as good s anything he has painted. Lack of motion and insistence on the truth of elling atmospheric effects are as usual e distinguishing features of this artist's ork. There are at least three very fine ieces of painting in the gallery, painting s painting: William Nicholson's "Porait of Miss Iris Tree," Mark Gertler's The Mother," and Orlando Greenwood's Visitor." The latter is a piece of viruosity; "The Mother" is an absolute uth; the portrait a complete piece of presentation. There is another distinuished thing, Augustus John's "Old edanois," a remarkable study in realism, ss remarkable as painting. There is fine ainting quality in Walter Sickert's usic-hall scene, "Katie Lawrence at atti's," of course, and I should like to e in the work of Henry Lamb a greater ve for this quality. I'm sure his original ay of observation would benefit by an nprovement in his technique. The Bather" of Charles Sims is a charming ttle boudoir picture, and James Pryde's Monument" is a nice small work, too, ut, curiously enough, much less monuental than the same artist's bedsteads d things that have been seen preiously here and elsewhere. Pryde's work presses the little in great better than e great in little. There is a brilliant rgent drawing in the small gallery lled "Near Versailles," a beautiful water-colour with the most melting greens imaginable. The Continental painters represented are Ribot, Jacque, J. and M. Maris, Boudin, Sisley, and Cossaar.

*The Leicester Galleries.*

The late Douglas Fox-Pitt's water-colour drawings of Brighton are very charming; they are small, compact, well-constructed, and admirable bits of light and colour to match a bright room or enliven a dark one.

To pass from them to the next gallery where Edward Wadsworth's tempera paintings are shown is to pass into a new world of art. There is colour in profusion: bright and dark, crude and sophisticated; there is drawing reduced to its most simplified forms. Any room in which it was proposed to hang these examples of modernist art would have to be specially designed for their reception. Wadsworth's work would definitely extrude any example of conventional picture-making. His art is disturbing and yet it is placid: there is nothing more aggravating than placidity causing a disturbance. Wadsworth is absolutely sure of himself, and his work is a sure thing.

*The Women's Exhibition.*

The sixty-eighth exhibition of the Society of Women Artists at the Royal Institute Galleries was one of the bright things in London during a very dull February. It must be said of the women artists that they believe in the joy of art, which is quite the proper thing to do. The walls of all the galleries were glowing with oil-paints, water-colours, textiles, and enamels, and in cases were book-bindings and pottery adding their lines successfully to the general effect. The sculpture, too, was full of interest, although even here it was never placed to the greatest advantage: it never is. But it was good of its kind, the most ambitious piece being a symbolical war subject of a Mother and Child, by J. Lawson-Peacey. Among the portraits the steady growth of strength in those by Mrs. Blakeney-Ward was noticeable.

*Cézanne and Matisse.*

The Independent Gallery is doing a great service to the study of modernist painting in its frequent shows of the chief exponents. It is to be hoped that before long painting will be followed by sculpture, for there is just as pronounced a modernist school in plastic as in graphic art on the Continent waiting for the appreciation of London. The present exhibition contains more important works by several of the artists represented than I remember to have seen for some considerable time. There are five by Matisse, of which Etretat is the best, and double that number of drawings by Cézanne, while Segonzac and Marchand make an advance on most of the works that have been seen here previously, and the heavy, sombre colour-scheme of Luc Albert Moreau claims attention and interest. There are half-a-dozen other exhibitors. KINETON PARKES.

*An Architecture Exhibition in New York.*

The 38th annual exhibition of the Architectural League of New York is strengthened and embellished by a comprehensive exhibit of the work of notable contemporaneous English architects. These are shown for the first time through the courtesy of Mr. Paul Waterhouse, P.R.I.B.A., and Mr. Alfred C. Bossom. This exhibition takes on further significance by the fact that simultaneously with England they offered to Sir Christopher Wren the honours of bi-centenary remembrance.

## A New Adjunct to the Theatre

"The play's the thing," wrote the Immortal Bard. Within recent years, however, there has risen up a school of thought that maintains, in effect, that the scenery is the thing, and a distinctly lively quarrel has ensued. To the impartial observer it would appear that both are necessary. Possibly Shakespeare, if he were alive to-day, would amend his dictum to "The play accompanied by adequate but not obtrusive scenery, and such lighting effects as do not distract the attention, make for a performance that shall give the greatest pleasure to the greatest number." Thus would he eliminate the cranks on both sides.

The theatrical producer who rejected the aid of electric light in the production of his plays would not last long to-day. No one, of course, would be so foolish. Electricity has affected the presentation of the drama more than any other mechanical factor in the modern theatre. Is it to have a yet wider influence? We think so.

Scientific stage lighting has made much more rapid progress on the Continent than it has in this country; where, however, it is now being taken up by progressive producers. The St. Martin's Theatre, for example, has a remarkably complete equipment, including an installation—the first in England—known as the Schwabe-Hasait system, with which it is possible to produce effects that are entirely new to the British theatre. The elements are a series of lanterns and an artificial horizon, upon which are projected natural sky effects in colours—dawn, sunrise, the blue sky of broad day, sunset, twilight, clouds, stars, and so forth. The slow motion of clouds across the sky is perfectly simulated, one particularly interesting effect being that of two separate banks of cloud travelling independently one across the other, a phenomenon that is frequently observed in nature. All these effects are produced from actual photographs and are therefore as near to nature as it is possible to get by mechanical means.

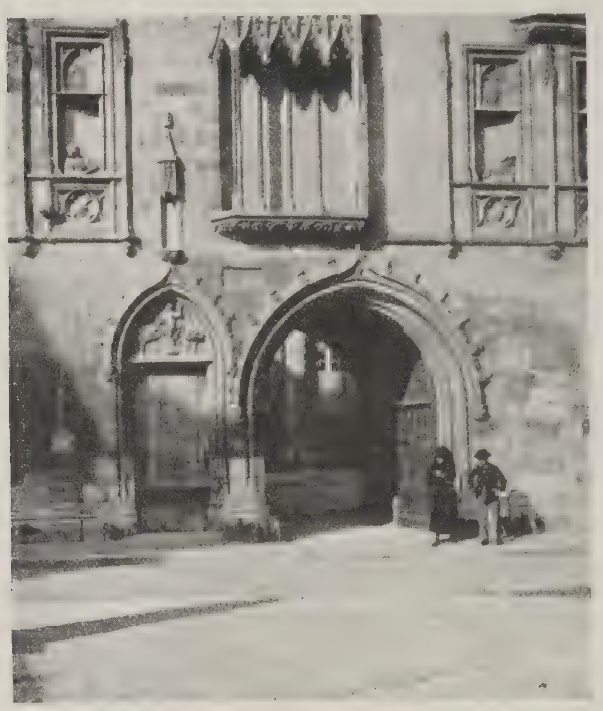
The advantages of this system are, briefly (1) that it is possible to do away with "drop" scenes, as the artificial horizon (which may be either a permanent structure of polished plaster of Paris or a movable canvas screen) forms the only background required for the presentation of sky effects; and (2) that it is under the control of a single operator, who, in addition, works all the subsidiary lighting, such as battens, floats, projectors, flood and spot lights. It is, therefore, very economical.

We are not sure that purely realistic effects are appropriate to the theatre, which itself is a pure convention; but we are assured that the system lends itself just as readily to the highly conventionalized effects of the scenic artist, who merely has to provide suitable slides for projection upon the artificial horizon. The General Electric Company, Ltd., have the sole rights of the system in this country.

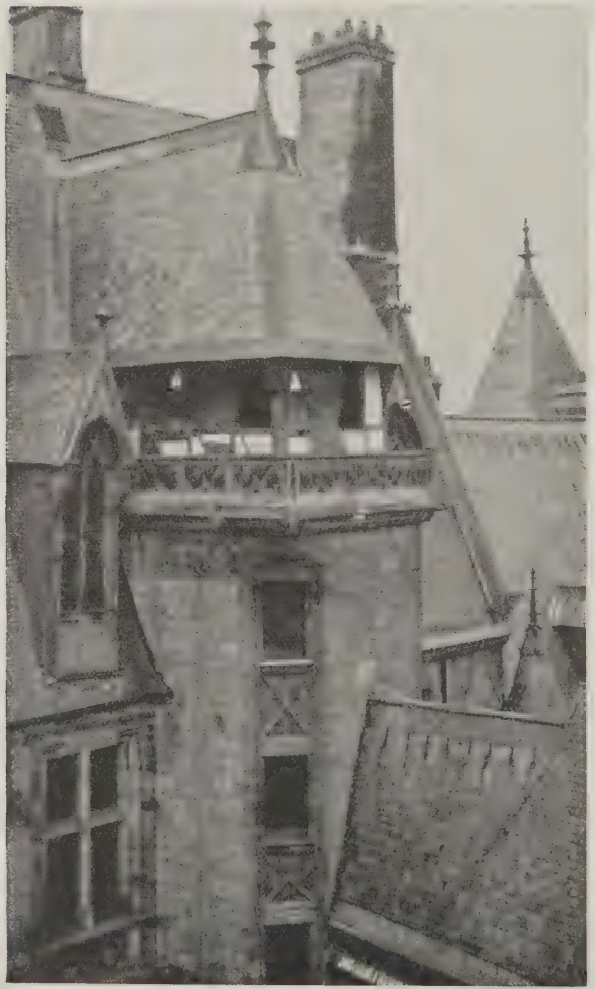
# A Pictorial Review

## Illustrations of Topical, Practical, or Curious Interest

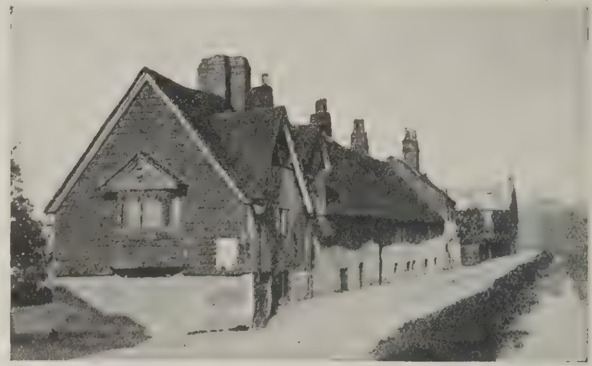
*Readers are invited to send in sketches and photographs for publication in these pages. A fee of 2s. 6d. will be paid for each illustration accepted. Contributions should be accompanied by short explanatory notes.*



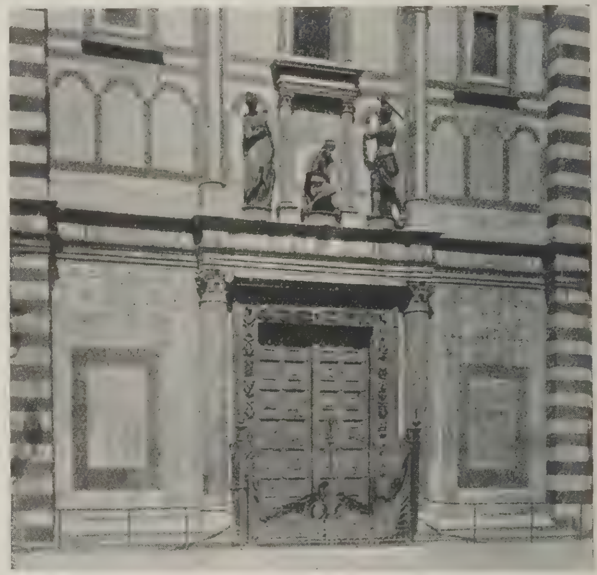
The main entrance to the house of Jacques Cœur at Bourges. From the false windows on the first floor are figures of servants looking for their master. (One of the stair turrets is illustrated below.)—A. B. H.



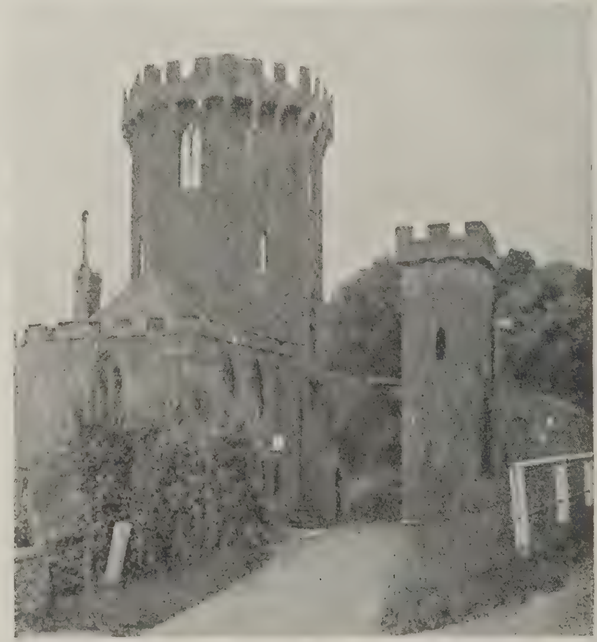
One of the stair turrets to the house of Jacques Cœur at Bourges. The house was built between 1443 and 1451, and is now partially used as the Palais de Justice. It is to be vacated by the Law, and cared for as an historical monument. It is in a state of good preservation (the main entrance is illustrated above).—A. B. H.



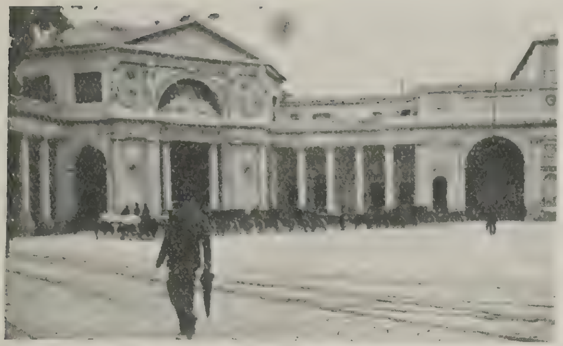
The "Weavers' Cottages" on the bank of the Kennet at Newbury, Berks. The town in the fifteenth century was a flourishing seat of the cloth trade. There is a marked contrast between windows in the front of the cottages and the oriel window at the east end of the structure.—J. B. T.



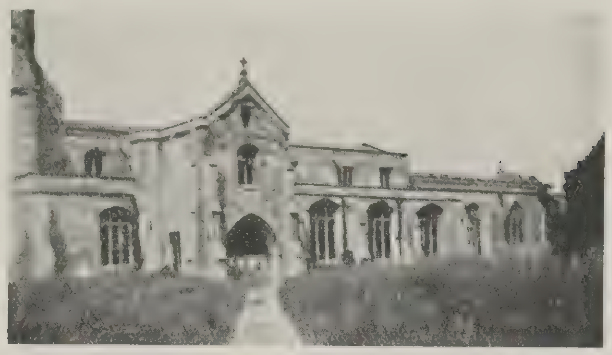
One of the three bronze doors to the baptistry at Florence and the first to be completed. It dates from 1336 and is the work of Pisano. The statuary group above is by Dante, and represents the beheading of John the Baptist.—J. V. D.



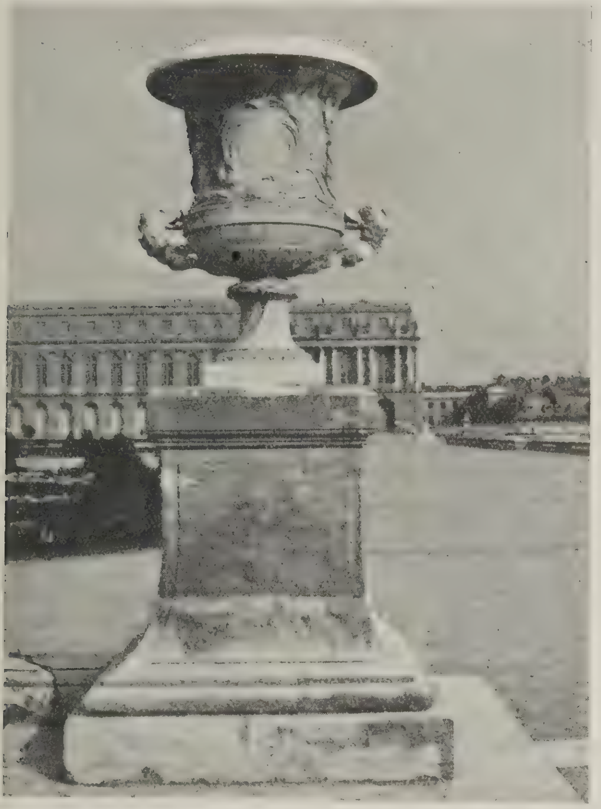
Edgehill Tower was erected to mark the position of the Royalist army before the battle. It was designed by Sanderson Miller—who evidently found inspiration in Guy's Tower at Warwick Castle—and completed in 1750.—A. H. G.



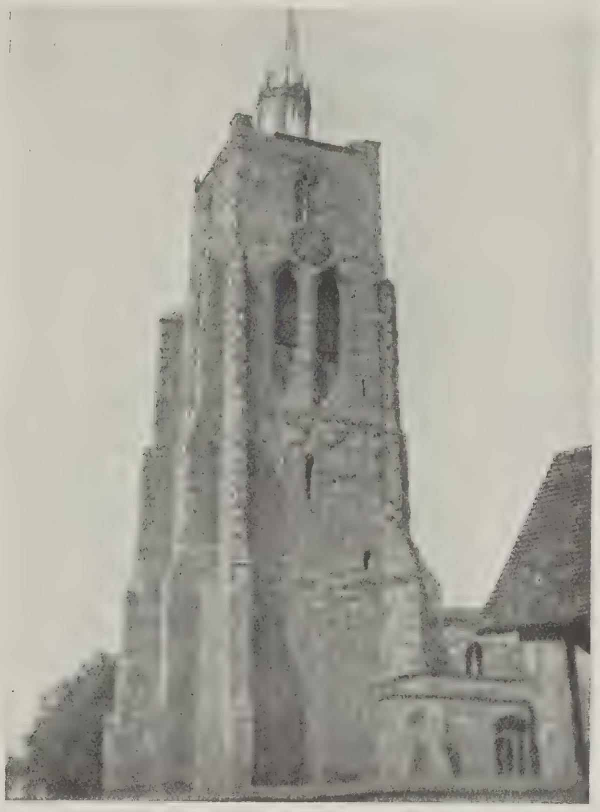
The railway station at Genoa is at the end of the via Balki. It consists of a central pavilion, and two colonnaded wings, one of which forms a screen across the thoroughfare.—A. MCG. H.



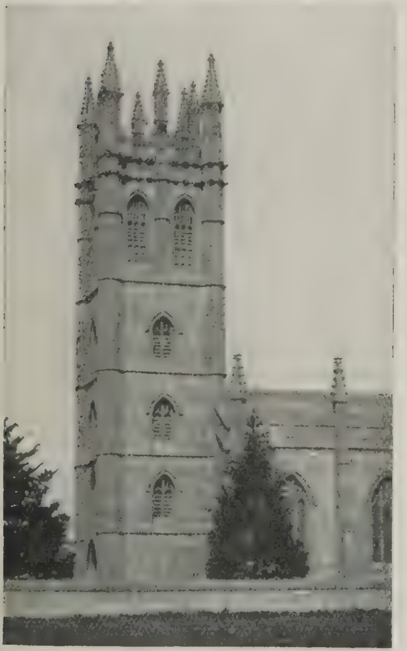
Ashwell Church, Herts, is on the extreme eastern end of the Chiltern Hills. The tower (illustrated below) has one of the best examples of the "Hertfordshire Spike."—W.



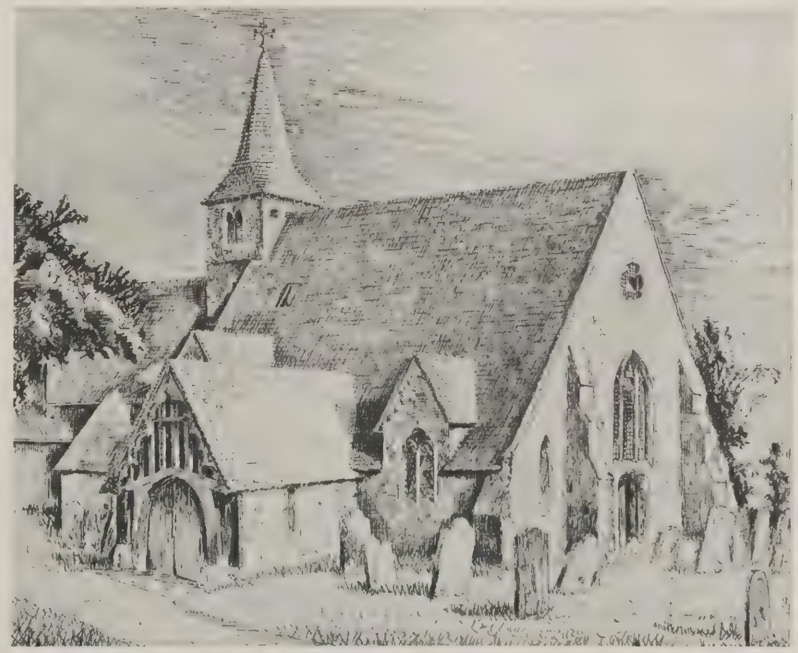
The "Bertin" Vase stands in the Palace Gardens at Versailles, near the Orangery. The height of the vase is 4 ft. 2 in., the pedestal being 4 ft. 6 in. high and 4 ft. 4 in. across the base.—B.



On the inside of the walls of the tower of Ashwell Church several fourteenth-century "Graffitti" are scratched. The gale of 1361 weakened the tower and the stone buttresses had to be enlarged.—W.



The tower of Churchill Church, Oxfordshire, is a reduced facsimile of the famous Magdalen Tower of Oxford. The original is copied down to the minutest detail.—J. B. T.



Warblington Church is a quaint example of early English architecture. The ancient wooden porch, according to local tradition, is fashioned from an old ship of the period of Edward the Third. Portions of a Saxon church which formerly occupied the site are incorporated in the building.—C. J. B.

# Acquiring and Replanning Congested Areas

## By L. C. EVANS, Town Clerk, Salford

IN reading a paper before the Town Planning Institute, Mr. L. C. Evans (Town Clerk of Salford) said that acquiring and replanning congested areas as a matter of practical politics resolved itself into a question of money. He said that sites could be cleared and newly planned on modern lines without difficulty so long as they were prepared to pay the price, as, e.g., the clearing and newly planning of Paris and payment of the cost by octroi duties on necessities of life entering Paris. But such heroic measures were too much for this country. Giving particulars of the actual administration prior to 1919 of the Housing Acts in Salford, a borough with nearly one-quarter of a million inhabitants, he said, when the Housing Act, 1890, was passed, Salford, like many other towns, declared that several areas in the town were unhealthy areas. These were in that part of the borough which was first built upon over a century ago.

As you are all probably aware, building by-laws and limitation of the number of houses per acre were unknown in the eighteenth century. The first Public Health Act was not passed until 1844. Up to 1792, Manchester and Salford were both under manorial government, but its inadequacy was such that in that year Police Commissioners were established by Act of Parliament, giving very limited powers to the Commissioners for watching and lighting the townships of Manchester and Salford; but at that date no one had visualized the rapid growth of towns which began to set in with the beginning of the industrial revolution, which may be said to have started about 1770, and he would have been a bold man who dared then to suggest wide streets and development of towns on modern garden city lines.

Consequently, the very centre of Manchester and Salford was covered to the last inch in providing dwellings for the industrial workers in the mills and manufactories then springing up. These dwellings are not all gone even now, and can still be seen on the verge of the river dividing Manchester from Salford. But many of them have been swept away, particularly in Manchester, to make room for new and commodious buildings.

Up to 1890, however, Salford had, in its oldest built-up district, several areas crowded with dwellings, one being on the verge of its main street. They were all crowded with working-class dwellings hemmed in together in courts and alleys, without sanitary conveniences of any kind, with a water supply on the village pump principle in the courts and alleys, where every occupier had to draw water from a standpipe, as it was called, and carry water to his dwelling, such as it was. Judged by the standard even of 1890, this condition of things was so deplorable that several areas were declared by the Corporation under the Act of 1890 as unhealthy areas, and the Council had to buy out the owners and build other houses for the dispossessed tenants. Then came the tug-of-war. The owners, very naturally wanted as much compensation as possible. And in those days the amount of compensation payable was so many years' purchase of the fair market value of the property. The net result of clearing these congested areas was that the Corporation paid, as the phrase goes, "through the nose," and they had never repeated the experiment. Some of the cleared sites have been sold as vacant land at about half the price per square yard which the Corporation paid for land and buildings. Some of the vacant land is still in hand. Compound interest on the price paid will mount up to a big figure. The purchase money and compensation was £40,669, including costs. On the cleared sites, except one, the Corporation erected working - class dwellings and erected dwellings on another large site instead of on the excepted area, to a total of 703 dwellings and 35 shops, at a cost of £298,162, of which £223,353 is still outstanding.

But although the dwellings erected by the Corporation were a very great improvement on the old cottages, the small sites were not laid out on garden city lines, but on the largest site a large hollow square was laid out to serve as a recreation ground available to the public and the tenants of the cottages built along the sides of the square. This type of lay-out seems to be most suitable in large towns, and although it does not approach the twelve-houses-to-the-acre standard, it is a great improvement on the inherited conditions still existing in large towns, where streets upon streets of brick boxes with slate lids extend over hundreds of acres. But these brick boxes cannot be said to be congested within the Housing Acts. They are merely monotonous and ugly. In the older parts of the towns there are long rows of cottages unbroken by intersecting streets, but in the newer parts the rows are broken up by intersecting streets in accordance with by-laws requiring such intersections.

We must, therefore, first of all decide what we mean by congested areas. Judged by the modern standard of twelve houses to the acre, Salford is hopelessly congested. In the older parts of the borough nearest to Manchester and only divided therefrom by the Irwell, and on the Manchester side of the river there are equally congested areas cheek by jowl with the celebrated John Rylands Library and warehouses, the warehouses being built on the site of cottages pulled down to make way for these modern buildings. But in the suburban parts of Salford built during the past thirty years there are wide streets and plenty of air space, and in some parts there are areas dignified by the name of parks where there are less than twelve houses to the acre. And this mixed condition of things doubtless prevails in most of the large towns of the country.

There is not now in Salford a really large congested area exceeding 6.26 acres. We must, however, decide what is meant by the words "congested areas." The Housing Acts do not use the words. What they do enact is that it is the duty of the medical officer of health in a district other than a rural district to make a written representation to the local authority in regard to any area which appears to him to be an area of the character described in Section 4 of the Act of 1890. Such an area is one within which either—

(*a*) any houses, courts, or alleys are unfit for human habitation; or

(*b*) the narrowness, closeness, and bad arrangement, or the bad condition of the streets and houses or groups of houses within such area, or the want of light, air, ventilation, or proper conveniences, or any other sanitary defects, or one or more of such causes, are dangerous or injurious to the health of the inhabitants either of the buildings in the said area or of the neighbouring buildings.

Here, therefore, we have the word "area" used, but not "congested area." The word is used under two headings, (*a*) and (*b*). Under the first heading an area includes any houses, courts, or alleys unfit for human habitation, and under (*b*) streets and houses or groups of houses where the narrowness, closeness, and bad arrangement or bad condition thereof, or the want of light, air, ventilation, or proper conveniences, or any other sanitary defects or one or more of such causes, are dangerous to the health of the inhabitants of the buildings in the area or of the neighbouring buildings, so that an existing built-up area which can be dealt with at all is an area where there are houses unfit for human habitation, or streets and houses or groups of houses dangerous to the health of the inhabitants thereof or of the neighbouring buildings.

I take it, therefore, that congested areas are areas falling within (*a*) and (*b*), otherwise we are each at large to form our own opinion as to what is a congested area. But the Acts call such areas unhealthy areas and not congested areas.

If we are agreed that congested areas means unhealthy areas as thus defined, we can now proceed to analyse the conditions which enable the Medical Officer of Health to prescribe the extent of an area. Section 4 of the Act of 1890 is a difficult section to interpret. Can the medical officer first prescribe an area of, say, 100 acres, and represent that within such area the conditions of (*a*) or (*b*) exist with respect to 10 acres thereof, and that the evils connected with such 10 acres cannot be effectually remedied otherwise than by an improvement scheme for the 100 acres? Do the words "such area" in the latter part mean the "certain area" in the first part of the clause? If so, the local authority might resolve that the 100 acres are an unhealthy area, and if the confirming authority agreed, the local authority could buy all the buildings on the 100 acres at site value.

But if, on the contrary, the medical officer of health can only include within the area houses, courts, or alleys falling within (*a*), or streets and houses, or groups of houses falling within (*b*), i.e.,

erous or injurious to the health of
nhabitants either of the buildings in
rea or of the neighbouring buildings,
only the area covering these which
be the subject of a representation
scheme.

the first proposition is sound, it is
ous that if there are in an urban
ct any houses, courts, or alleys
for human habitation, or the con-
ns referred to in (*b*) exist, the official
sentation made to the local authority
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ied of the truth thereof, and of the
iency of their resources, they could
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unhealthy area, and that an improve-
scheme ought to be made in
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may be said neither the medical
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is construction sound? Can it be
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escribed including property falling
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for human habitation nor dangerous
alth nor itself endangered? In my
n, for what it is worth, the medical
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(*b*) conditions make a representation
he whole of the area first prescribed
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up the area by finding (*a*) and (*b*)
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tions, and if it be necessary to
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authority may by the scheme include
and pay full compensation for such
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ibe an area, however large, and if
(*b*) conditions exist in a part only,
ver small, of such area, the whole
area may be described by him as an
lthy area.

s problem is definitely before us in
d, and it seemed to me to be so
ful that the opinion of eminent
el was obtained. He says :—

[COPY OPINION.]

. The answer to the question what
mises may be purchased at site
ue depends upon the true construc-
of the parenthesis in the First
agraph of Section 9 (1) of the
using, Town Planning, etc., Act,
9. In my opinion, according to the
e meaning of that parenthesis any
mises except "neighbouring lands"
luded by the Local Authority for
purpose of "making their Scheme
cient" under Section 6 of the Housing
he Working Classes Act, 1890, might
purchased at site value. In other
ds, any premises comprised in the
eme which are premises within the
a comprised in the Official Repre-
tation made by the Medical Officer
of Health might be purchased at site value. But important practical limitations exist. First of all there is the possibility that the Local Authority might not indicate as "lands proposed to be taken compulsorily" under Section 6 (2) of the Act of 1890, such buildings as factories or such dwellings as are in good sanitary condition. In the second place, the Ministry of Health have power to make conditions and modifications of the Scheme under Section 8 (5), or to alter the area under Section 8 (4) of the Act of 1890. The Ministry will certainly refuse to confirm a Scheme except upon condition that the market price is to be paid for buildings which are in no sense detrimental to the health of the area.

2. I do not think it is legally impossible that buildings other than dwelling-houses can be purchased at site value under Section 9 of the Housing and Town Planning, etc., Act, 1919. But I think the circumstances under which purchase at such a price would be permitted must be exceptional.

3. If licensed premises were purchased at site value, I do not think the existence of the licence would add anything to the site value. In my opinion, the value of the licence attaches to the buildings and not to the site. If it is contemplated that licensed premises should not continue within the area, the most satisfactory method would be, if possible, to get the licence referred for compensation. Those interested in the licensed premises would thus obtain a reasonable amount of compensation, and the premises would then be merely a dwelling-house.

If no licence is to be permitted in the area, and if the site value is to be paid, then the extinguishment of the licence will affect the "deduction factor" under the First Schedule to the Housing and Town Planning, etc., Act, 1919.

R. M. MONTGOMERY,
5, Crown Office Row, Temple, E.C.4.
30th January, 1923.

The opinion of the Ministry of Health was also sought, who say :—

[COPY.]

Reference: 1593/8.
Ministry of Health,
Whitehall, S.W.1.
1st March, 1923.

Sir,

I am directed by the Minister of Health to refer to your letter of the 13th ultimo, with regard to the proposed scheme for the clearance of an unhealthy area in Salford. The application of the provisions of Section 9 of the Housing, Town Planning, etc., Act, 1919, to individual cases is a matter for the consideration of the Minister after a local enquiry has been held and the persons concerned have had an opportunity of stating their contentions, and for this reason the Minister does not consider that it would be proper for him to anticipate his decision by expressing an opinion as to the various categories of houses mentioned in your letter. In general, however, he agrees that while premises other than dwelling-houses are not excluded from the operation of Section 9, business premises should not as a rule be included in a scheme except for the purpose of making the scheme efficient, unless there is positive proof that they are (*a*) themselves unhealthy or insanitary, or (*b*) a source of danger to neighbouring buildings which, but for their presence, would otherwise be both healthy and sanitary.

In the case of licensed premises the question whether the value of the licence can be wholly excluded appears to the Minister to be open to some doubt, but he agrees that until the price has been decided by the Official Arbitrator Local Authorities would be well advised to negotiate on the footing that the existence of the licence does not add anything to the value of the land as a site cleared of buildings.

I am, however, to inform you that arrangements have been made under which the services of the District Valuer will be available to the Corporation both in framing a preliminary estimate of the expense of acquiring the property in the area, and also in taking subsequent negotiations for its acquisition. If you will furnish the District Valuer with information as to the properties the Council propose to include on account of their insanitary condition and which it is proposed to include for the sake of making the scheme efficient, the District Valuer will be ready to furnish you with a preliminary estimate of the cost of the acquisition.

I am, Sir,
Your obedient Servant,
(Signed) T. C. WRIGLEY,
For Assistant Secretary.

The Town Clerk,
Town Hall, Salford.

It is obvious that the estimated cost of any clearance and replanning a congested area depends to a large extent upon the fact whether land and buildings are purchased at site value or partly at site value and partly at full value of lands and buildings. But until a scheme has actually been made and the confirming authority has definitely stated which land may be bought at site value and which at full value, it is impossible for a local authority to estimate the probable cost of purchase. But in any event the main cost will be due to the annual loss due to rehousing the dispossessed tenants. This depends upon the price of land elsewhere than on the cleared site, the type and cost of the new dwellings, the rent likely to be obtained, and other factors difficult to assess, so that it is almost impracticable to give any reliable figures of the probable cost of clearing any area. Having regard to the still existing high cost of materials and wages, it seems prudent for any district to make haste slowly in embarking upon any extensive schemes of clearing and re-planning congested areas except those which are a source of real danger to health.

Courts and alleys are familiar words, but in what sense are they used in this Act? A building and premises such as Hampton Court, even if it were unfit for human habitation, could scarcely be included within the term. Nor could we imagine that it includes courts of justice. The words must have a more restricted meaning. Courts or alleys are the words used, and they are in a collocation—houses, courts, and alleys. The latter must, therefore, be of the same character as houses, on the judge-made doctrine of *ejusdem generis*. The dictionary meanings of court and alley include many things other than houses, e.g., court includes a palace, a hall where justice is administered and the tribunal itself, and all the surroundings of a sovereign in his regal state, etc., so that we are forced to adopt a restricted meaning of the word to mean a short arm of a street enclosed on one or more sides by houses and buildings. And an alley means a narrow passage with houses therein.

Suppose that a medical officer of health does represent that courts or alleys are unfit for human habitation. They can be made the subject of a representation and be acquired and replanned by an improvement scheme, but in practical politics these courts and alleys in towns are little bits of places as a rule whereof replanning is a very minor operation. They can only be replanned on a very limited scale determined largely by the surroundings of the cleared area. But when we come to (*b*) we reach a bigger scale of operations.

Acquiring houses or groups of hou under either (*a*) or (*b*) follows the sa procedure, and since the Acquisition Land (Assessment of Compensation) A 1919, the process of purchase is mı simpler and much less expensive th under the Act of 1890.

Replanning an area depends largely its extent. It is possible to plan area of 100 acres much better th replanning an area of one acre sı rounded by streets and buildings which streets in the area would have be adapted.

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# The Shortcomings of the L.C.C. By-laws

"THE Shortcomings of the London County Council By-laws and the Difficulties of Enforcing them in Restricted Areas" was the subject of a paper read recently before a meeting of the Associate Members of the Institution of Municipal and County Engineers by Mr. C. A. Austin, of the Holborn Borough Surveyor's Department.

Mr. Austin confined himself to those by-laws dealing with house drainage, and the special difficulties met with in enforcing them in the Central London boroughs, stating that his views were based upon many conversations and arguments between the administrators of the by-laws and those who were forced to conform to them. The by-laws were distinctly out of date, the most important being over twenty years old, since when not only had sanitary fittings vastly improved, but, what was more important, public opinion was better educated, and the time for a revision had arrived. To add to this, the by-laws had been tested in administration, which had brought to light defects in drafting and clauses which could be evaded. It is evident that the framers of the by-laws had a certain type of building only in their eye—that of the old-fashioned dwelling-house, with its front area, and that their knowledge was limited, as was shown, for example, by the many omissions of urinals.

The author's experience in Holborn had shown him that the by-laws had to be twisted to meet certain cases, and that, had full consideration been given to the need of Central London, stall-board and skylight ventilation to basement w.c.'s and the use of other than lead soil pipes inside a building would not always have been forbidden.

Taking the by-laws seriatim amongst other suggestions the author proposed no alteration to that which dealt with the notice to the sanitary authority, but would add a clause to the later by-laws, No. 1,451, 1911, on the same subject, making the person giving notice responsible for all the work contained in the notice and drawings, although part of the work may be executed by somebody else.

The author asked for a definition of a gully, when referring to No. 330, Drainage By-laws No. 3, and maintained that the gully mentioned in the by-laws means an open trap with a grating in the open air, not a sealed gully indoors, nor a sealed gully outside. The words "where practicable" should be inserted after "open air," as the only open-air position for a gully where the site is entirely covered by buildings is on the roof. There being some doubt as to what constitutes an air-tight cover, the words "to the satisfaction of the local authority" should be included in By-law No. 6. By-law No. 10 should be made applicable to baths in addition to lavatories and sinks, and also that here again the insertion "wherever practicable" should be made after "external wall" in this by-law. In connection with this by-law the author mentioned a case where a bath had been put in an outhouse, the waste water running into the garden to soak away. The local authority required the owner to run a waste pipe from the bath to a gully, although "bath" is not mentioned in the by-laws.

Dealing with By-law No. 11, it was suggested that drawn lead, with proper wiped joints, should only be used for a soil pipe where it passed through a room used for human habitation, or for the storage of food. By-law No. 17 should apply to urinals, and that ventilation of the trap in the case of a top w.c. of a stack was not necessary when the w.c. was not more than 12 in. from the soil vent-pipe. Alterations and additions were suggested to the by-laws made under the Public Health (London) Act, 1891, section 39, deleting water-closets from By-law No. 1 and of the words "in the case of a w.c., one of its sides at least shall be an external wall," thereby permitting of a skylight or lantern instead of a window.

Reference was made to unnecessary clauses dealing with water-closets below the surface of the ground, and the obscurity of their meaning. The subject of the ventilation of a range of water-closets or urinals received much attention from the author, certain stipulations being very well left out, while others could with benefit be added. No. 3, dealing with the capacity of flushing cisterns was, so the author said, vague, and suggested that the capacity should be stated, both for w.c.s and a set of urinals. He also suggested the addition of a clause prohibiting washout or trough closets, and the addition of a new by-law, forbidding anyone making alteration or additions upsetting the existing sanitary arrangements. In support of this addition he instanced the case of a w.c. in a vault opening into an area, or with stall-board ventilation, when it was very difficult to prevent anyone subsequently covering the area with pavement lights and fixing a shop-front with no stall-board.

In conclusion the author moved "Th this meeting of Associate Members of t Metropolitan District do request t Council of the Institution to approa the London County Council and to dra the attention of that body to the fa that the drainage by-laws made und the Metropolis Management Acts ar the Public Health (London) Act, urgent require to be amended on the lin laid down in the accompanying sch dule."

Mr. Frederick White, L.R.I.B.A., ma out a strong point against the exclusi use of lead soil-pipes for internal work habitable houses, and stated one ca where he had fixed a cast-iron soil-pi in a kitchen. The Marylebone Borou Council took the case to court, but t magistrate dismissed the case. Later t Borough Council applied for a convictio as a by-law had been contravened; the magistrate fined Mr. White ten sh lings and the cast-iron soil-pipe st remains in the kitchen. Dealing wi alterations to existing buildings, M White, as a member of a Public Heal Committee, always used his discretio when plans were submitted for alter tions, maintaining that in a close built-in district it was sometimes impo sible to alter existing buildings to mal them comply with by-laws intended f new buildings. If the alterations show an improvement on the existing state affairs, he was willing to propose the approval.

With regard to the resolution, M White considered that before the san was sent to the Council of the Institutio they should obtain the support of t twenty-eight Metropolitan Boroughs.

Mr. Harvey R. Sayer said, in supportir the Resolution, that at a meeting of t R.I.B.A., held on December 18, whe Mr. A. N. C. Shelley (of the Ministry Health) read a paper on "The Law Building Outside London," Mr. A. Alba H. Scott proposed, among other thing that "All by-laws must be revised ever ten years," and he gathered that M Austin held practically the same vie with regard to the L.C.C. draina by-laws. He did not agree with t writer's suggestion of the use of t words "wherever practicable" in ne by-laws. The use of these words woul tend to argument as to when the by-la was practicable or not, while it was t thought required in solving what appe at first sight to be unsolvable problem by which any advancement can be mad in the science of sanitation.

# Reinforced Concrete Calculations for Beginners. IX

## By Professor HENRY ADAMS, M.Inst.C.E.

*(Concluded from February 21, page 355.)*

HE next step is to determine the points for bending up and down the longitudinal reinforcement. 21 shows section through the slab cross-beams. The bars are bent up the cross-beams for one-quarter span ach side to meet the negative bend- moments. No shear members are ired in the slab, but contraction rein- ment will be required to localize any ible shrinking. This consists of ¼ in. 12 in. centre to centre at right angles ne longitudinal reinforcement. Fig. ows the longitudinal section through ross-beam and transverse section ugh main beam. In one direction the lle bar will be bent up to cross over beam, and in the other direction wo outer bars will be bent up, so as ake the full resistance of three bars nst the negative bending moment. bent up bars after passing over the beams have the ends hooked at quarter span beyond. Where the lle bar is bent up the other two will through, and where the two bars are up the middle one will run through, bars having the ends hooked at three-sixteenths of the span beyond the centre of main beam.

The main beams being doubly reinforced the bars will all run through both top and bottom, as shown in Fig. 23. Where joints are necessary in the length they should preferably be welded owing to the difficulty of finding any other convenient method where the rods are so numerous. A plain butt joint may under certain circumstances be used if an additional joint rod be put in not less than forty diameters long each way from the joint, and of the same section as the rod to be covered. This is what is known as "grip length," meaning that the grip of the concrete at that length is equal to the tensile strength of the steel of the given section. If the joint is outside the middle third of the span half the above length will be sufficient, as the stress is reduced. For the shear members of the cross-beams, the load is 22,336 lb., therefore, maximum shear equals 11,168 lb., and dividing by 10,000, the allowable shear stress on steel, $\frac{11,168}{10,000} = 1{\cdot}1168$ sq. in. total sectional area required each side of the centre. Assume eight points for stirrups, then $\frac{1{\cdot}1168}{8} = {\cdot}14$ sq. in.; assume two stirrups at each, i.e., four rods, then $\frac{{\cdot}14}{4} = {\cdot}035$ sq. in. sectional area. On reference to a table this is found to be given by a rod $\frac{7}{32}$ in. diameter, but either $\frac{3}{16}$ in. or ¼ in. may be used. Working from a parabola as previously described the shear stirrups will be placed as shown on Fig. 22, being attached to the outer rods.

For the shear members of the main beams the load is $\frac{2,932,320 \times 10}{25 \times 12} =$ 97,744 lb., therefore, the maximum shear $= \frac{97,744}{2} = 48,872$ lb., and dividing by 10,000 allowable stress, $\frac{48,872}{10,000} = 4{\cdot}8872$ sq. in. total sectional area required each side of the centre. Assume ten points for the stirrups, then $\frac{4{\cdot}8872}{10} = {\cdot}49$ sq. in.; assume four stirrups in each set, i.e., eight rods, then $\frac{{\cdot}49}{8} = {\cdot}06125$ sq. in. sectional area. On reference to a table this is found to be given by a rod $\frac{9}{32}$ in. diameter, but either ¼ in. or $\frac{5}{16}$ in. may be used.

For the pillars we have the load from the main beams 97,744 lb. plus the load from one pair of cross-beams 22,336 lb. = 120,080 lb., and we may assume a load equal to half this coming from the upper floor or roof, making a total of, say, 180,000 lb. Assuming the pillars 12 ft. high, allowing 600 lb. sq. in. on the concrete, and 1 per cent. reinforcement, we shall have a sectional area of $\frac{180,000}{600}$ = 300 sq. in., or, say, 17½ in. by 17½ in., and a reinforcement of 3 sq. in., or, say, four 1 in. diameter rods.

Checking this by another rule where

$$A_c = \frac{W}{570} = \frac{180,000}{570} = 315{\cdot}8,$$

say, 316, and $\sqrt{316} = 17\frac{3}{4}$ in. side of square pillar. The diameter of the laterals or horizontal binding of the reinforcement rods, must not be less than $\frac{3}{16}$ in., with a pitch not greater than $\frac{6}{10}$ of the effective diameter of the pillar, i.e., measured outside the vertical rods. Allowing for 18 in. pillar with 1½ in. cover the effective diameter will then be $18 - 2 \times 1\frac{1}{2} = 15$ in., and the pitch of laterals $15 \times \frac{6}{10} = 9$ in. At the ends for a length of one-and-a-half times the effective diameter, $15 \times 1\frac{1}{2} = 22\frac{1}{2}$ in., the pitch must be reduced to half the amount, or 4½ in. The details of this pillar are added to Fig. 23.

The pillar for the upper floor with a load of 60,040 lb. will have a sectional area of $\frac{60,040}{570} = 105$ sq. in., or $\sqrt{105} = 10\frac{1}{4}$ in., say, 10½ in. square, with a reinforcement of four ⅝ in. rods. The plan of the beams and pillars is shown in Fig. 24.

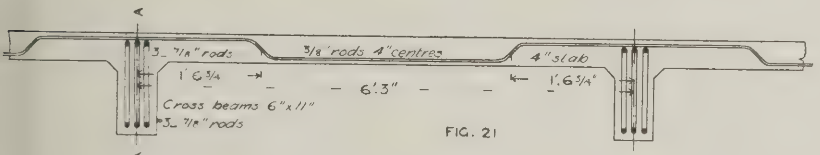
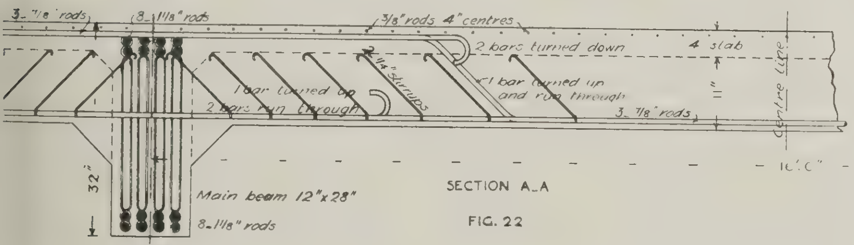


FIG. 21



SECTION A_A

FIG. 22

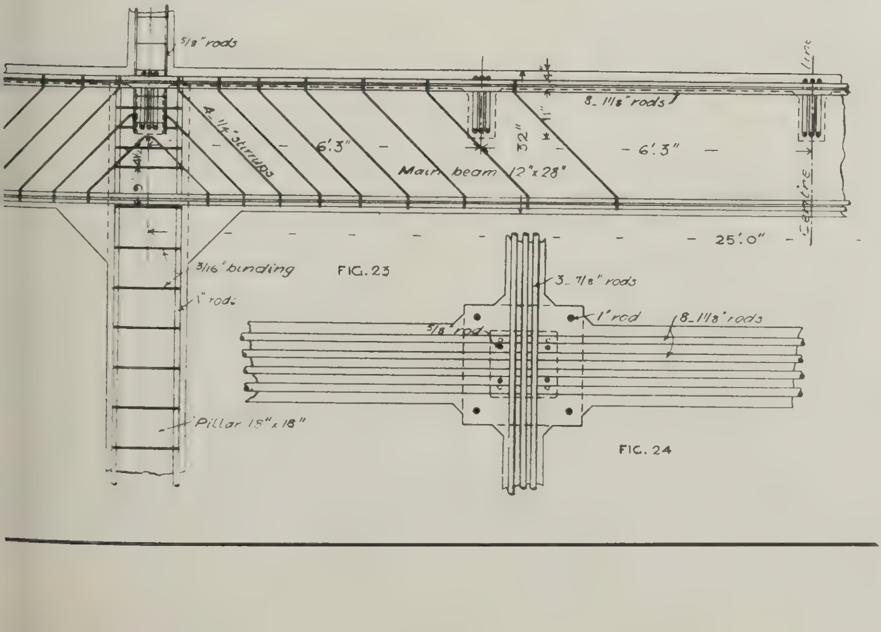


FIG. 23

FIG. 24

# Enquiries Answered

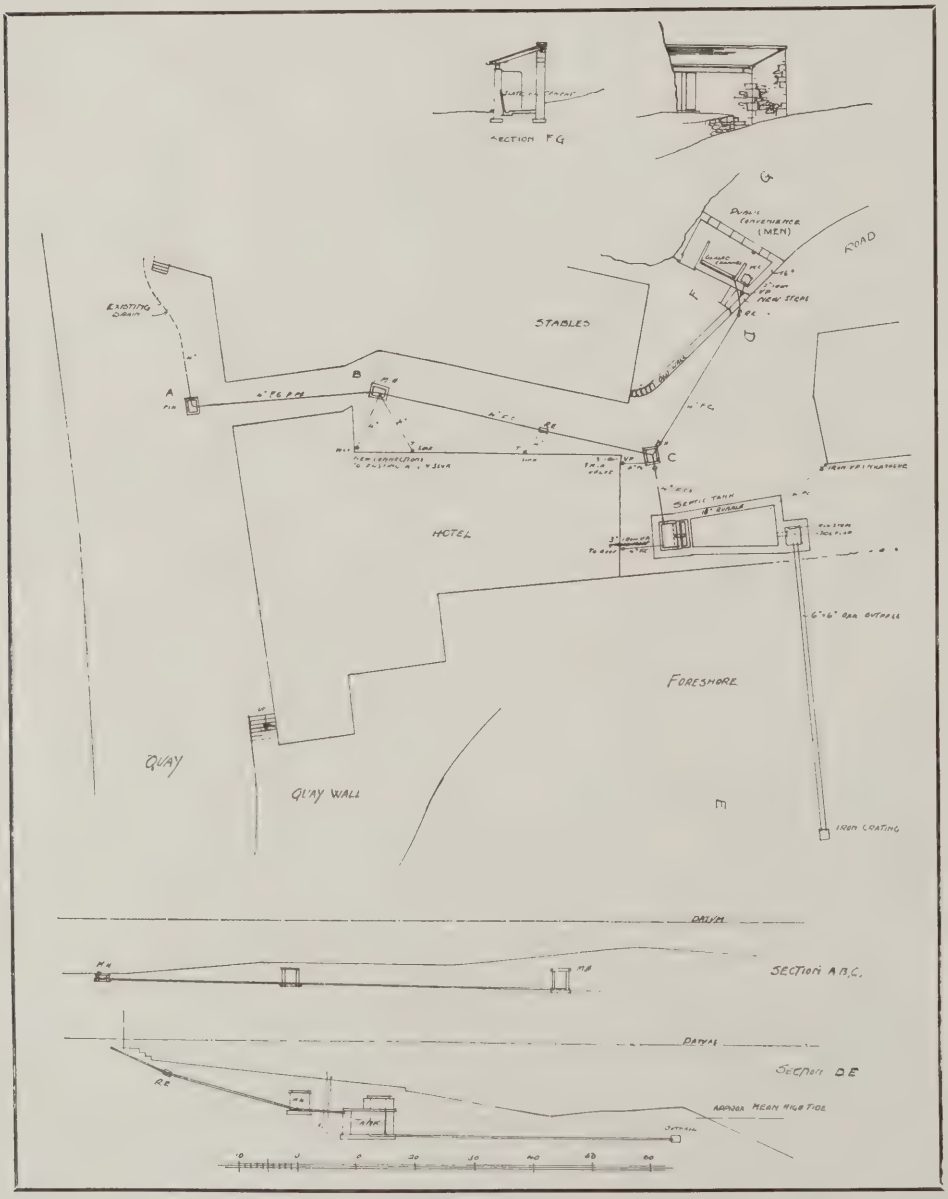
*The Editors cordially invite enquiries from readers who require information on architectural, constructional, or legal matter
Answers to enquiries are in all cases the work of experts ; and while every care is taken to make the replies thoroughly reliabl
the Editors cannot hold themselves responsible for any inaccuracies that may inadvertently occur. Correspondents whos
difficulties involve possible legal proceedings are strongly urged to consult their solicitors before taking action on any advic
that may be given. Examination questions cannot be answered. It must be understood that, as a rule, both question an
answer will be published in these columns. The name and address of the querist must always be given, not necessarily fo
publication. Correspondents are requested to be as brief as possible, and to write on one side of the paper only.*

### *Sewage Disposal from Hotel.*

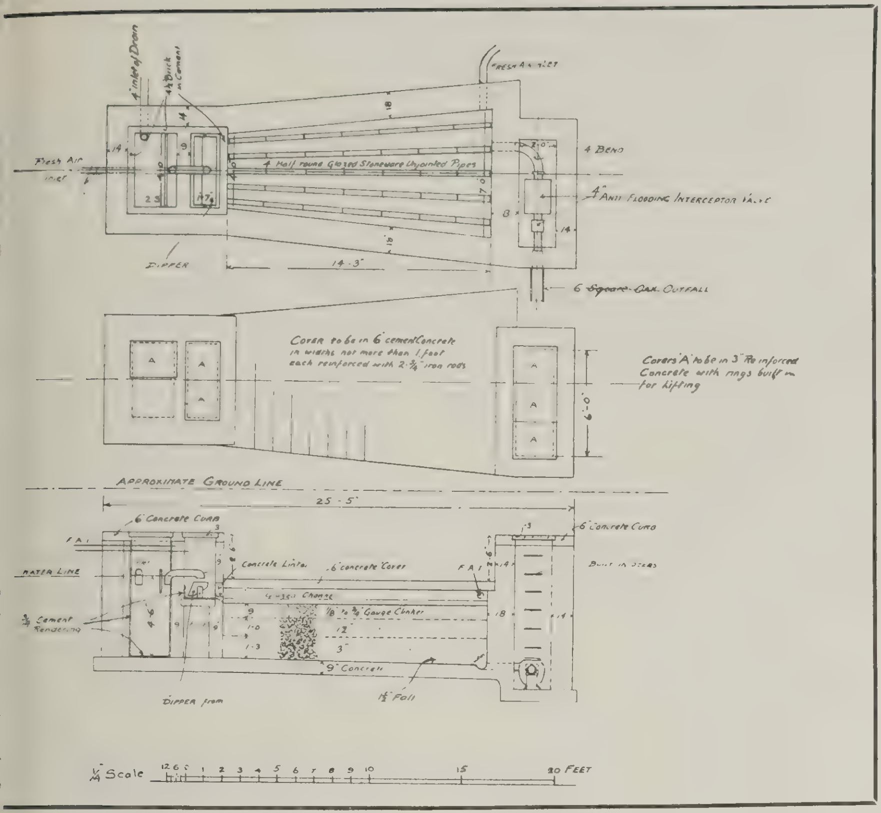
"Architects" write : "The accompanying drawings show a small septic tank-disposal arrangement, which is not acting satisfactorily. The tank arrangement is almost exactly on the lines of a type drawing, sent us by the Ministry of Health in connection with the housing scheme, with the exception of the filter bed, which is covered in. This was inevitable as it had to be close to buildings. From an article of J. E. Tuke in your issue for May 18, 1921, it would appear that this is not likely to upset the working, ventilation being provided by out and inlet pipes. There are four closets, two sinks, and a small public urinal, and now after eight months the whole system is choked with scum or sludge. The anaerobic chamber has a solid scum perhaps 2 ft. deep, so solid that a spade cannot readily be pushed into it, and bearing on its surface a plentiful growth of lanky bleached fungus. The outlet is through an anti-flooding valve to the foreshore, where the effluent finds its way under the 10 ft. or 12 ft. of shingle. The foreshore is covered with a depth of anything over 10 ft. or 12 ft. of boulders and shingle always travelling eastward. It is almost impossible to arrange for any ordinary form of outfall. It is possible, however, that at the strongest spring tides, especially if accompanied by a gale, a little salt water may find its way into the filter chamber through the masonry walls. This would only happen perhaps once or twice a year, and would not affect the anaerobic chamber. No nuisance has
arisen from the effluent, but the w
arrangement appears to be clogged
We have never before come on a cas
so much or so solid a floating scum (
so deep that it is passing undigested
the dipper and filter chamber). Can
suggest a remedy or point out any de
in the arrangements ? The systen
being used in connection with an hot

—In the writer's opinion satisfac
results are not likely to be obtained w
a "stock pattern" sewage disposal
stallation is put down irrespective
local conditions. Each scheme shoul
designed with regard to the special
cumstances of the case. No indicati
given of the quantity of sewage t
dealt with; it is probably very str
and it seems likely that the septic
is too small. The excessive scun
probably due to the high tempera
maintained in the tank, the absenc
effective ventilation, and the ferme
tion of the beer-washings. Arrangem
should be made for removing som
the sludge at intervals, and also
greater part of the scum if it conti
to increase. A scum board shoul
fixed across the angle of the septic
in front of the inlet and extending 1
below the water level. The outlet
should be removed to the corner o
tank furthest from the inlet, and sh
be shielded by a scum board across
angle extending to a depth of 21 i
24 in. The tipper chamber is prob
in a filthy state, but little can be do
it beyond periodical cleaning. The
effluent should be distributed evenly
the top of the filter. In this case
probably not distributed at all in
ordinary sense of the word, but is ap
in mass at a few points, which
areas must inevitably become clo
The one-eighth gauge clinker is too
for such a tank effluent, and it shoul
removed, leaving nothing less than
in the bed. Agricultural pipe u
drains should be laid on the floor o
filter to facilitate the egress of
effluent. If the bed is remade with
drains it will be desirable to increas
depth of $1\frac{1}{2}$ in. gauge and reduce
depth of the 3 in. gauge material by,
9 in., if a good effluent is required.
pipe from the surface of the bed sh
connect with the under-drains. H
regard to the mean level of high wa
is obvious that the outfall is blocke
several hours each day during whic
filter is surcharged with sewage una
flow away. This would certainly le
complete clogging of the whole bed
therefore some provision for stora
required. The ventilating pipes s
be increased, at least to 4 in. dian
and means should be provided fo
ample current of fresh air to travel
the F.A.I., across the top of the
through the tipper chamber and
part of the tank, to the upcast shaft

HENRY ADA



PLANS OF A HOTEL SEWAGE DISPOSAL SCHEME.
*(See enquiry by "Architects.")*



DETAIL OF SEPTIC TANK. (*See enquiry by "Architects."*)

*Specification for Thatch.*

nquirer" writes : "I am building a in the country for a client who a thatched roof, and I propose the ing : Good reed or wheaten straw 15 in. thick laid on 2 × 1 battens on afters, 2 ft. centres, by an experi- thatcher. Eaves minimum pro- 2 ft., and protected from birds re netting. Pitch of roof 50 deg. ave not had any previous experience tching I should be glad to know is in accordance with modern prac- What is the best method of treat- e verges to gables and round dor- and chimney stacks to keep out in, and what special underlining al is required? As unless some vious material, such as a good inous felt, is used, I see no pro- from wet getting through if a patch or other defect develops in hatch, or down the sides of the ey stacks, which, I take it, should d flashed in the ordinary way and the thatch. Is there any known expensive method of treating the surface of the thatch as a protec- gainst fire ?"

w thatch and reed thatch are of y differing value as a roof covering, re laid by different methods. The may be taken as having a "life" rhaps, twenty years, which may be led by a new top dressing and ng" or ridge after that interval. atter, which is driven home after so that only the butt ends are d forming the surface of the roof, en known to last eighty years with- ore attention than would be entailed ordinary slate or tile roof. If it is led to rely entirely on a descriptive cation, considerable expansion will irable. For straw thatch the follow- suggested :—

thatcher shall provide all materials, laddering, plant, etc. Cover the with good rye or wheaten straw thatch, 15 in. thick, well tied down to 2 × 1 in. battens or sound straight fir or larch poles. The straw to be hand-threshed and unbroken, free from mildew and mould, thoroughly damped and softened before use, and only the best in length and quality drawn and laid. Twine to be best hemp well tarred.

The thatching to have fair verges and hips as required; the valleys shall be formed rounded with extra thickness of straw; the eaves shall project 18 ins. (or 2 ft.) from face of wall and be neatly undercut at a slight angle; the finished thatch shall be raked down until all loose or broken straw is removed; work thatching up and around projecting brick courses of chimney stacks and ramps at ridge; the ridges shall be formed separately with as long a staple as possible and laid on over the ordinary surface of the thatch; put proper wood lacing of clean sound elastic hazel rods made up about 15 in. on face along eaves, verges, hips, and where else shown on drawings, circular over dormer windows, all well and securely pinned in with bent hazel loops driven upwards against slope of roof, ½ in. mesh galvanized rabbit wire to be pegged down round eaves, verges, and roving, as protection against birds; trim all loose ends and leave perfect on completion.

If reed thatch is desired, it is advisable to get quotations from one or two of the few firms who practice this very specialist craft and insert a p.c. sum. Messrs. Farman, of N. Walsham, and Mr. Oldfield, of Whittlesey, nr. Peterboro', are two reliable reed thatchers.

With regard to other queries, verges are treated quite differently in different districts. I prefer the treatment in which the straw is laid off diagonally and cut down, rather like the eaves treatment. Dormers and such-like projecting features should be covered by gentle-swelling forms—the characteristic beauty of thatch, which lends itself to easy transitions.

No underlinings are necessary or desirable, and it is not usual to provide lead flashings in any of the positions where these would ordinarily be used. A heavy oversailing of brick or tile should be formed projecting at least 3 in. above the finished thatch level. Flashings may, however, be used as suggested, in which case they should lie on the thatch and be covered by a super-coat, somewhat similar to the ridging.

The Timber Fireproofing Co., of Market Bosworth, will treat reed before laying in such a manner as to make it virtually fireproof for a time, but it apparently becomes rather brittle as a result.

For further information as to thatching refer to "Specification," No. 9, pp. 379 *et seq.*, which also describes the Midland method of thatching upon a layer of fibrous sods or "scraws." G.

## Noises in Steam Heat Pipes

"Eliminating noise in heating systems" is the subject of an article in "Power Plant Engineering" (Cleveland), which has reference specifically to the clicking noises generally associated with steam heating plants. The writer describes several cases in which the noises were eliminated by the judicious use of traps to get rid of accumulations of water and by changed piping. He says :—

"In the main office of a manufacturing plant it was necessary to instal more radiators. After steam had been turned into the system there was more or less noise in some of the return pipes. On investigation it was found that when more radiation was installed in some of the rooms the fitters had connected the half-inch outlet from one of the new radiators to the half-inch outlet of one of the old radiators. This made two half-inch return pipes discharge into one, and I was under the impression that this was the cause of the noise, as it was my idea that the main pipe was continuously filled with water, and when one of the radiator traps discharged and a little steam leaked by it would cause the clicking noise.

"As a remedy, the half-inch pipes between the outlets of the two radiators were replaced by one-inch pipe. After this change there was no more noise in any of the return pipes.

"As it would have taken much time and expense to straighten the feed line the trouble was overcome by replacing the elbow with a tee. Then a trap was placed which collected any condensate in the pipe. This condensate was returned to the boiler by a tilting trap.

"The writer has a pressure regulator in use reducing the pressure to a heating system. In many plants where there are pressure regulators in use for air or steam they have much trouble with them even if they are of the correct size and of a reliable make. In most instances this is due to carelessness in taking care of the regulator. A regulator should receive proper inspection frequently the same as any other equipment in the plant.

"Many users fail to instal a strainer or sediment trap ahead or in the initial pressure line next to the regulator. This will prevent much of the trouble experienced with regulators caused by dirt, scale, etc., finding its way into the regulator, causing some part to bind, thus preventing the regulator from working properly or causing it to leak."

# The Week's News

### *Music Pavilion for Tunbridge Wells.*

Tunbridge Wells Corporation is to build a £30,000 music pavilion.

### *More Houses for Banbury.*

At Banbury a model lodging-house and forty cottages are to be built.

### *Proposed Baths for Bloxwich.*

Walsall Town Council are considering a proposal to erect slipper baths at Bloxwich at a cost of £1,760.

### *Herne Bay Improvements.*

Herne Bay propose to construct a new bandstand, promenade, shelters, and bathing pool at a cost of £27,000.

### *A Builder's Estate.*

Councillor David Morgan, of Glandyfi, Tredegar, Mon., builder, who left £11,808, bequeathed over £5,000 to charity.

### *Slum Clearance at Durham.*

Durham City is to spend £20,000 in "abolishing slums" and improving housing.

### *New Garden Suburb for Yorkshire.*

The Richmond (Yorks) Garden Suburb, Ltd., are to purchase 12 acres of land upon which to form a suburb estate.

### *New Baths for Newcastle.*

New baths are to be erected at Heaton and Walker by the Newcastle-upon-Tyne Corporation.

### *Housing at Clacton-on-Sea.*

Clacton-on-Sea Urban District Council are to build sixteen houses, each containing six rooms, with bathroom, to be let at 10s. 6d. per week.

### *New Dwellings for London.*

The L.C.C.'s scheme for the clearance of the Ware Street area of Hoxton involves the provision of new dwellings to accommodate 2,648 working people.

### *New Institute for Newcastle.*

The Horden Brotherhood has acquired a site at Newcastle-on-Tyne for the erection of an institute and hall, which it is estimated will cost about £2,000.

### *Ballymena New Town Hall.*

At a meeting of the Ballymena Urban District Council it was stated that the proposed new town hall would cost something like £32,000.

### *Sunderland Building Trade Association.*

Mr. J. Duncan White has been chosen as president of the Sunderland and District Building Trade Association for the ensuing year.

### *Housing at Dorking.*

In view of the possible early passing of the Government's Housing Bill, the Urban Council have decided at once to prepare plans for the erection of working-class cottages.

### *Whitby Memorial Cottage Hospital.*

The architect for the Whitby Memorial Cottage Hospital is Mr. A. E. Young. An appeal has been made for £15,000. The present funds reach a total of £11,543.

### *St. George's Cathedral.*

The Roman Catholic Bishop of Southwark has made an appeal for £5,000 to renovate St. George's Cathedral in commemoration of the diamond jubilee of its opening. The anniversary is in July.

### *£2,000,000 for Slum Clearance.*

Glasgow Corporation are applying to the Scottish Board of Health for powers to borrow £2,000,000 for slum clearing schemes. Already £4,000,000 has been expended on housing proposals.

### *New Exhibition Hall for Manchester.*

A scheme has been prepared by a number of private business men in Manchester and Liverpool for building a permanent exhibition hall in Manchester. The site selected is that of the White City at Old Trafford.

### *Housing at Ashington.*

Plans of the Lynemouth housing scheme submitted by the Ashington Coal Company have been approved by the Morpeth Rural District Council. Sixty-nine three-roomed houses and twelve six-roomed houses are to be erected.

### *Temple Bar.*

Efforts are being made to restore Wren's Temple Bar to the nation. At present it stands on the Essex estate of Sir Hedworth Meux, and it is proposed that the new site shall be the Embankment.

### *New "Underground" Stations.*

The Underground Company have placed a contract for £21,000 with Messrs. James Carmichael for the construction of two station buildings on the new Edgware and Hampstead Extension Line at Brent and Hendon.

### *Exhibition of Mr. Raffles Davison's Drawings in New York.*

The largest one-man show of its kind is now being held in New York. It consists of over a thousand drawings and sketches by T. Raffles Davison, hon. A.R.I.B.A., which have been created during the last forty years of his professional experience.

### *A Longer Embankment.*

A £160,000 scheme to extend the Westminster Embankment along Millbank is being considered by the L.C.C. The extension will link up the present Embankment from Lambeth Bridge to that part of the Thames Wall which begins at Grosvenor Road.

### *Blyth Water Supply.*

In his annual report to the Blyth Town Council Mr. L. Leeper, the borough engineer, strongly criticizes the public water service. The necessity of a large service reservoir within the borough, he says, is becoming more and more urgent. A recommendation to build a storage tank at a cost of £15,000 has since been adopted by the Council.

### *2,757 Municipal Houses in Leeds.*

Since the Corporation housing schemes were commenced on the different estates in 1919, no fewer than 2,757 dwellings have been erected and are occupied, and it is confidently expected that a further 3,130 houses, a number of which are now being built, will be completed by the end of the year.

### *London Site for Sale.*

A portion of the Duchy of Cornwall estates, about one acre in extent, is to be let by auction on a building lease. The property is situated on the Prince's Meadow estate, between Waterloo Bridge and Waterloo Station, at the corne Waterloo Road and Stamford Str next to St. John's Church.

### *An Ancient London Church.*

The 800th anniversary of the found of the Church of St. Bartholomew Great, London, was marked by larg attended celebrations. It stands c under the Hospital in Smithfield, honour its founder, Rahere. The Bis of London has dedicated a lectern commemorate the safe-standing of church through the air-raids.

### *Durham's Insanitary Areas.*

The Ministry of Health have agr to contribute towards an approved sche for the reconstruction of insanitary ar in the city. The Council will receive haps £15,000 to £20,000 on loan for si years from the Government, and scheme could be carried out at the of a 1½d. rate. A crescent of houses gardens will be built from Court Lan Hallgarth Street in the Elvet district.

### *Sheffield War Memorial.*

The Lord Mayor of Sheffield has iss a public appeal for funds to erect obelisk as a war memorial for the It was originally intended to buil memorial hall, but owing to the finan stringency this proposal has been ab doned temporarily in favour of obelisk, which is to cost about £5,00 £6,000, and to be 80 ft. in height. ready £1,461 has been contributed.

### *New Pictures for the National Gall*

Four new pictures have just been h in the National Gallery. Two of th a portrait of Lady Emilia Kerr by R ney and a portrait of a Gentleman by Anglo-Dutch painter of the school Mierevelt, have been bequeathed by late Mr. John G. Griffiths, C.V.O. other pictures are an "Italian Gentlem by Richard Wilson, which the trus have purchased, and a flower-piece Fantin-Latour bequeathed by the Mrs. M. J. Yates.

### *L.C.C.'s Claim against the Governm*

It is reported that the claim of London County Council against Government in respect of interfere with the building of the County Hall its subsequent occupation during war amounts in all to £1,473,546, incl ing £1,230,374 in respect of the additi cost of the County Hall by reason of stoppage of the building work. An timation has been received by the Cou from his Majesty's Office of Works application is being made to the Compensation Court with a view having the compensation payable to Council determined by that Court.

### *The late Mr. R. D. Oliver.*

Mr. Robert Dudley Oliver, the archi who has just died, was best known the restoration of Hoghton Tower, Preston, for Sir James de Hoghton, Another piece of judicious restora was some work for Colonel Harding Madingley Hall, near Cambridge, w King Edward VII lived for a time an undergraduate at the univers Throughout life Mr. Oliver devoted m of his time to painting, and in his ea years work of his was shown at the R Academy exhibitions in several seaso

# Correspondence

## tutory Registration of Architects

*o the Editors of* THE ARCHITECTS' JOURNAL.

RS,—I am directed by the Council of Royal Institute of British Architects form you of the steps that have been 1 by them since the beginning of the in pursuance of the policy of Statu- Registration for the architectural ssion.

Bill was drafted and submitted to a ral meeting of the Royal Institute at end of January. The meeting was fully attended, and it was decided first step, to consult the other pro- nal societies and interests affected to endeavour to obtain a general con- is of professional opinion in favour e Bill.

pies of the Bill have, accordingly, sent to all the architectural societies erned and to the representatives of tached architects, and they have been ed to consider the Bill in principle in detail and to inform me of all ts in which they think it might be oved or amended.

1 the receipt of this information the stration Committee of the Royal tute will endeavour to embody the estions in the draft as far as may be ticable, and a meeting of all interested es will be arranged at which the Bill, mended, will be examined and dis- d.

is hoped that by this means the imity which is desired will be ob- d in support of the Bill.

IAN MACALISTER.
Secretary of the R.I.B.A.

## As Others See Us

*o the Editors of* THE ARCHITECTS' JOURNAL.

RS,—To see ourselves as others see a view which is always interesting, ever its æsthetic qualities are. The majority of the "others," however, t see us at all, so on the rare occasions 1 we happen to catch the eye of the in the street we blush nervously and greatly flattered.

ith these feelings I read the report r. Gilbert Frankau's lecture at the , and having partly recovered from awe caused by the novelty of the I venture to scribble a little humble nent.

. Frankau has the layman's objec- to technical parlance; but inquiry convince him of its necessity, though ould be interesting to know where Frankau got the information that bellishment" was the technical for ament"; the latter is the term in- bly used by architects. Mr. kau's suggestion that architectural seology should be translated into Anglo-Saxon is practically impos- because of the limitations of that st, but inexpressive, language.

resent-day architecture does not," Frankau said, "reflect the character e public." But I am afraid present- architecture and the daily news- rs reflect it only too well; and the reflection is too black and sordid to be desirable. The only beautiful present-day architecture reflects character and ideals quite at variance with those of the public.

Mr. Frankau tells us that the man in the street "is not uneducated . . . he both knows and appreciates what is good." Let Mr. Frankau have half an hour's conversation with a typical man in the street and find out the things which the man thinks are good and appreciates. He will then agree, that compared with our man in the street, the average African savage is a marvel of culture and refinement.

It is certainly true that modern houses are "full of conveniences, but empty of comforts," and that the present tendency is to save the servant and "strafe" the mistress, this, however, is a result of the public labour-saving mania.

Mr. Frankau sounds a timely word of warning when he tells us to "let the profession cling to individualism and fight for freedom from control." What little art we get out of modern architecture will soon be stifled if we regulate it on the lines of a Government department.

Mr. Frankau tells us we are "far too obsessed with lofty ideas of art." Little does he know us—lofty ideas of art are rare amongst architects. He also informs us that architecture is not an art but a craft; but if he reflects on what he means by craft I think he will find the definition more applicable to "art." "Architects," he further tells us, "should come off their art pedestal." Very flattering, but I am afraid very few architects have mounted such a pedestal. Mr. Frankau then asks us to think and feel as the people think and feel, and to give them what they want. Unfortunately, this is just what most architects are doing; and to give the people what they ask for means ugliness, not art.

Mr. Frankau has some strange delusions as to architects and their work, but touching on the "silence" of the profession he spoke words of distilled wisdom. "Why don't they do something about it; write, speak, agitate, anything rather than suffer in silence?" For these suggestions Mr. Frankau deserves paradise.

EDGAR LUCAS.

## Acoustics of Large Concert Rooms: Hints to Architects

*To the Editors of* THE ARCHITECTS' JOURNAL.

SIRS,—In reply to questions on the above subject may I outline briefly the main facts which have emerged as a result of acoustic research upon this class of auditory during recent years. The problem of reverberation where music is concerned is different to that for the speaking voice. In the case of the speaking voice as short a reverberation as is consistent with loudness is desirable; where music is concerned a reverberation of at least two seconds is necessary in order to secure adequate tone for strings and voices. Now the absorption necessary to ensure two seconds, reverberation is generally provided for by the relatively large audiences common to concert rooms and opera houses. Consider a concert room seating 2,000. A rough preliminary calculation will show that such an audience will provide $2{,}000 \times 4{\cdot}7 = 9{,}400$ units of absorption. In order to secure a reverberation of two seconds this involves a minimum air volume of 376,000 cu. ft. But other factors such as stage scenery, carpets, drapery, will also contribute slightly to the total absorption. This means that for music the figure, 376,000 cu. ft., is on the small side. If, on calculating and adding in all the factors, using Sabine's formula (as recently explained by Mr. G. A. Sutherland in his lectures at University College, published in the architectural Press), it is found that the reverberation is considerably less than two seconds, dissatisfaction in regard both to the tone and loudness of instruments and of voices is sure to result unless a considerable amount of wood panelling is used near the source of sound. The effect of wood panelling is to brighten the tone of instruments by absorbing sound in the lower rather than in the upper register and thereby relatively increasing the power of over-tones. Also, wood surfaces, owing to resonance, increase loudness where they are in contact with or placed very near to a musical instrument. Thus the floor of a platform or orchestra pit having a 6 in. air space below it will reinforce notes of average pitch for instruments in contact with the floor, such as piano, double bass, cello, solo voice. In the case of a platform, if the floor is tightly jointed to the panelling of the platform recess, so as to make one continuous wood area, the reinforcing effect is likely to be greater. The 6 in. air space under the floor can be either continuous or divided into compartments by floor joists; the conditions are fulfilled by 6 in. floor joists laid upon a concrete floor. The reinforcing of double basses and cellos by some such means as this is important. Halls suitable to the speaking voice, owing to their short reverberation, are frequently dull and lifeless for orchestral and choral music and inaudible for cellos, double basses, and the larger organ pipes.

In regard to shape a good acoustic plan for this class of auditory has certainly emerged. This is the fan shape with a portion of the splay to right and left of platform turned over to form a deep proscenium arch. This plan has been developed in America for combined concert and cinema auditories. The splays, both of vertical and horizontal section, form useful reflecting surfaces and should be hard and smooth. They are diminished in their usefulness if they are broken for the insertion of boxes. Up to a level of 8 ft. or 10 ft. above the stage floor they should be unbroken, but doors can be shown in them. The fan shape has developed naturally, as far as acoustics is concerned, from the principle of directing sound with as few reflections as possible from the neighbourhood of the source to the neighbourhood of the audience. For this reason the splays require to be hard reflectors and not soft absorbers. Sound paths vary in efficiency. From a crowded platform, horizontal sound paths are interrupted, and lessened in efficiency, by neighbouring human beings. On the other hand the vertical sound path rising from each instrument rapidly disengages and preserves its intensity. Hence the great importance of the overhead portion of the proscenium splay. Sound reflected from the overhead portion of the splay will penetrate under the galleries at a more efficient angle than will sound reflected from the horizontal plane of the ceiling. The depth of penetration of these proscenium reflections under the gallery should mark the limit of the rear seats on the floor below.

The rear wall of an organ chamber can with advantage be tilted forwards, thereby deflecting sound downwards; the rear wall of an orchestra pit can with advantage be tilted backwards, thereby deflecting sound upwards.

The galleries should be at as great a rake as possible, so that direct sound from the speaker's mouth shall reach each listener at as wide an angle of incidence as possible. Sound traversing human heads at a narrow angle dies away at a considerably greater rate than in proportion to the square of the distance from the source. Hence deep galleries, the rear seats of which are screened from useful reflecting sources and having nothing to rely upon but the direct sound, naturally suffer from insufficient loudness and lack of tone. Conversely, a chief feature in the Greek theatre and Bayreuth theatre types is the efficient rake of the seats and the full advantage taken thereby of the direct sound.

Having directed the bulk of the sound upon the audience, it remains to prevent reflections back from rear walls behind the audience. This can be done by a frieze of acoustic felt, acoustic tiles or plaster. In a modern acoustically designed hall there need be no more than a very small area on the back wall that will prove dangerous and will require to be eliminated.

Where curves are used either on plan or section the length of the radius of the curve must be carefully considered. The arc of a curved ceiling must have a radius *considerably greater* than the height of the hall. The curves of coves must have a radius considerably smaller than the length of any possible sound path in the room. This is in order to prevent concentration of sounds from curved surfaces to focal points which might result in echoes. Echoes are caused not merely by long reflected paths, but also by bringing sound to a focus at the level of seats.

It is important in large concert rooms, as in cinema halls, not to include the expensive seats in the front rows next the platform. Nothing is more annoying than to pay a high price for a seat at the end of a front row and to hear the whole performance astigmatically. A distance of at least 20 ft. or 30 ft. back is required for an equal assembling of sounds from all instruments upon the ear.

Good examples of concert rooms showing acoustic design are as follows: New Orchestra Hall, Boston, Sabine's "Collected Papers," page 60; Hill Memorial Auditorium, University of Michigan, "Brickbuilder," August 1913; Smith Memorial School of Music, Illinois University, "Archit. Forum," November 1921; Eastman Theatre and School of Music, "American Architect," February 28, 1923.

Yours, etc.,

H. BAGENAL.

Architectural Association.

## Coming Events

*Wednesday, March 21.*

R.I.B.A.—"The Public and the Architect." By Lord Sumner. 5 p.m.

Institute of Builders.—"Ancient English Woodwork." By Professor Beresford Pole. R.I.B.A. Galleries. 8 p.m.

Institute of Civil Engineers.—"Electric Train Lighting." By Mr. J. R. W. Grainge. 7 p.m.

*Thursday, March 22.*

Edinburgh A.A.—Annual General Meeting of the Assoc. Section. 8 p.m.

Institute of Structural Engineers.—Presidential Address by E. Feander Etchells, A.M.Inst.C.E. 7.30 p.m.

Grosvenor House.—"Is Architecture the Mother of the Arts?" By Professor W. Rothenstein. 5 p.m.

Architecture Club.—Quarterly Dinner, Grosvenor House. 7.15 p.m.

*Friday, March 23.*

R.T.C.A.C.S., Glasgow. — Business Meeting.

Art Workers' Guild.—Ladies' Night. "Design and Treatment of Street Furniture." By Professor Adshead. 8 p.m.

Birmingham Municipal Technical School. "Paints and Varnishes in the World's Work." By Dr. Morrell. 7.15 p.m.

*Saturday, March 24.*

Architecture Club.—Visit to P.L.A. Building.

Institute of Civil Engineers.—Visit to King George V Dock, Port of London Authority.

*Monday, March 26.*

A.A.—"As Others See Us." By Maurice E. Webb. Exhibition of Executed Work by Seven Past Students.

*Tuesday, March 27.*

Illuminating Engineering Society.—"Window Design and the Measurement and Predetermination of Daylight Illumination." By P. J. Waldram and J. M. Waldram, B.Sc. 8 p.m.

## Improvement of London

At the annual meeting of the London Society, held at the Royal Academy, Sir Aston Webb, P.R.A., in moving the adoption of the report, referred to the work of the society, which, he said, received many applications for help from various quarters. For example, there was a little place at Chiswick called Strand-on-the-Green, which was threatened with destruction. The society had done its best to assist in preventing this. The society considered that it should take a large view of London as a whole, and that was how it came to be concerned in the matter of Charing Cross bridge and St. Paul's bridge. Lately interest had been centred on St. Paul's bridge, which the society considered was not really a great necessity. Another matter which concerned the Metropolis very much was the possibility of founding a commission of fine arts for London, a consultative commission, composed mainly of experts who would act in an advisory capacity, and to whom any proposal for public improvement could be sent for opinion. The society was very anxious to prepare a plan for the future enlargement of London—an imaginative plan showing not only roads but also where commerce and residences were likely to expand and where open spaces were likely to be required.

## Competition News

*Bridge in Bergen, Norway.*

The replies of the Judging Commi to certain questions raised by the c petitors may be seen at the Departn of Overseas Trade (Room 40), 35 Queen Street, S.W.1.

*Ossett War Memorial Competition*
*Haifa Business Centre Competition*

The R.I.B.A. have issued the foll ing notice: "Members and Licentiate the Royal Institute of British Archit must not take part in the above con titions because the conditions are no accordance with the published regulat of the Royal Institute for Architect Competitions."

## List of Competitions Op

| Date of Delivery | COMPETITION. |
|---|---|
| March 28 | Cenotaph for Ossett. Cost not to e £2,000. Premiums 20 guineas and 10 gui Apply Borough Surveyor, Town Hall, C |
| March 31 | War Memorial in Crow Nest Park, Dews Assessor, Professor C. H. Reilly, O. M.A., F.R.I.B.A. A copy of the cond together with plans of the site ma obtained on application to Mr. H. Dea A.R.I.B.A., Borough Surveyor, Town Dewsbury, on payment of one shilling. |
| April 15 | Buildings for the Polytechnic Inst Reval. Premiums 200,000 marks, 1 marks, 100,000 marks. Apply Office tional du Commerce Exterieur, 22 Av Victor Emmanuel III, Paris. (8e) competition is an International one. |
| June 1 | New Municipal Buildings and Town Cork. Total cost not to exceed £12 Assessor Mr. Lucius O'Calla F.R.I.A.I., A.R.H.A. The successful petitor will be appointed to carry the work. Second and third pren £200 and £100 respectively. Apply William Hegarty, Town Clerk, Cork. competition is limited to architects and practising in Ireland. |
| June 12 | Concert Pavilion, Bournemouth, to seat Estimated cost £100,000. Assessor Edwin Cooper, F.R.I.B.A. Premiums: £200, and £100. Apply Town Clerk, cipal Offices, Bournemouth. Deposit (cheque). |
| June 30 | Bridge over Nygaardsstrommen in Be Apply Department of Overseas (Room 50), 35 Old Queen Street, minster, S.W. 1. |
| No date | The Crown Agents for the Colonies, a on behalf of the Government of the S Settlements, invite competitive design the reinforced concrete work requir connection with the construction of a general post office at Singapore. Tent designs, for which no fees will be paic required in the first instance, from w it is proposed to select a design and sp its adoption in the contract for the struction of the building. The firm w design is so adopted will be subsequ engaged to prepare full detail plans, sp cation, quantities, &c., for an approve Drawings can be seen and further d of the competition obtained from the C Agents for the Colonies, 4 Millbank, minster, S.W.1, quoting Z/Straits S ments 5664. |
| No date | Five shops for the Prestwich Co-oper and Industrial Society. Premiun guineas. Apply General Manager o Society, Warwick Street, Bury New Prestwich, Lancs. |
| No date | Pavilion in Calverley Gardens, Tunb Wells. Assessor Mr. E. Guy Dawber, F. F.R.I.B.A. Premiums £150, £100, and Apply Town Clerk. |

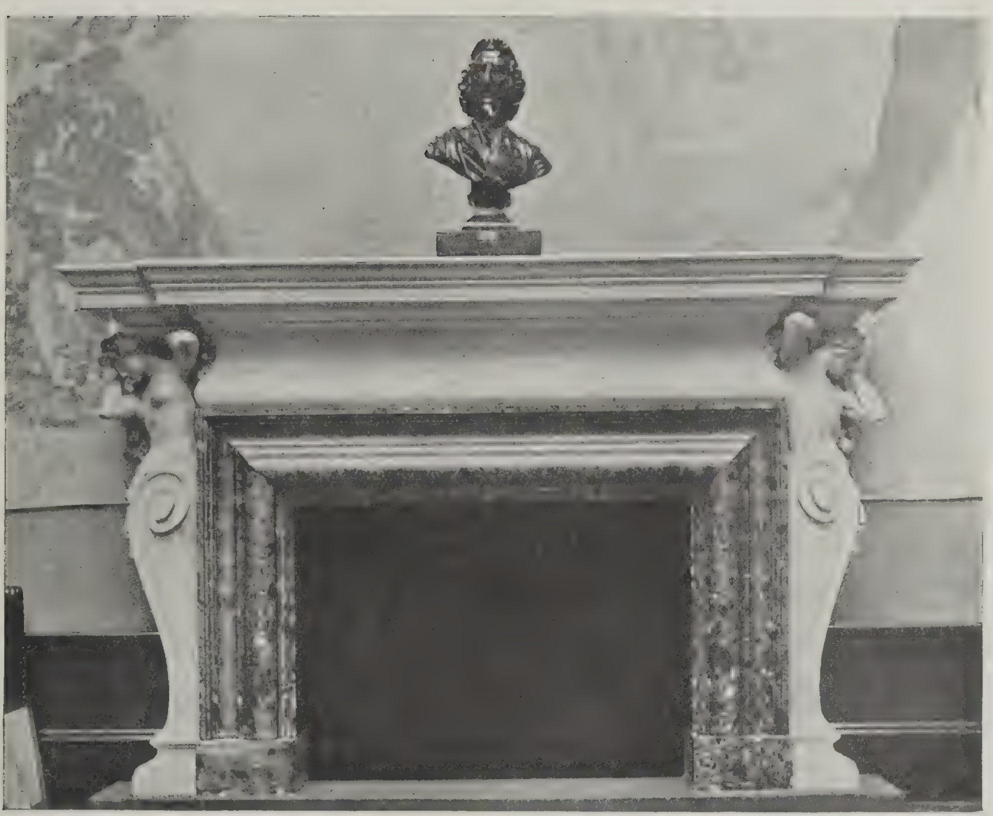
## Our Title Page Illustrati

The rain-water head illustrated on title page, designed by Basil Oli F.R.I.B.A., was executed by Mes Thomas Elsley, Ltd.

sday, March 28, 1923 Vol. LVII. No. 1473

# THE ARCHITECTS' JOURNAL & Architectural Engineer

*With which is incorporated "The Builders' Journal."*



WORKING MODEL FOR A MANTELPIECE AT 1067 FIFTH AVENUE, NEW YORK.

*George A. Crawley, Architect.*
*F. Derwent Wood, R.A., Sculptor.*

27-29 Tothill Street, Westminster, S.W.1.

# Current Architecture. 168.—The Bush Building, London

Helmle and Corbett, Architects

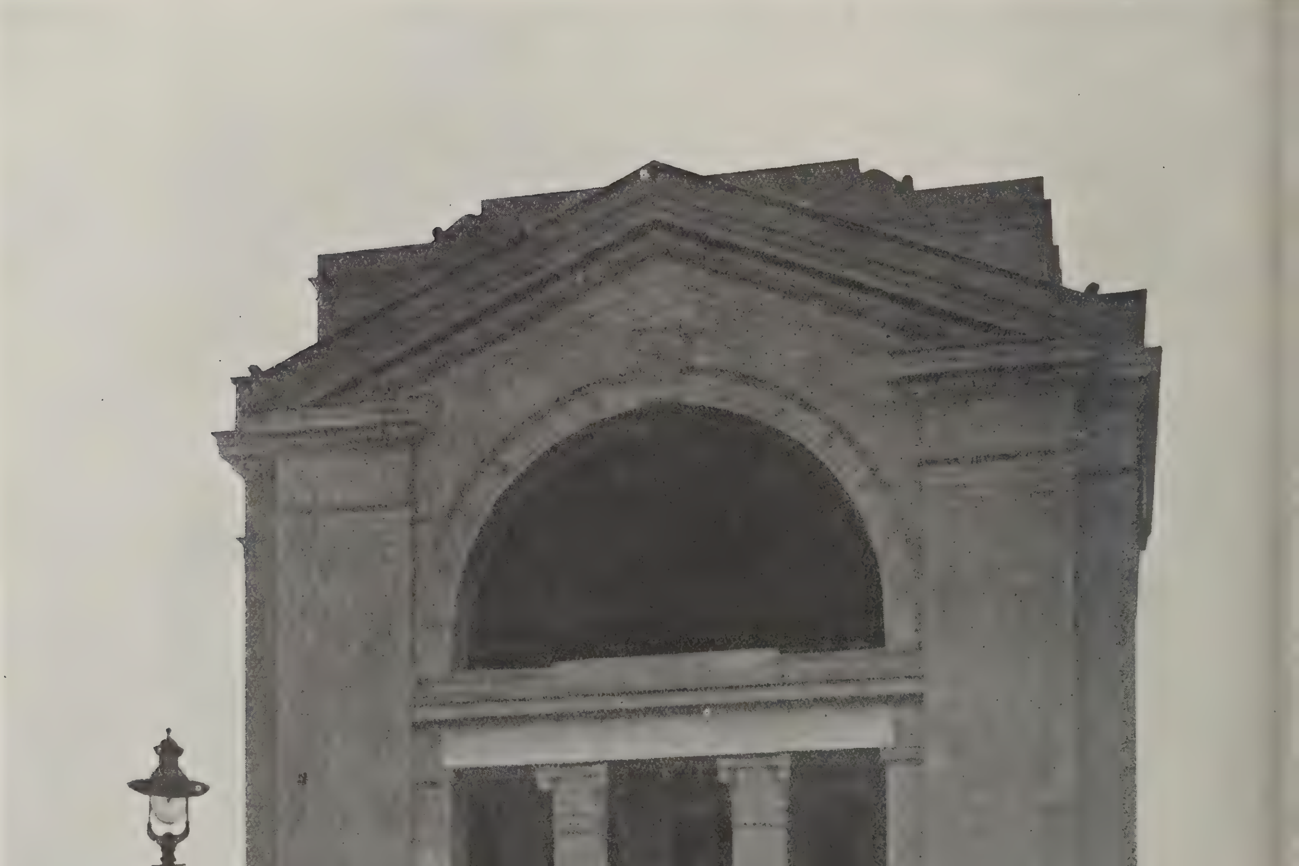


Photo: Architects' Journal.

The centre block of the Bush Building, which stands on the for long derelict Aldwych site, is now nearing completion. Ultimately it will have balancing wings on either flank, and we understand that a start will shortly be made with that on the west side. Our photograph, which gives a good idea of the immense scale of the building, was taken last week from a position in Kingsway.

THE

ARCHITECTS' JOURNAL

27-29 Tothill Street, Westminster, S.W.1.

nesday, March 28, 1923

Volume LVII. No. 1473

# The Housing Subsidy

MR. NEVILLE CHAMBERLAIN has shown commendable promptitude in formulating a housing policy within a fortnight of accepting office. But in his new Minister of Health, the me Minister would really seem to have chosen a man ), by knowledge and sympathy, is fitted for the great ·k that awaits him. Mr. Chamberlain's association with housing and town-planning problems of Birmingham es him a practical grasp of the subject, which was netimes lacking in his predecessors.

'he £6 annual subsidy for twenty years, which is now gested, is a compromise between the "Manchester programme" advocating a £6 subsidy for sixty years, and the vernment's earlier tentative suggestion, which was for ıbsidy of four guineas for twenty years. The increase, it said, is due to the fact that a rent of 7s. 6d., upon ch the Government's calculations were made, is conered, by the municipal authorities, to be too high, and s. rent was substituted, the annual loss on which is mated at £12. The Government are, therefore, meeting half of the loss, the local authority being left to bear other half. There is, however, a divergence of opinion ong the large municipalities. Leeds, for example, has eded from the Manchester programme, and considers t a subsidy of £4 would be sufficient. No doubt adequate son for the higher figure will be demanded in the House Commons when the Minister introduces his new Bill. leed, until that time discussion or criticism is difficult. eoretically the new subsidy differs from the 1919 Act that it fixes the Government's liability while allowing t of the local authority to fluctuate, whereas the earlier fixed the authorities' at a penny rate in the pound and owed the Government's to fluctuate. It differs from Additional Powers Act in that the subsidy then, alugh fixed for different types of houses, was a capital sidy, whereas the present one is in the form of income. arrangement, on the whole, seems to offer more inducent to local authorities to continue building than to vate enterprise, but here again, until details are available o the methods of distribution and allocation, comment is culative. Judging by past events it cannot be denied t the attempt to subsidize the private builder which was orded by the Additional Powers Act was disastrous. ose who have been in any way connected with the late vernment's housing endeavours will know that many of subsidy houses were of the shoddiest description, in which wise man, much less a State, should invest his money.

Much criticism has been levelled against the type of ıse which it is proposed to subsidize; an A3 with kitchen, llery, and three bedrooms. For our own part, however, do not object to this type. In the first place there a demand for this accommodation, and every addition reases the nation's housing capacity and eases the ssure elsewhere, often releasing a house now used as ements and allowing it to revert to a better class of perty. Much importance, however, attaches to the size the rooms and to constructional soundness. A wellilt A3 house, the living-room of which has a superficial area of at least 200 ft., will be of infinitely more use to the nation than a house of poor construction, worse planning, and of doubtful appearance, even if of greater accommodation. Any impartial survey of the houses built by local authorities under the 1919 Act and those by private enterprise under the Additional Powers Act would produce a verdict in favour of the former. Much, therefore, as we want to see the provision of houses revert largely to private enterprise, we must admit that many builders have shown themselves in the past willing enough to take the Government's subsidy while evading their responsibility to the community. We trust, therefore, that under the new Act, whatever facilities may be given to private builders there will be adequate safeguards to ensure that the houses are well built and that they comply with high standards. An annual subsidy of £6 represents to-day a capital sum of about £120. With this assistance, therefore, there is no reason why a house of the A3 type should not be "well and truly built."

The success of the new Act will very largely depend upon whether the sum of £6 for twenty years is precisely the right one, for it will be seen that if it is too small it will fail as an inducement to builders, whether private or municipal, whereas if it is too large it might send up building prices until the subsidy balances building costs. This is doubtless the danger that the Leeds Corporation feel. They consider that an A3 house can be built to-day at such a figure that £4 per annum represents a sufficiently liberal encouragement; to increase the figure is to invite a rise in building prices. We do not know for how long a period the Government intend to make the subsidy available. The eligible houses will, we presume, have to be built at once. Perhaps, on the other hand, it is the Government's intention to set aside a definite amount, and that when this is allotted no further houses can obtain the aid. Whatever plan they adopt we think it is important that no long period shall elapse before the matter comes up for review again. For in the event of building prices dropping a *pro rata* reduction in the subsidy should take place.

Other suggestions have, of course, been put forward for expediting the erection of houses. Some favour a Government guarantee to accredited building societies; others maintain that new houses should be tax free for a period of years. Neither of these schemes, on the face of it, commends itself to us particularly. We think that the subsidy should be paid through the local authority who have now become the recognized housing body of the district, rather than through building societies, and to grant a relief from tax paying is to confuse two distinct issues, moreover, taxpaying has a moral significance, it is representative of the individual's relation to the State.

The present proposals are simple and direct, and we see no reason why they should not have the desired effect of producing good houses in large numbers at once. Everything, however, will depend upon the details of the scheme and upon its administration, and in this connection we do not doubt that Mr. Chamberlain has already learnt much from the pioneer work of his predecessors.

# Notes and Comments

## The Building Dispute

TO-DAY the building trade employers decide what course they shall take in the wages and hours dispute with the operatives. Their original demand, it may be recalled, was for a 20 per cent. reduction in wages and the lengthening of the working week by two and a half hours to forty-seven during eight months of the year. With the object of securing a settlement by mutual agreement, however, they withdrew the demand for an extension of hours and cut the claim for wage reduction by one half. These concessions failed to produce any sign of the spirit of compromise among the operatives. It is difficult to believe that they can be so blind to their own interests, for a reduction in costs will at once release an amount of repair and decorative work that will keep the building industry fully occupied for an indefinite period. The small sacrifice in wages which is asked will in the end mean for the operatives a substantial gain by creating the conditions of regular instead of casual employment. If the dispute should result in a strike or a lock-out (and we sincerely hope that either contingency may be avoided) there is unlikely to be a complete stoppage of work, for only about one-third of the members of the trade unions took the trouble to vote on the point at issue. It would be ludicrous, were it not so perilous, that in effect the part should be greater than the whole. The case is obviously one that should be submitted to arbitration.

## Names on Buildings

Mr. Selfridge has decreed that his name shall not appear over the new extension of his great store, and is taking it down from the existing building. Certainly the great business in Oxford Street needs no external label; it is world-famous. Hence Mr. Selfridge's action may be regarded not so much as a quixotic concession to the street amenities, as a triumphant gesture signifying fame and success. It must not be taken to mean that there is something reprehensible in exposing your name on a building. On the contrary this is a very desirable practice. A general expunging of names from fascia boards would mean chaos. We hereby advise any other shopkeeper who may be tempted to copy Mr. Selfridge's example to think again. The real point about names on buildings is that they should be properly done—that the lettering should follow a good model. Obliterate all the ugly labels by all means, and all those that interfere with architectural effect. But retain the essential fascia label, and let it be something that is good to look upon.

## Past, Present, and Future

"Why," asked Mr. H. A. L. Fisher at the Architecture Club dinner, "is London not so beautiful as it was forty years ago?" The answer we believe is fairly obvious. It is not because later-Victorian architecture was any better than the architecture of to-day; as a matter of fact, taken as a whole, it was not so good. London is not so beautiful to-day as it was forty years ago because the heritage of the eighteenth and early nineteenth centuries has since been sadly marred. We have only to think of what has happened to Regent Street to picture the general change that has taken place over nearly the whole face of London. We have lost the repose, simplicity, quiet orderliness that without any other qualities will make a city beautiful. The size of our buildings has increased enormously our elevations have become more grandiose; our skyline more ragged. Great areas have been swept away and remodelled—with an undoubted gain, in most instances, to public health and convenience, but with some loss to the amenities. The loss is also sentimental, largely so. The mind grieves for Cloth Fair, Clare Market, Clifford's Inn. Mankind takes nothing so easily as the "longing, lingering look behind." It would be good for a change to look ahead. The period of transition architecturally is, we believe, passing away London forty years hence will be an infinitely finer city than it is to-day.

## Mr. Fisher on Architecture

Mr. H. A. L. Fisher seems to share the conventional view that architects are collectively responsible for the squalid and very unbeautiful character of much of our urban building development. At the Architecture Club dinner he said that we had never enjoyed a period more rich in architectural talent, genius, and courage than that of the last half-century, yet the world of architecture had not succeeded in making a full and adequate impression upon the public. It ought to be unnecessary to remind Mr Fisher that the squalor and ugliness of which he complains are not due to any deficiency among qualified architects; they are the result of public indifference to architecture. The parallel of the horse and the water is not inappropriate Architects may put their own house in order, argue eloquently the case for architecture, hold stimulating exhibitions; but if there is no response from the public it is all o no avail. Salvation must come from within, not without, and assuredly it is coming. The success of the Architecture Club's Exhibition (we note with satisfaction that it is to be kept open a fortnight longer than had been arranged), the continued popularity of the Ideal Home Exhibition the extraordinary success of magazines devoted to the domestic side of architectural art, the prominence given to the subject of architecture in the daily Press—all these things are convincing proofs of an interest at last awake Architects may be relied upon to support any movement designed to keep it awake.

## The Greater London Problem

Royal Commissions have a habit of ending in nothing and that which has been sitting on the Local Government of Greater London has proved no exception to the rule. There was little hope of any other result. The issue, in its rough outlines, was between Amalgamation and De-centralization, and on both sides there are very powerful arguments that tend to mutual cancelling out The subject is so vast, so complicated in its ramifications that no attempt can be made to consider it here. It may be said, however, that there is something radically wrong with a system that leaves the Government of a great city like London to 122 different authorities. Inequalities injustices, and possibly chaos must result from it. Simplification and co-ordination are obviously desirable, especially in such important matters as transport, housing, town planning, and main drainage. Some would also add, rating We cannot believe that the position can long be left as it is Force of circumstances must in the end prevail over majority reports.

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## St. Paul's Cathedral: An Acknowledgment

We regret that the full-page view of St. Paul's Cathedra from the west, which appeared on page 371 of our issue o February 28, was inadvertently published without acknowledgment, or the permission of the owners of the copyright Messrs. B. T. Batsford, Ltd., 94 High Holborn. The subject forms Plate I of Birch's "London Churches of th Seventeenth and Eighteenth Centuries." It is probabl that the block was reproduced some years ago, and at th time of using its source was unrecognized. We tender ou apologies to Messrs. B. T. Batsford, Ltd., for the omission.

# Joking Apart

## Sir Christopher Wren, F.R.I.B.A.

SO much has recently been written of Sir Christopher Wren that no apology need be offered for adding one more chirp to the chorus. Wren's reputation is certainly in no danger of being damned with nt praise, and he is endeared to us by the fact that spite his majestic intellectual equipment he was no dant, but a fluent and witty writer and a warm-blooded man being, replete with charm and playfulness. I have thing to add to this testimony except what may be thered from two anecdotes, which, perhaps because y belong to legend rather than history (for I cannot all where I gleaned them), I have not seen mentioned any recent writings.

The first reminds us, only, that Wren was of small ture; and tells us that once, in company with the King the banqueting hall of Whitehall Palace, he expressed opinion that the apartment was too lofty. "So might lso, think were I to view it, thus!" said Charles, squatting wn on his hunkers. The saying is true to what we ow of Charles II, and many of us will consider Wren's nion to be well justified.

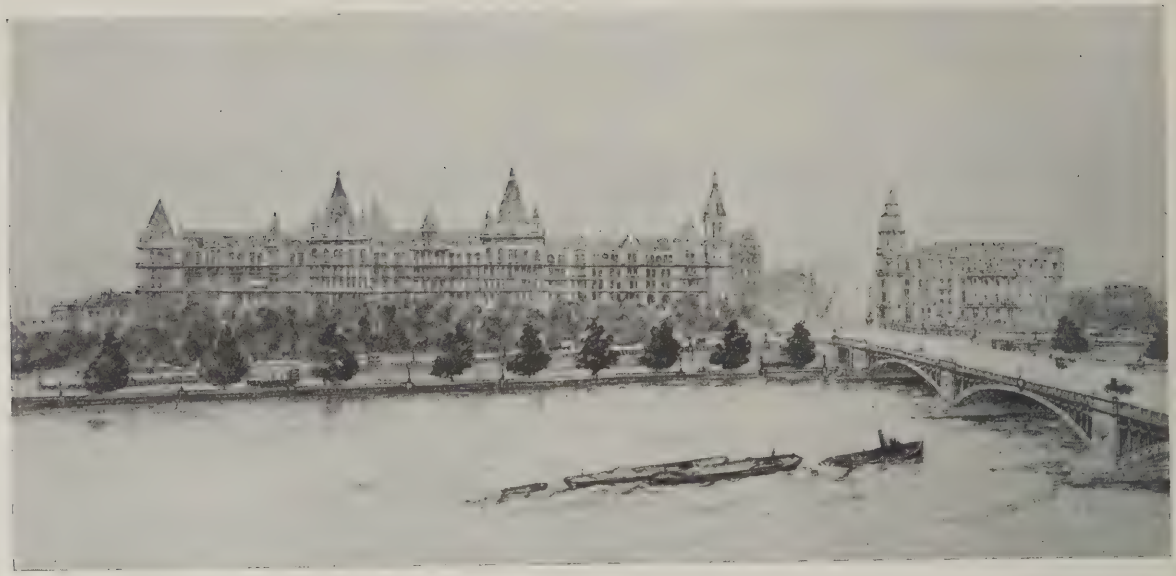
The second anecdote bears, not upon Wren's physical, upon his intellectual stature; and refers to the con-uction of the dome of St. Paul's. Before approaching design of the dome, which he did with a mathematical uipment far in excess of that possessed by previous lders, he enquired into the structural principles of lier domes. He found that in many of them the abut-nts were excessive, and he accordingly laid out his own ign on principles of his own. The use of a tie was no thing: in the first important dome of the Renaissance he octagonal dome of the Duomo, at Florence—unelleschi had girdled its base with timber beams, upped together at the angles. The story is that pressure brought upon the Surveyor-General to make him roduce the chain which now encircles the base of the ater London dome; but that before this chain was pletely hidden in the masonry, Wren, for his private sfaction, caused one link to be secretly cut through. s scarcely necessary to mention that a chain is only trong as its weakest link, and that half-an-hour's work a file would completely stultify all purposes served the chain. There is a true magnificence in the cool urance of one who, for the sake of justifying his own -respect as a craftsman, pits the reasoning capacity is solitary brain against the wise caution of tradition, who, at the risk of wrecking his *chef d'œuvre* and de-ying his reputation, defies the unproved forces of Nature. e shall, before long, know whether this story belongs istory or not, for the question of the integrity of this n is not the least of the problems facing those now onsible for the structural restoration of the Cathedral. chain is of wrought-iron plates, linked together at the s, and is now "on view"; but, as it is buried some feet within the masonry, the task of opening it up ughout its entire length is not lightly to be undertaken indeed, possible of accomplishment. It is likely, ever, that the continuity, or otherwise, of the chain, the position of fractures (if any) may be determined ome system of testing for electrical resistances. Thus ay happen that the examination of a bit of cold iron—ured for two hundred years—may strangely navigate nto the remote secret channels of a great intellect and ble spirit.

r Reginald Blomfield has inadvertently reminded us if the late commemoration had fallen thirty years ago, ceremonial at St. Paul's would have lacked somewhat s enthusiasm; and that it might have been difficult to a truly representative architect to lay a wreath on tomb. The change is due to change of taste, not to ge of men; for (will it be credited?) less than thirty years ago an eminent and leading architect, still eminent and leading, was heard to utter these words in a weighty and reflective manner: "Wren? Well, Wren, of course, was a mere constructionalist." The reactionary forces of Ruskin and Morris had swung the pendulum too far, we must agree.

For most of us, however, the arresting circumstance of the ceremonial act of homage performed by the President of the Royal Institute of British Architects, arose from the reflection that, if Wren were beginning his professional career to-day, British architects would sniff at the pretensions of a middle-aged President of the Royal Society in presuming ready-made eminence as an architect; and the Royal Institute, under any of its conflicting schemes of Registration, would shut Mr. Wren out from the practice of architecture altogether. This attitude would seem to us not merely reasonable, but unavoidable. Mr. Wren might possibly possess all the essentials of a great architect, but he would be hopelessly deficient in those *un*essentials a knowledge of which is demanded of us all, and which it is the pride of all architects in large practice once to have possessed, and no less their pride to have since entirely lost and forgotten. It is extremely doubtful whether Wren at any period of his career would have been able to claim a good working knowledge of quantities, or of the ingredients and chemistry of paints, or pass tests in the law and practice of dilapidations, or even draw the Orders neatly to scale from memory. What is an Aumbrye, Mr. Wren? The poor man does not, you see, know; still less is he able to state the nature and uses of "Bricko," "Slabbo," "Poppo," "Cougho," "Sneezo," or any of those facilities with which modern building operations are endowed. We do not need this extravagant analogy to remind us that the prominent architect of to-day has a far more intricate technical equipment than his brother of but fifty years ago, and that, in general cultivation, he is far inferior. All schemes of architectural education are apt to emphasize this inferiority; for every man's mental capacities are limited, and if he is to engage in intricate technical questions, taste and opportunity alike will divert him from those more scholarly attainments which have characterized the great architects of the past.

Supposing that Mr. Wren, by some means, surmounted the hostility of architects—which we may feel proud to know he would readily do by once proving his quality—and overcame the organized obstruction of the Royal Institute, it is amusing to picture the professional circumstances of Sir Christopher Wren, F.R.I.B.A. The working principles of architects' offices in this country would be unable to offer him ideas for running his practice. The Office of Works would perhaps do so, and Wren might arrange one department for the preparation of plans, another for sections, a third for elevations, a fourth for half-inch details—and so on; but I am inclined to think America would give him the hints he needed, and that he would have a well-planned floor in a large building, with a receiving-room for clients, a designing-room, separate rooms for draughtsmen, for checkers, for experts, for specification writers, for typists, for correspondence, for information and filing, and a passage marked "Travellers, this Way!" which, after several turns, found the explorer who had been put in at one end out in the street again. Wren, too, might very probably complete his office with a convenience, which even I have sometimes felt the need of, and that is a small pulp works for dealing profitably with the huge mass of circulars which would be bestowed upon so eminent an architect; for we can imagine Wren's letter-bin on the day after he was commissioned to build a cathedral—choked with recommendations of beer-pulls and chicken-houses, ham-curing furnaces, and cat-runs.

KARSISH.



A SCHEME BY THE LONDON COUNTY COUNCIL.

# The Charing Cross Bridge Exhibition

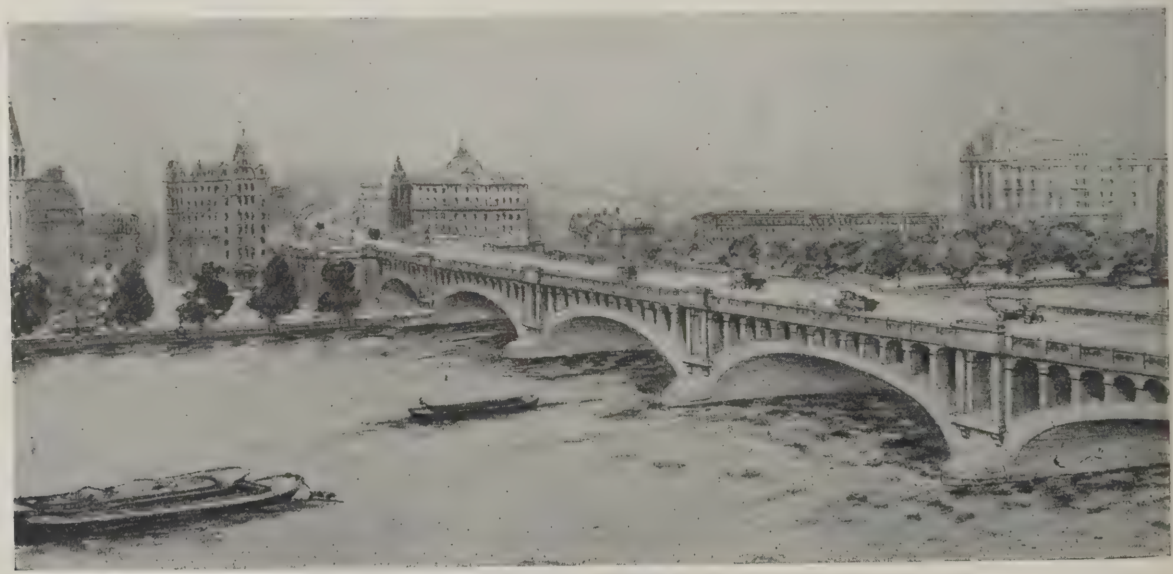
### By PERCY LOVELL, Secretary of the London Society

AN interesting exhibition of the various solutions of the problem of the provision of a fine new road-bridge, in place of the present structure and railway station at Charing Cross, has been arranged by The London Society at the Old County Hall, Spring Gardens, S.W., and will remain open at any rate until Thursday, March 29th. The solutions of the problem practically resolve themselves into two—the high level and the low level—and the majority of the drawings and models exhibited are variations of these two main ideas.

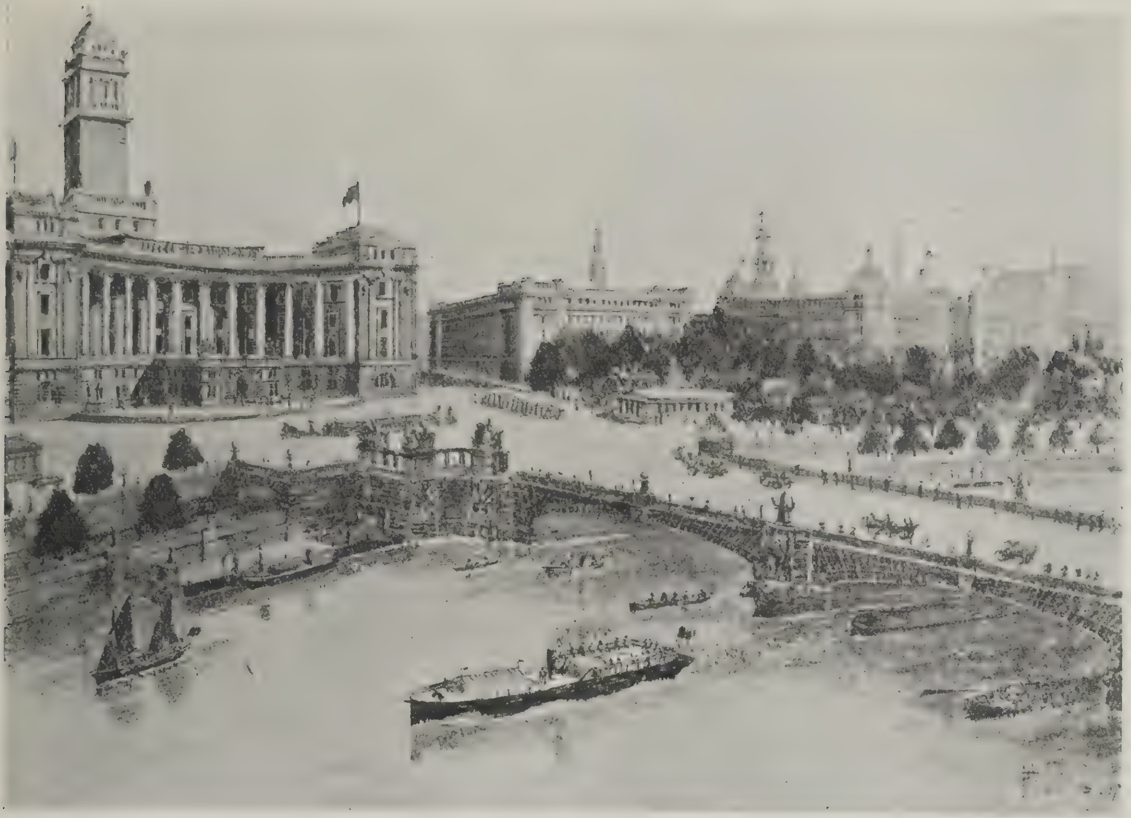
The high-level school all show a bridge starting from the level of the Strand (or higher) and either on the site of or rather to the east of the existing railway bridge, while the low-level school show a bridge usually on the line of Northumberland Avenue that can be approached directly from the Embankment roadways, which necessitates raising the level of the Embankment from 17 to 34 feet above ordnance datum, opposite the centre of the approach to the new bridge. Several interesting outlines of types of bridges that conform to these requirements are exhibited by the London County Council. One scheme, submitte by Mr. Edwin T. Hall, F.R.I.B.A., is something of compromise between the two schools.

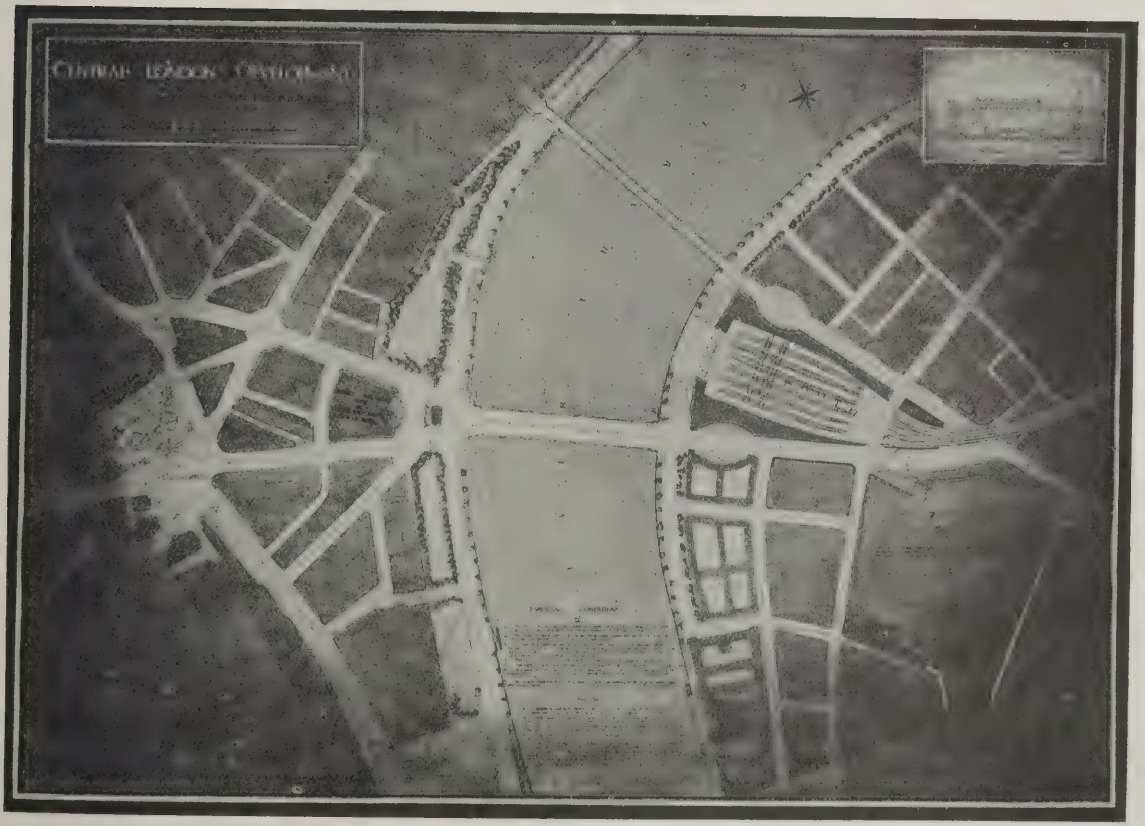
To turn to the consideration of some of the suggestion in greater detail, one of the most attractive is undoubtedl the sketch model prepared by Sir Hamo Thornycroft, R.A This shows a road-bridge at the high level, just to the eas of the present railway bridge, starting from an open plac on the site of the existing station and gradually descendin from the opposite bank, until the southern approac terminates in a spacious place opposite St. John's Churc in the Waterloo Road. A new south-eastern sectio terminus for the Southern Railway is indicated adjoinin Waterloo, the existing approach road for cabs bein carried over the Waterloo Road to serve the new statio as well. We believe that a larger model of this scheme being prepared for the Royal Academy Exhibition.

Another model, to a larger scale, has been prepared Mr. Ernest Herbert specially for this exhibition, and th also shows a high level bridge following more or less t



ANOTHER DESIGN BY THE LONDON COUNTY COUNCIL.





"A NEW BRIDGE AT CHARING CROSS."

BY EDWIN T. HALL, F.R.I.B.A.

*(From the London Society's Exhibition.)*

lines of the existing bridge and station site and retaining the present change of direction on the northern bank. On the opposite bank the bridge approach is carried through at the high-level right up to Waterloo and across Waterloo Road, up to a new South-Eastern station, in a similar position to that suggested by Sir Hamo Thornycroft. A feature of Mr. Herbert's scheme is a suggestion for an embankment roadway on the southern bank of the river, also at the high level, forming a connection between the new bridge and Waterloo Bridge, and providing an unrivalled panorama of London from Westminster to St. Paul's.

Sir Reginald Blomfield, R.A., also shows a plan for a high-level bridge a little bit more to the east than the line suggested on the two models; but the main point of difference lies in his site for a new terminus, which he places on the river front and to the south and west of the new bridge. This line for the new bridge reduces the triangular space on the Surrey shore between the river and the approaches to Waterloo Bridge and the new bridge to a comparatively small area, and Sir Reginald suggests that no buildings should be erected upon it.

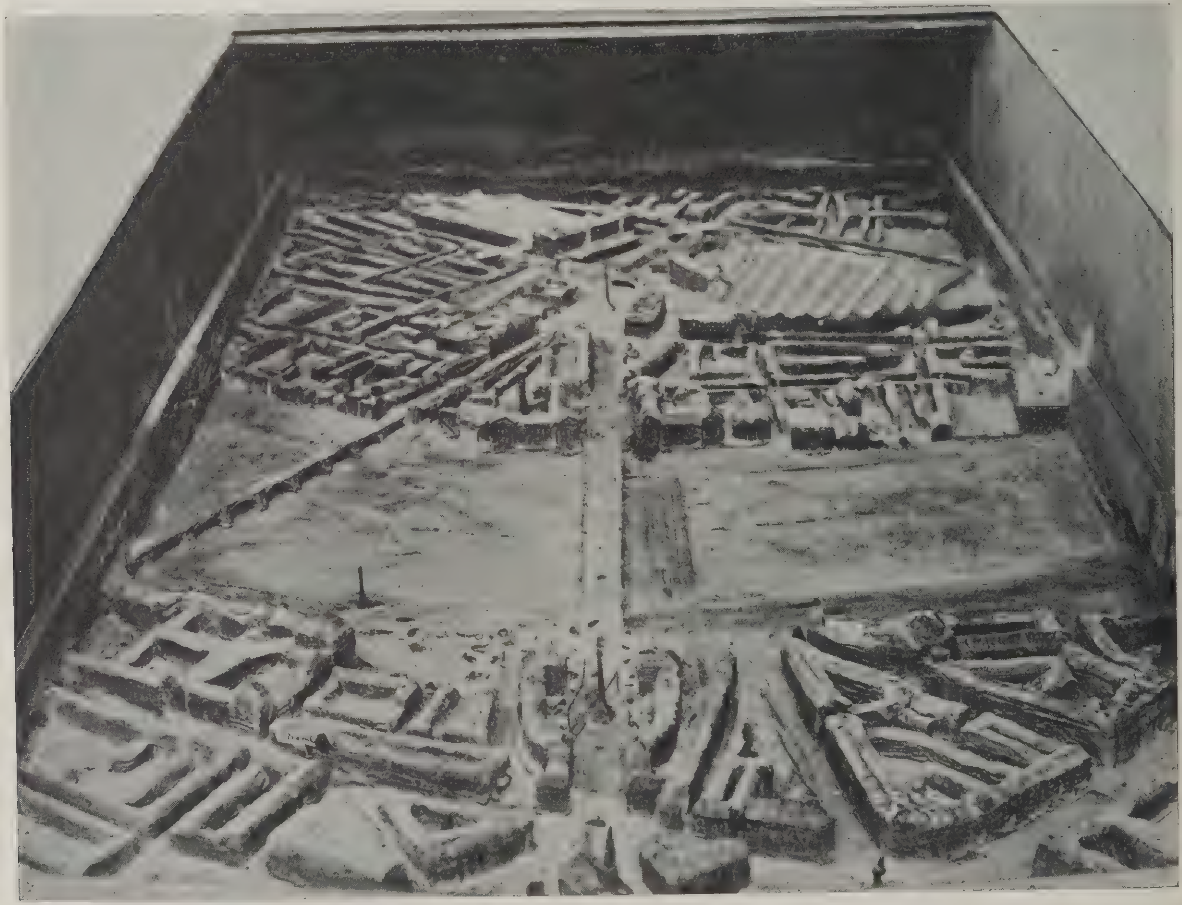
Professor Adshead also shows a high-level solution. He places his new terminus near to Waterloo, and on the north bank of the river suggests bringing forward the building-line and erecting two big blocks over part of the Embankment Gardens, thus doing away with the gap in the river front caused by the setting of Adelphi Terrace so far back. His bridge-head approach on this side of the river divides into two, one line providing direct access with West London by way of Cockspur Street, the other connecting with Charing Cross Road by a widened King William Street. The loss of open space on the north side is compensated for by the provision of fine gardens reclaimed from the mud-banks on the opposite shore.

Mr. Lionel Barrett also joins the ranks of the high-level school, and his scheme includes a bridge with approaches both from Piccadilly Circus and Charing Cross Road. T
general line of the bridge is similar to that suggested
Professor Adshead; but Mr. Barrett keeps his building-li
back nearly to that of Adelphi Terrace, and this has t
effect of bringing into prominence the break in the fronta
to which Professor Adshead refers. Mr. Barrett al
indicates a considerable open place to the north of t
Church of St. Martin's-in-the-Fields, and his new termin
on the Surrey side is suggested to adjoin Waterloo.

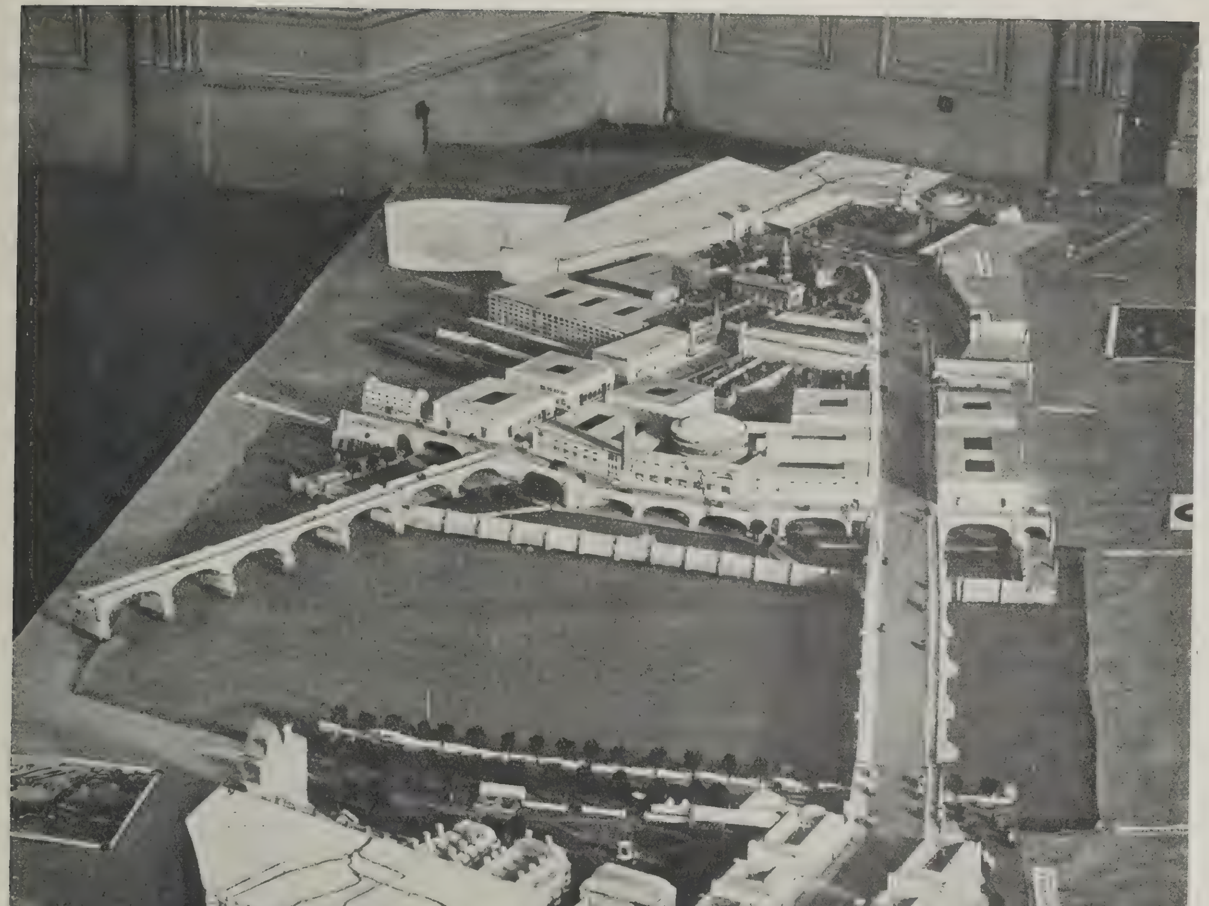
One of the arguments in favour of a road-bridge at th
point is that it will relieve the Strand of a good deal
east-to-west traffic, that at present has to proceed alo
that thoroughfare in order to get across Waterloo Bridg
and it would seem that an essential part of the scheme
the provision of improved traffic connections with Picc
dilly. These are provided by Mr. Barrett, and to a st
greater degree by Mr. John Murray, whose scheme has be
already widely discussed in the architectural and oth
journals.

Mr. Murray shows a considerable alteration in the we
end of the Strand, clearing away everything between t
Little Theatre and Lyons' Corner House. Another importa
point that has to be borne in mind in considering the ro
improvements north of the Thames is the fact that Sev
Dials is now ripe for reconstruction. The Holborn Coun
have a scheme for rebuilding this area, and are in a positi
to arrange for a connection between the northern end
the new bridge and the bottom of Tottenham Cou
Road. This connection is indicated in Mr. Murray's schem

Two perspective sketches are shown by the Lond
County Council, in addition to the valuable diagramma
drawings already referred to. Both these are illustrat
on page 556, and the one that represents a high-lev
bridge, seen from the Surrey shore, has two unique featur
The bridge is shown sufficiently high to allow for elect
trains running across the river beneath the roadway a
diving down directly the Embankment is crossed, in ord



"A NEW BRIDGE AT CHARING CROSS."
FROM A MODEL BY SIR HAMO THORNYCROFT, R.A.



By courtesy of "The Times."

"THE GREAT SOUTH VIADUCT."

BY ERNEST HERBERT.

*(From the London Society's Exhibition.)*

to connect up with the northern termini at Euston or King's Cross. In addition to this, the centre portion of the roadway rises sufficiently to enable it to be carried right across the Strand without interfering with the stream of traffic along that thoroughfare.

Still another high-level solution is contributed by Mr. W. L. Lucas, who agrees with Mr. Herbert in perpetuating the existing "kink" in his roadway. Mr. Lucas also brings his new terminal station up to the river front, but places it on the opposite side of the road to that selected by Sir Reginald Blomfield. Another high-level scheme is shown anonymously, and differs from the others in showing not only a new road-bridge at Charing Cross, but another near to the Temple Station, connecting up with the eastern horn of Aldwych. The author of this scheme indicates that these new bridges should be treated solely as approaches to the new termini, through north and south traffic being concentrated on the Blackfriars route. It would appear to be one of the principal objections to the St. Paul's Bridge scheme that it aims at establishing a fresh north-to-south through route in the heart of the City, instead of encouraging such traffic to avoid the congested areas.

Another high-level scheme, contributed by Mr. E. Frazer Tomlins, emphasizes the idea of making the new bridge a memorial of the Signing of Peace. Mr. Tomlins suggests at the bridge-head a memorial to the fallen, beneath which you pass to a Temple of Peace on the northern bank. Before leaving the high-level schemes, reference must be made to Mr. G. A. T. Middleton's scheme, originally prepared some years ago, suggesting the gradual transformation of the existing railway bridges and viaducts of the South-Eastern Railway into high-level roadways and the eventual removal of all the termini north of the river. Mr. Middleton also suggests the site for the new terminus should be on the approach road to Blackfriars Bridge.

Mr. Edwin T. Hall shows a plan and perspective drawing (see page 557) for a bridge approached from the Embankment roadways on either side of the river; but instead of carrying on the line of Northumberland Avenue, he places his bridge exactly on the site of the present bridge, making Northumberland Avenue and Villiers Street (widened) the approaches on the north bank of the river. Mr. Hall thus provides a site for important buildings opposite the northern end of his bridge, and lays stress on several other points in his description of his scheme. He indicates that a bridge from embankment to embankment is not only the shortest and therefore the least expensive way of crossing the river, but, by providing direct access to the Embankment on the south side, directly encourages the much-needed development of that part of London. He not only provides the maximum space for new buildings on the northern bank, with a consequent increase in amount that can be obtained by way of recoupment, but by keeping his approach road on the southern bank exactly on the line of the existing railway viaduct he disturbs comparatively few existing properties, but provides frontages of enormously increased value on either side. The site he suggests for the new terminus is on the river front between and adjoining the approaches to Waterloo Bridge and the new bridge. This scheme, as we have indicated above, partakes of some of the features of both high-level and low-level schools.

Low-level schemes, upon the whole, are not so numerous as the other type; but there are several striking solutions, although most of them are known to readers of architectural journals, as they have been published on previous occasions.

Mr. W. D. Caroe and Messrs. D. Barclay Niven and T. Raffles Davison both show bridges on the same alignment: that is to say, carrying on the line of Northumberland Avenue, and both place their new termini adjoining Waterloo. Another supporter of the low-level solution is Mr. Paul Waterhouse, who differs from the two schemes we have just referred to in placing his new terminus to the east of the Blackfriars Road, more in the position suggested by Mr. Middleton. Mr. Waterhouse contributed this plan to the article he wrote on the development of the south, Surrey, side of the river, in the book "London of t Future," published by The London Society a year or t ago. A very good illustration of the raising of the Embar ment roadway entailed by erection of a low-level bridg provided by the perspective drawing illustrating t type of bridge prepared by the London County Coun Their perspective view being taken from the Surrey sh enables the sloping roadways to be clearly seen, and a the fact that the tramways must be taken straight under the bridge approach. In order to effect this level of the Embankment, as we have already indicat must be raised 17 feet above its present level opposite centre of the new bridge approach.

One other low-level scheme, by Mr. Nesbitt Ken shows a bridge starting opposite Northumberland Aver and connecting up with the line of the South-East Railway viaduct (just as in Mr. Hall's scheme) on reach the southern shore. This gives rather an awkward se of breaks, and, on the whole, Mr. Hall's siting of his bri seems the more satisfactory. One or two schemes ha been added since the exhibition, including a plan improvements at the Strand end of the new bridge, p pared in 1916 by Mr. Mark H. Judge (Hon. Secretary the Further Strand Improvements Committee). noticed in this scheme, amongst other interesting sugg tions, a considerable widening and improvement of Wh comb Street is indicated.

The exhibition, as a whole, should do a great deal good, particularly in indicating the practical possibili of the site. The crying need for a road-bridge at this po becomes greater every year: firstly, in order to facilit traffic, and, secondly, to encourage the development the Lambeth district. Unless the new bridge is bu Waterloo Bridge will certainly have to be widened. effect of this æsthetically is doubtful; but the v considerable cost should, if saved, be reckoned to credit of the new bridge. It would certainly seem t an unrivalled opportunity is presented for carrying ou scheme of very real benefit to the public and a sup national monument. The best of our engineers, our archit and our sculptors should find their opportunity, and great public bodies should co-operate. But it is for authorities, who alone can initiate and carry throug scheme of this importance, to give to the whole quest of Charing Cross Station and the construction of a bridge and its approaches their immediate and seri consideration.

In their foreword to the exhibition catalogue the Lon Society say: "The idea of transferring Charing C Station to the right bank of the river and of forming a roadway bridge between Waterloo and Westmin Bridges has long been familiar to those who have the provement of London at heart, and in 1916 the actio the South-Eastern Railway Company in promoting a to strengthen the bridge raised the whole question as a issue, even amidst the all-absorbing interests of the To the public it is the most important project that has presented since the days of the Thames Embankment. Some method of relieving the traffic across the river become an absolute necessity. The inconvenience getting to the south side of the river, and the conges of traffic on Westminster, and particularly on Wate Bridge, is familiar and intolerable; a new traffic br between those two points will sooner or later becon necessity, and this is a matter in which the ratepayer London should take a very keen interest. Vast s have had to be spent in undoing the harm done in generations through ignorance, indifference, and want of prescience. Great municipal improvements like the Sybilline leaves. The chance, once missed gone for ever, and it is from bitter experience of the opportunities of the past that we are slowly learnin look ahead. The public case for the construction of new bridge appears to us to be established on unshak grounds."

# Tsi-Nan-Fu, China

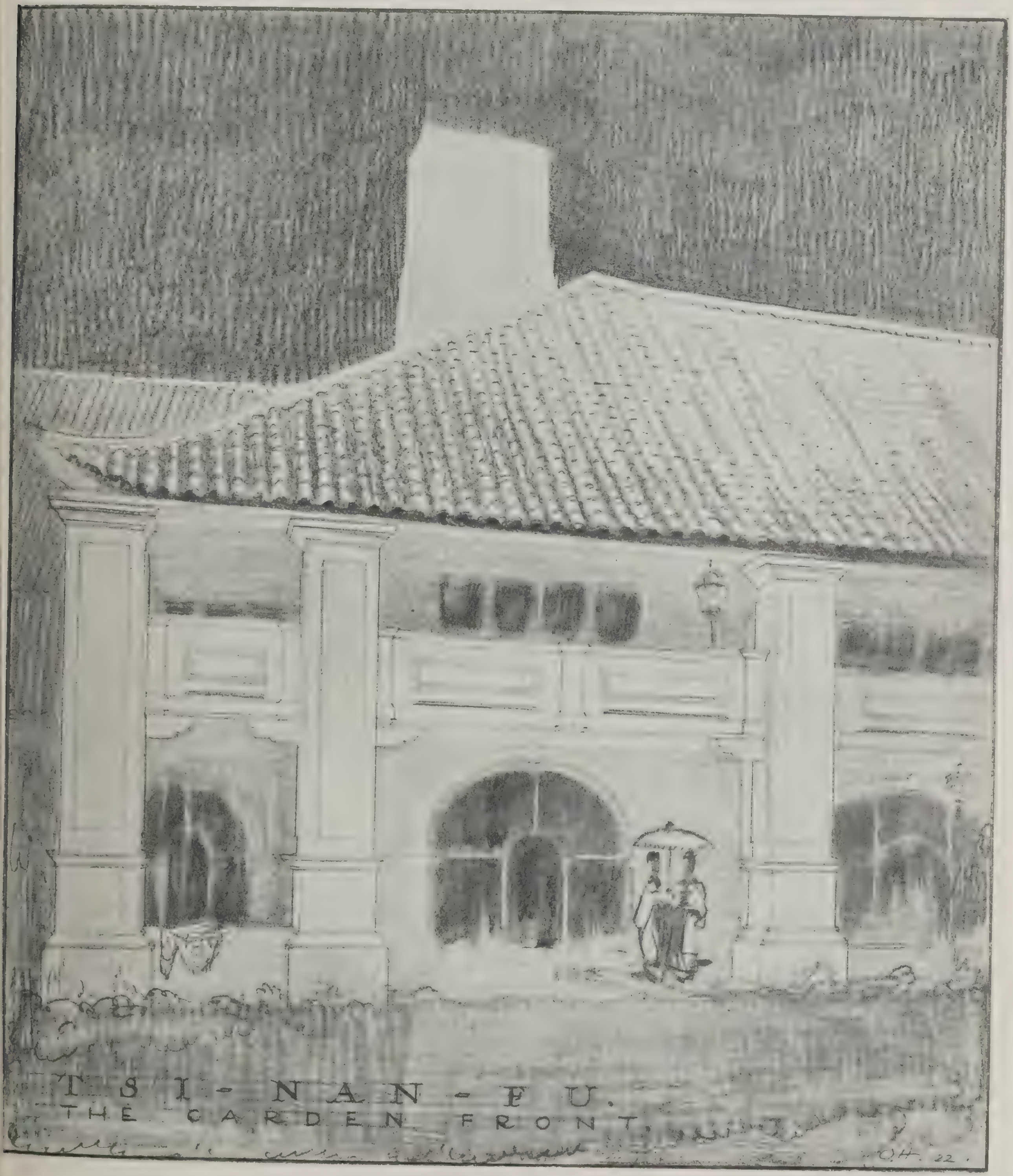
## OLIVER HILL, A.R.I.B.A., Architect

THIS house was designed for European occupation on a site within the compound of the Christian University of Tsi-Nan-Fu, the capital city of Shantung. In planning, special care had to be bserved to avoid the direct rays of the sun into any of l living-rooms, or even on the outer walls, the summer t being so excessive.

double-tiered veranda carries round the east, south west façades, over which is brought the main roof. ge arched windows, reaching from the floor level, light the ground-floor rooms and afford views across the plain to a distant range of mountains.

The native servants' quarters are provided separately, together with a gate-house.

An atmosphere of home was desired as far as internal arrangements were concerned, while extremes of climate and the proximity of the old Chinese houses of the city, with their unique roof forms, more or less decided the general scheme. Mr. Oliver Hill, A.R.I.B.A., was the architect.


TSI-NAN-FU.
THE GARDEN FRONT.
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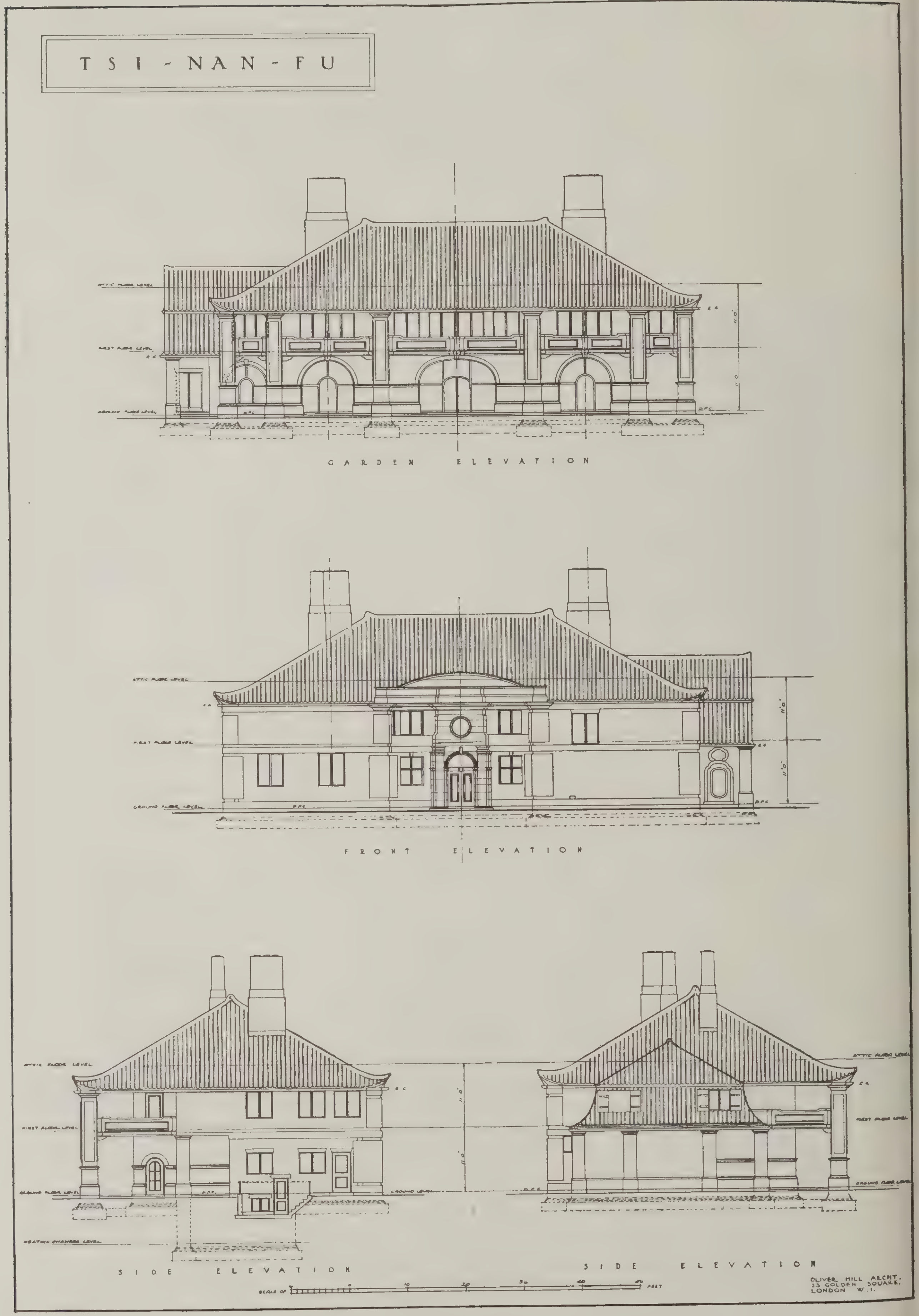
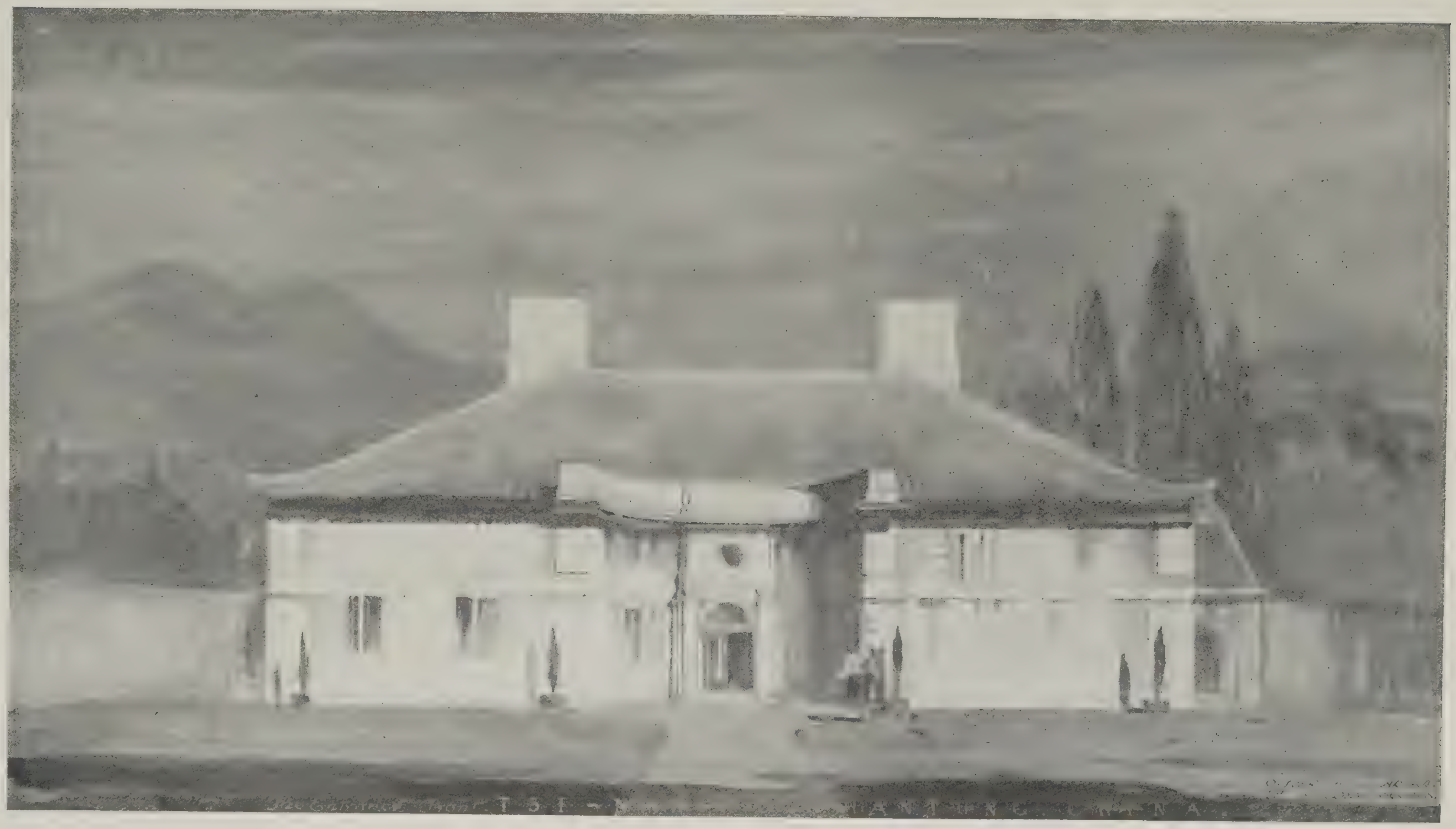
A DWELLING-HOUSE IN CHINA: THE GARDEN FRONT.



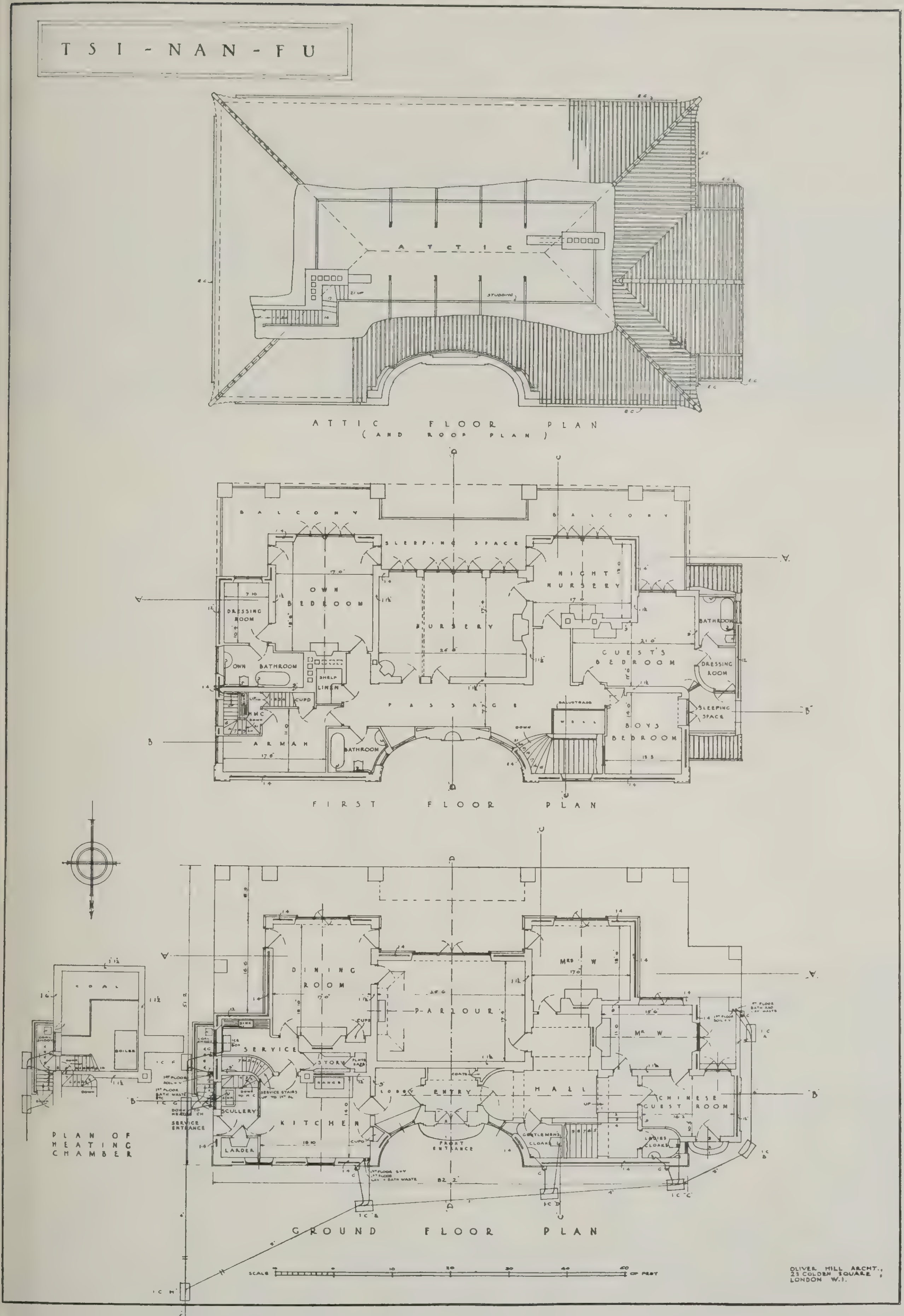
A DWELLING-HOUSE IN CHINA: THE ELEVATIONS. OLIVER HILL, A.R.I.B.A., ARCHITECT.

# Modern Domestic Architecture. 49.—A Dwelling House in China

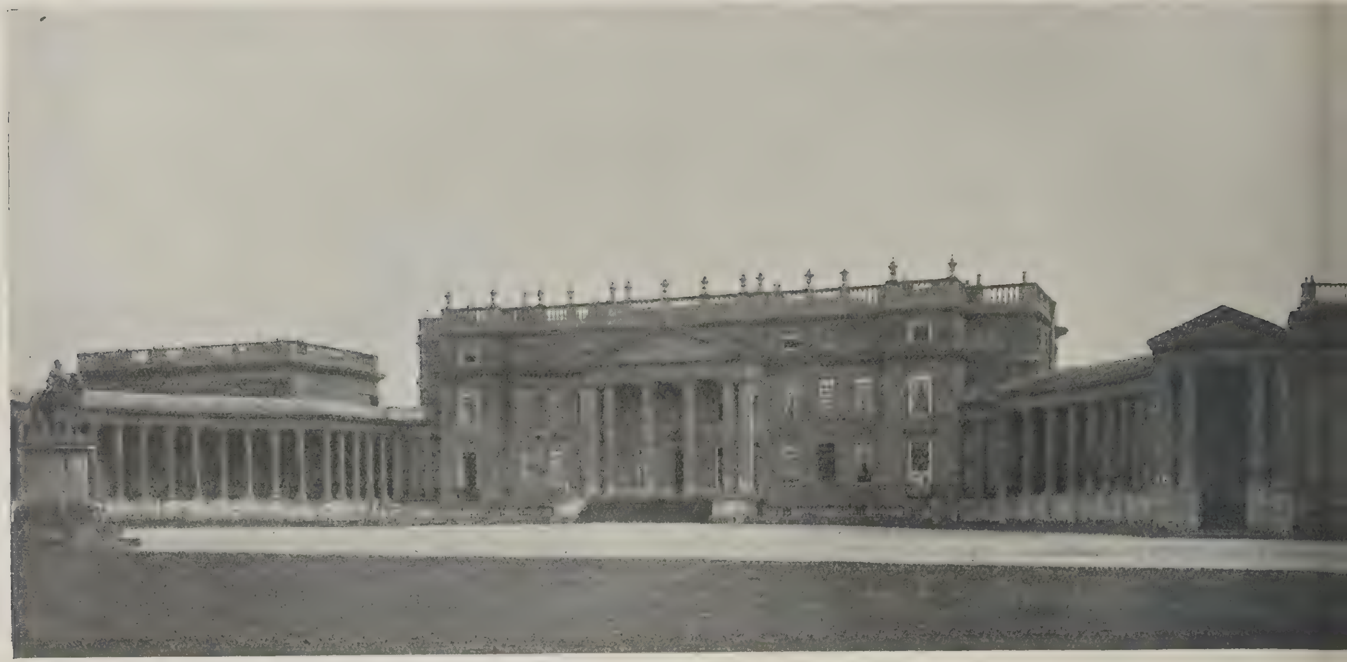
Oliver Hill, A.R.I.B.A., Architect



In all hot countries the plan and design of buildings is affected by conditions varying widely from those which obtain here, and features which in an English building would be mere affectation, are actual necessities abroad.



A DWELLING-HOUSE IN CHINA: PLANS. OLIVER HILL, A.R.I.B.A., ARCHITECT.



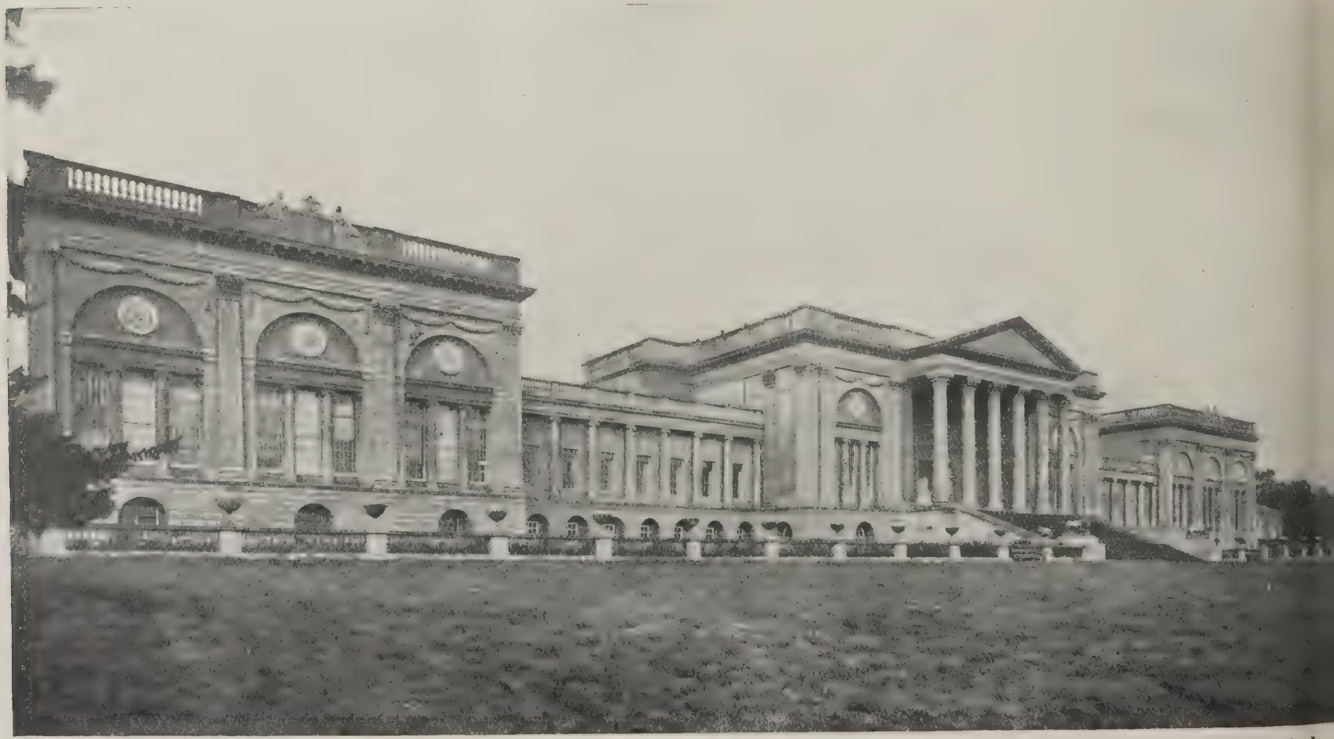
STOWE: THE NORTH FRONT.

# The Conversion of Stowe

## CLOUGH WILLIAMS-ELLIS, Architect for the Alterations

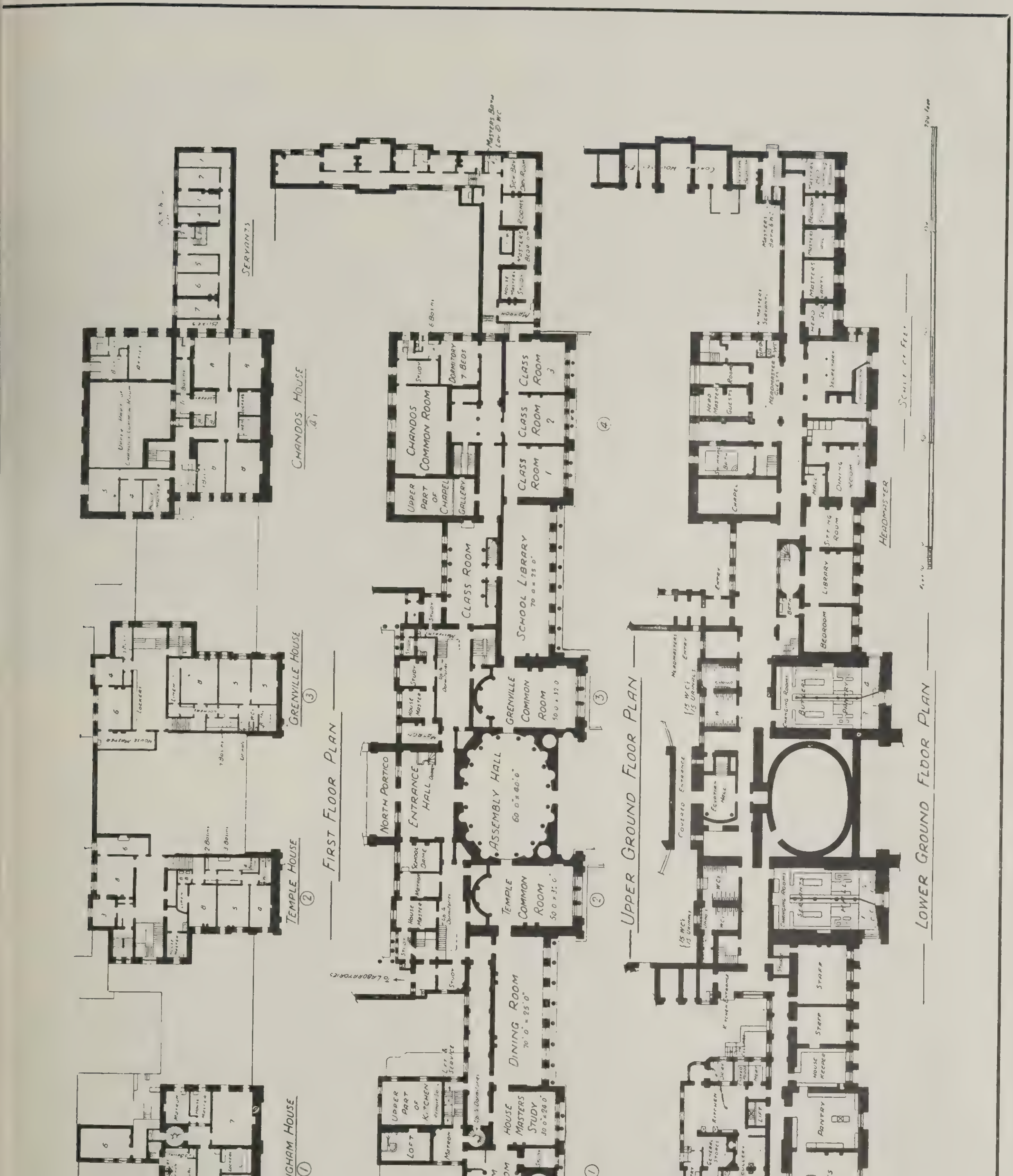
THE historical associations, natural beauties, and architectural glories of Stowe have recently received considerable attention in the Press through the public interest naturally evinced in the change of ownership. By the courtesy of the architect (Mr. Clough Williams-Ellis), who is responsible for the conversion of the place from the uses of a great country house to those of a great public school, we are now able to give our readers some particulars as to what this conversion will mean. It has throughout been Mr. Williams-Ellis's chief aim to render the place fit for its new functions with the minimum of alteration to the old fabric, and his labours have been, therefore, more directed to the avoidi of structural changes than to their introduction.

In his preliminary report he suggested that the right id at Stowe would be to modify the ordinary public scho routine to suit the peculiar and, indeed, unique buildin that existed, rather than to do violence to the fabric order that the generally accepted arrangements for t working of a public school should be uncompromising adhered to. He contended that the whole point of Sto was that its rare distinction as a great country hou enabled it to pass on a tradition and an atmosphere th would be invaluable to a new school necessarily witho



Photos: R. & H. Chapman, Buckingha

THE SOUTH FRONT.



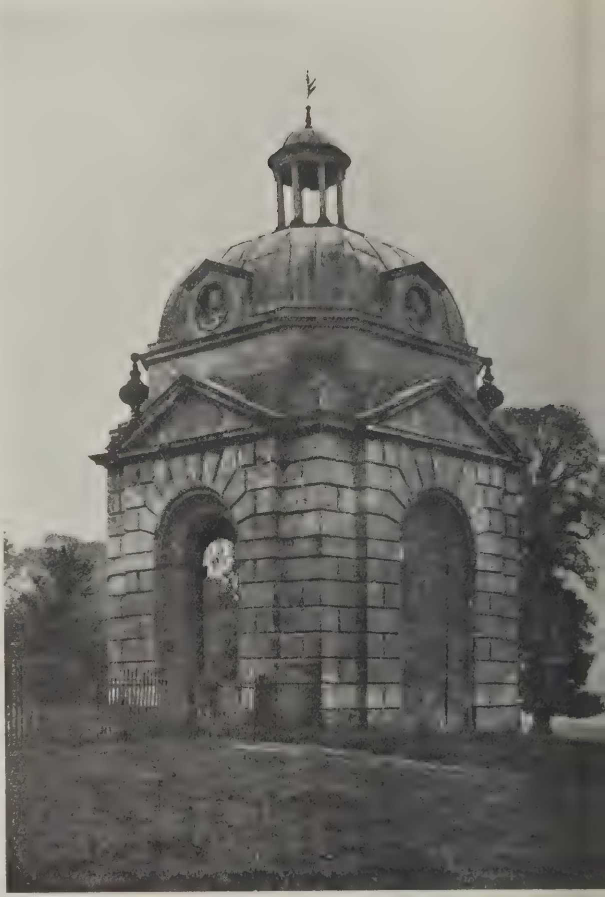
STOWE, BUCKS: PLANS SHOWING THE CONVERSIONS. CLOUGH WILLIAMS-ELLIS, ARCHITECT FOR THE ALTERATIONS.

traditions of its own. In his view, the white-washed corridors and concrete stairs of so many "up-to-date" schools must be held responsible for their somewhat uncivilized products, and he is strong in the belief that beautiful architectural surroundings and interiors not primarily designed to resist rough usage must have a civilizing influence on boys at their most impressionable age. Happily this, too, is the view of the Governors, whilst Mr. Roxburgh, the headmaster-elect (well known for his belief in the humanities as the strongest educational implement), is himself an enthusiast about architecture, as his lectures on this subject to the boys at Lancing are sufficient testimony.

The intention of the Governors is to open next May with some eighty boys, who will be accommodated in approximately half Stowe, the second half being completed and occupied in the next and following terms. The old house of Stowe, fortunately, lends itself very happily to sub-division into four subsidiary boarding-houses of some forty boys each with little structural alteration, except in matters of internal detail, the great state rooms providing their common rooms and classrooms, meals being taken in common in the old state dining-room. To serve this, the old kitchen arrangements are being abolished in favour of the most modern equipment, where it is proposed to do the cooking partly by steam and partly by electricity, under the advice of Mr. George Dixon, the consulting engineer.

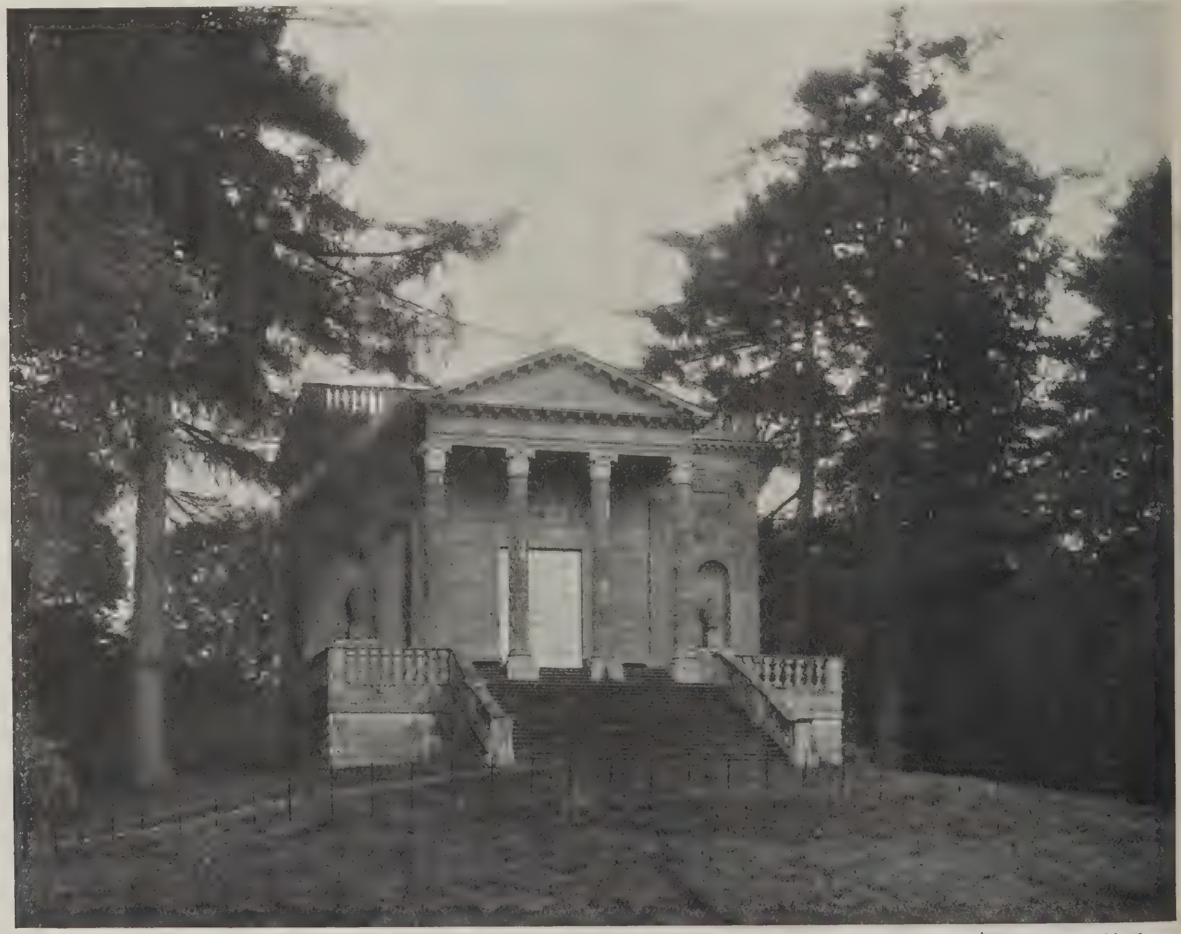
The engineering side of the enterprise is, of course, a very important one, as water supply, drainage, electric lighting, central heating, hot-water supply, laundries, workshops, and so forth have all to be installed on a considerable scale, not only with a view to the present capacity of the converted house, but with an eye to probable expansion in the not-distant future.

The old riding-school is being converted into a gymnasium and racket court; a swimming-bath is being provided, and accommodation for fives courts and a tuck-shop are being found amongst the widely spread subsidiary buildings that cluster so bewilderingly on either side of the great house itself.



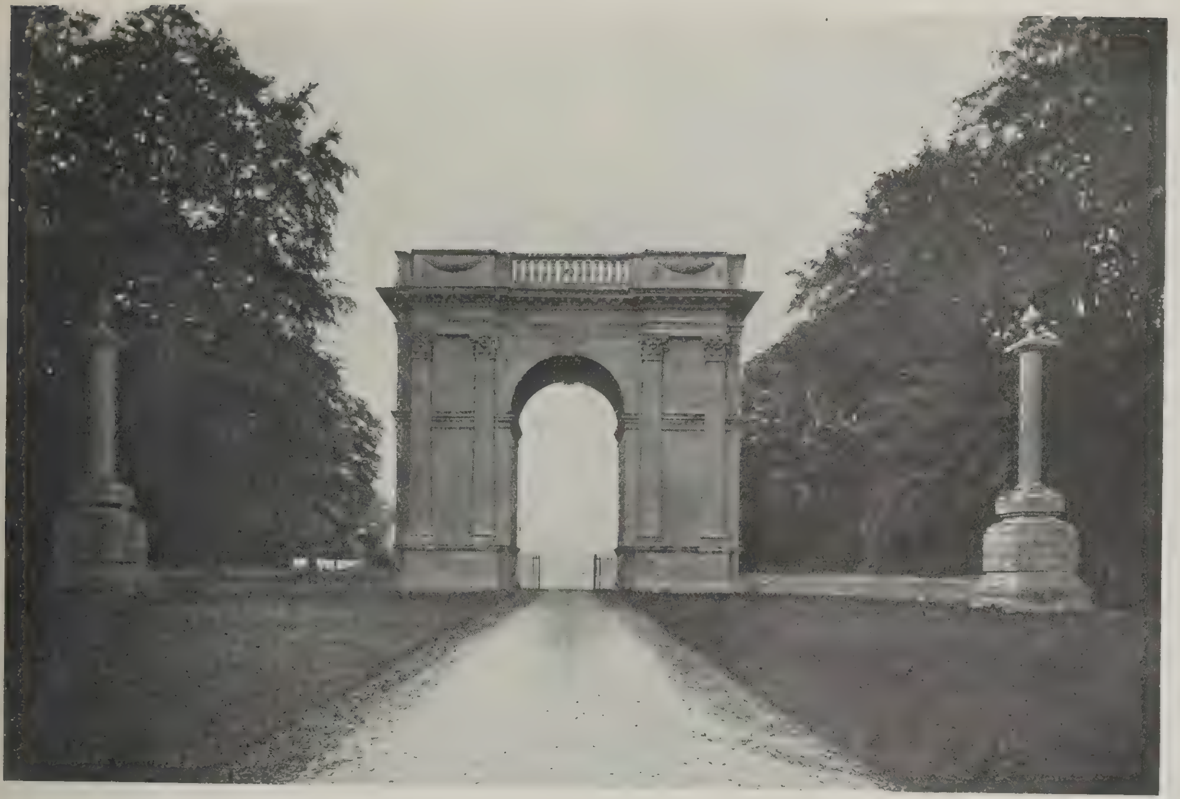
BOYCOTT PAVILION.

Even from a plumbing point of view Stowe is remarka amenable, as it is full of curious spaces, shafts and f

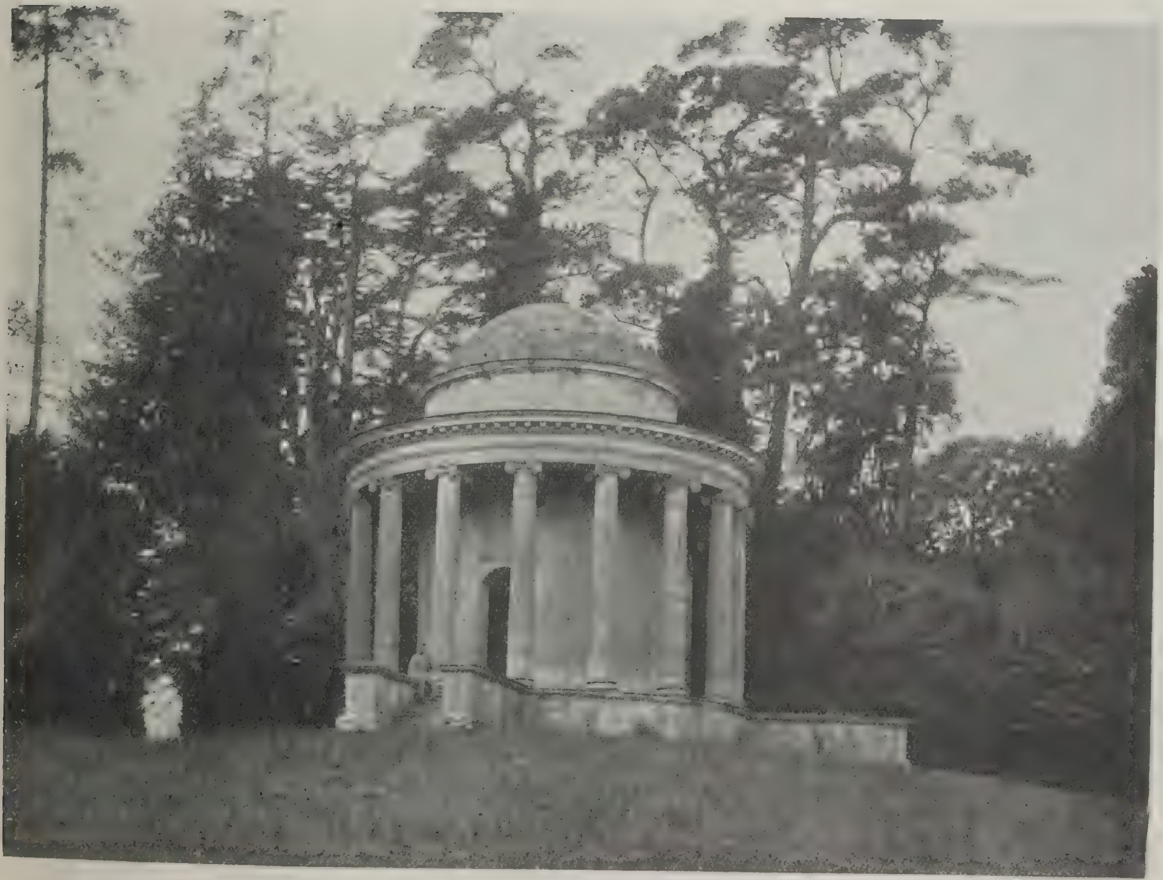


Photos: R. & H. Chapman, Buckingham.

QUEEN'S BUILDING.



THE CORINTHIAN ARCH.



Photos: R. & H. Chapman, Buckingham.

TEMPLE OF ANCIENT VIRTUE.

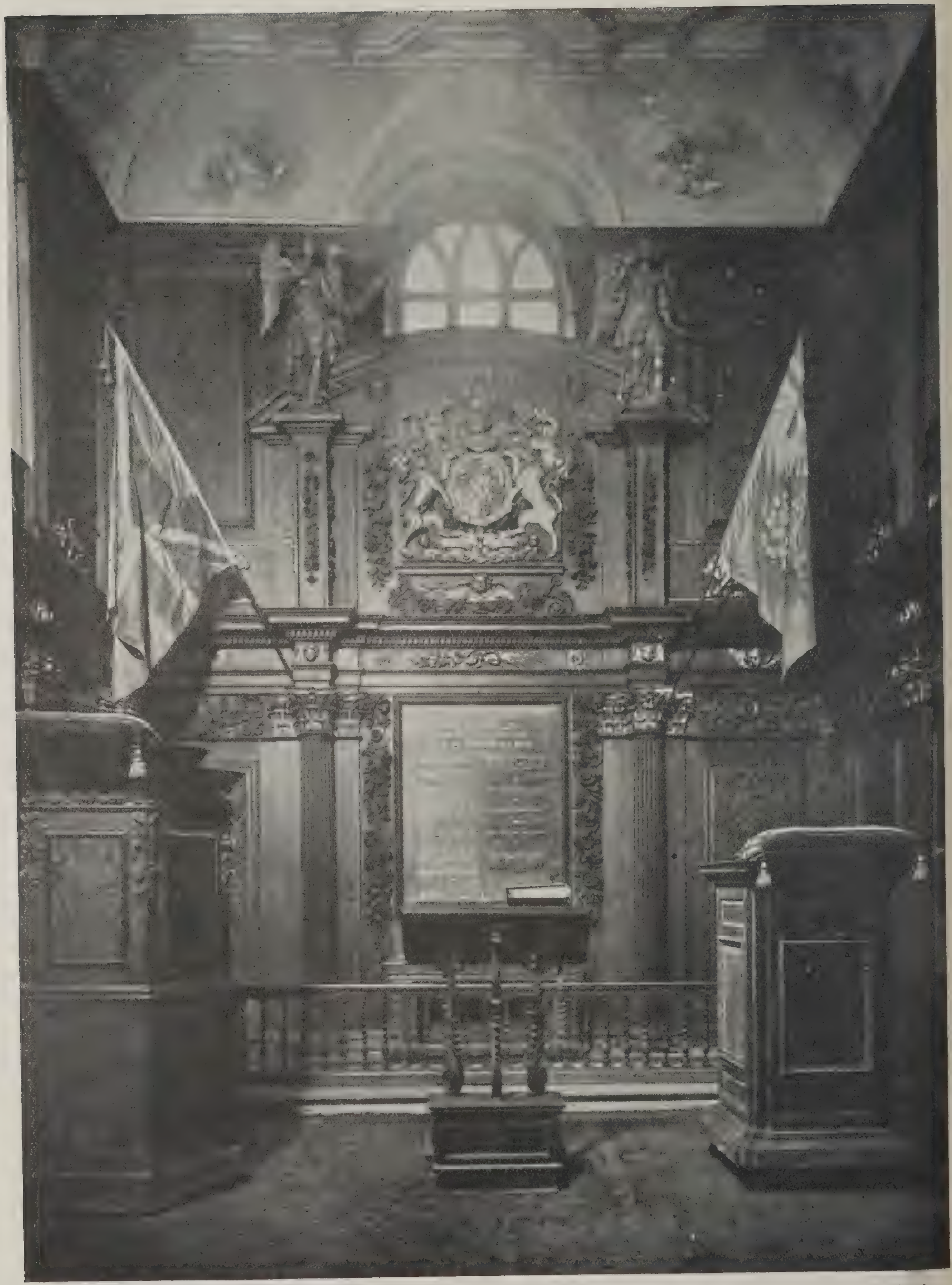


*Photo: R. & H. Chapman, Buckingham.*

THE CHAPEL.

The fine panelling is in cedar wood.

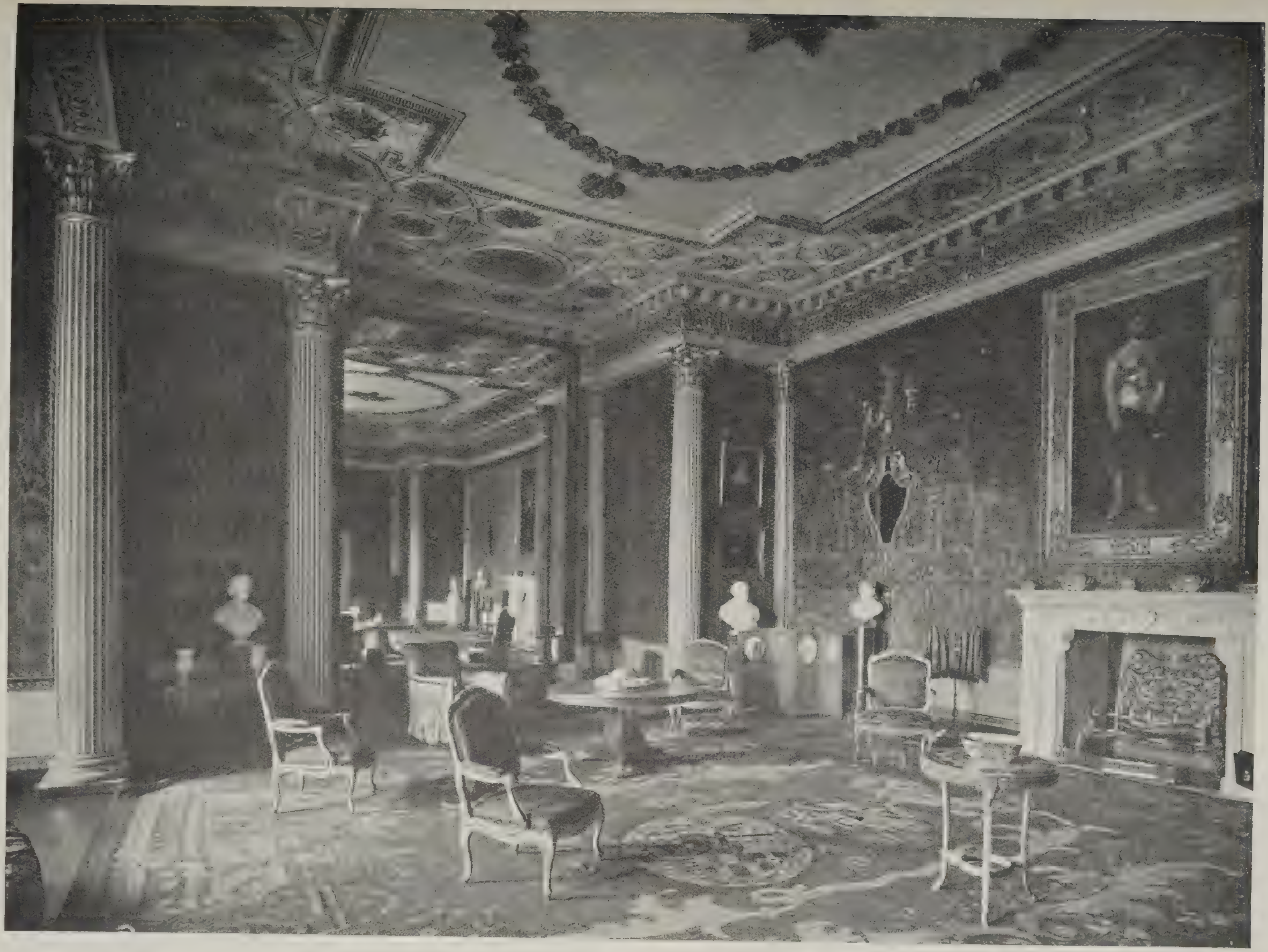


Photo: R. & H. Chapman, Buckingham.

This room, which, in the old days of Stowe House, was styled the Duchess's Drawing-room, is fifty feet long, thirty-five feet wide, and eighteen feet high. The frieze, which was designed and executed by Valdre, composes a "Triumph" and "Sacrifice."

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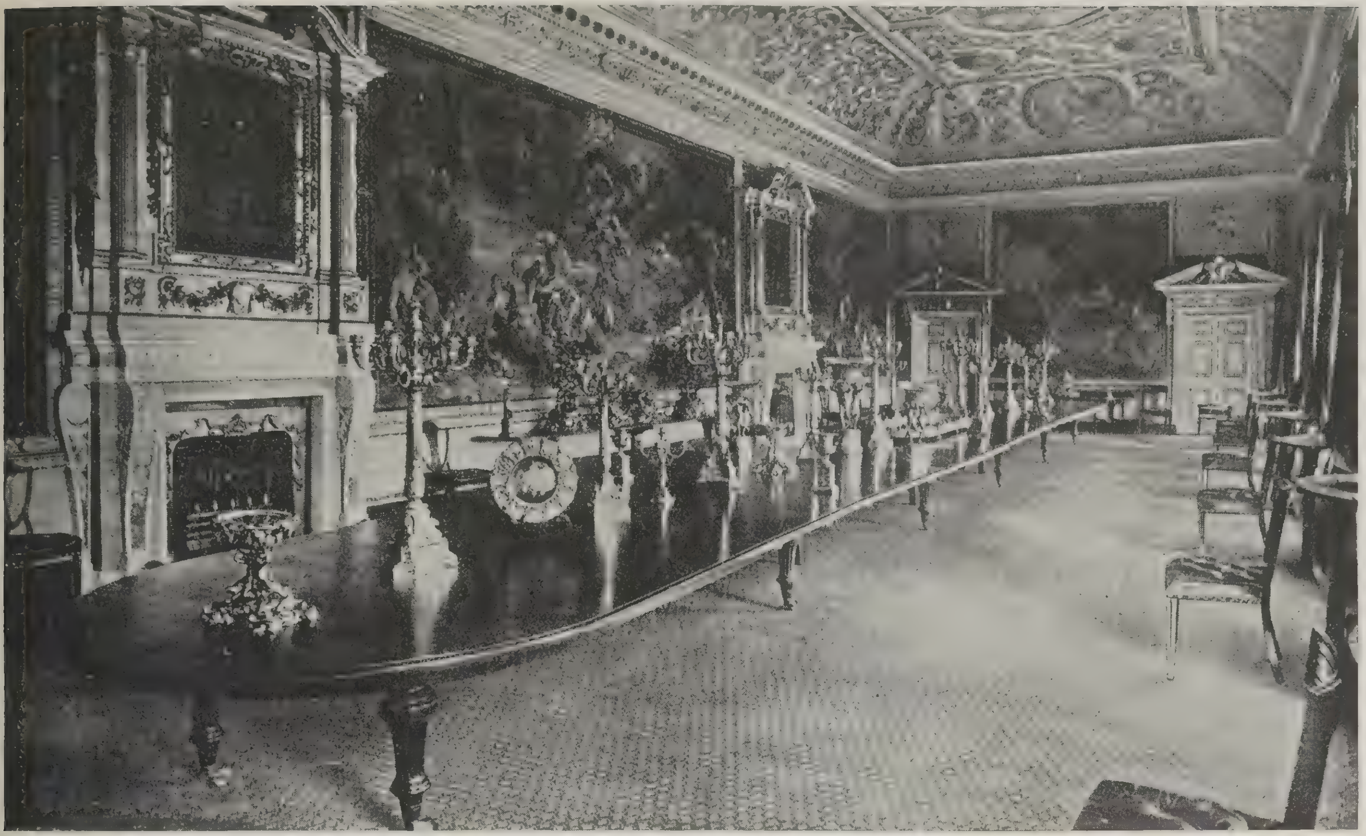
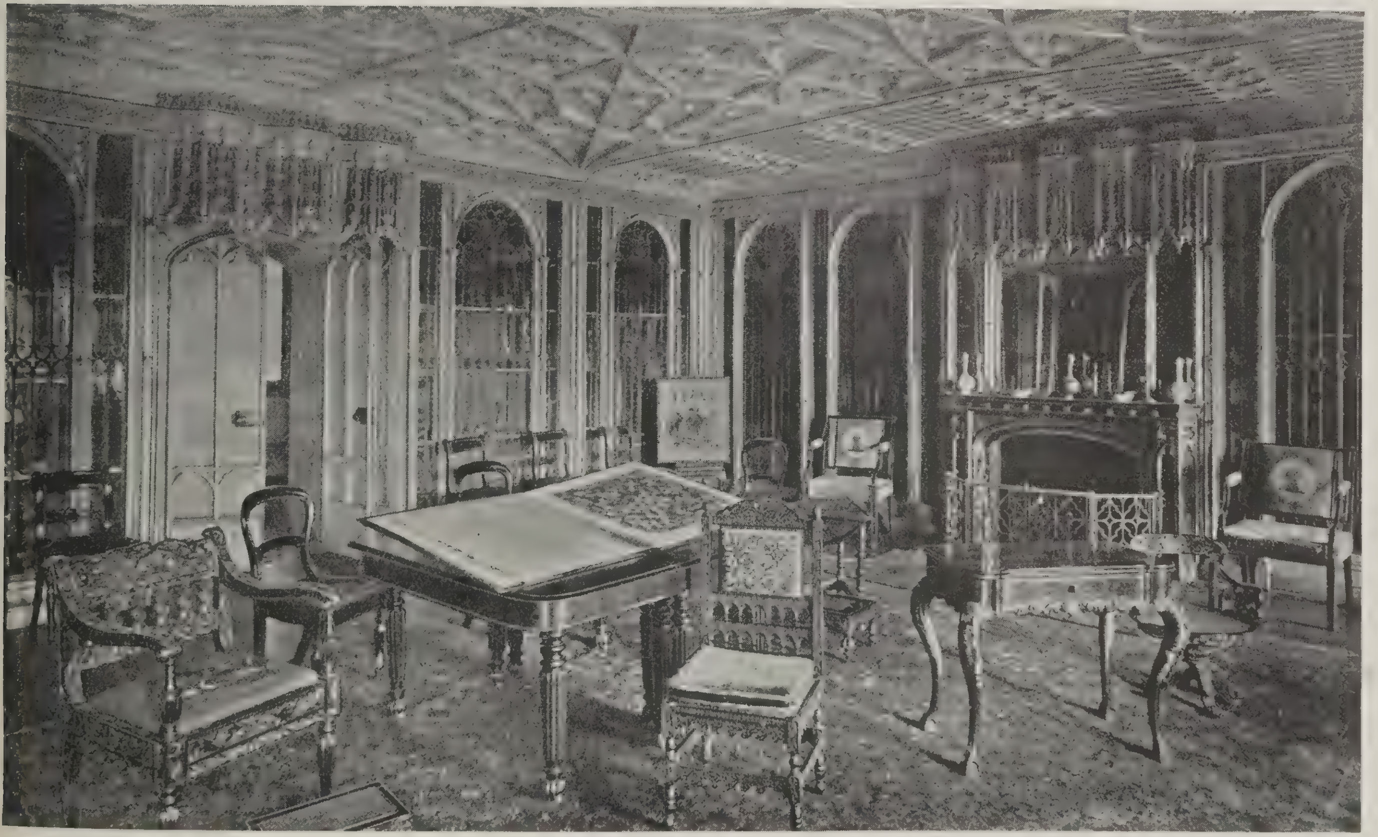
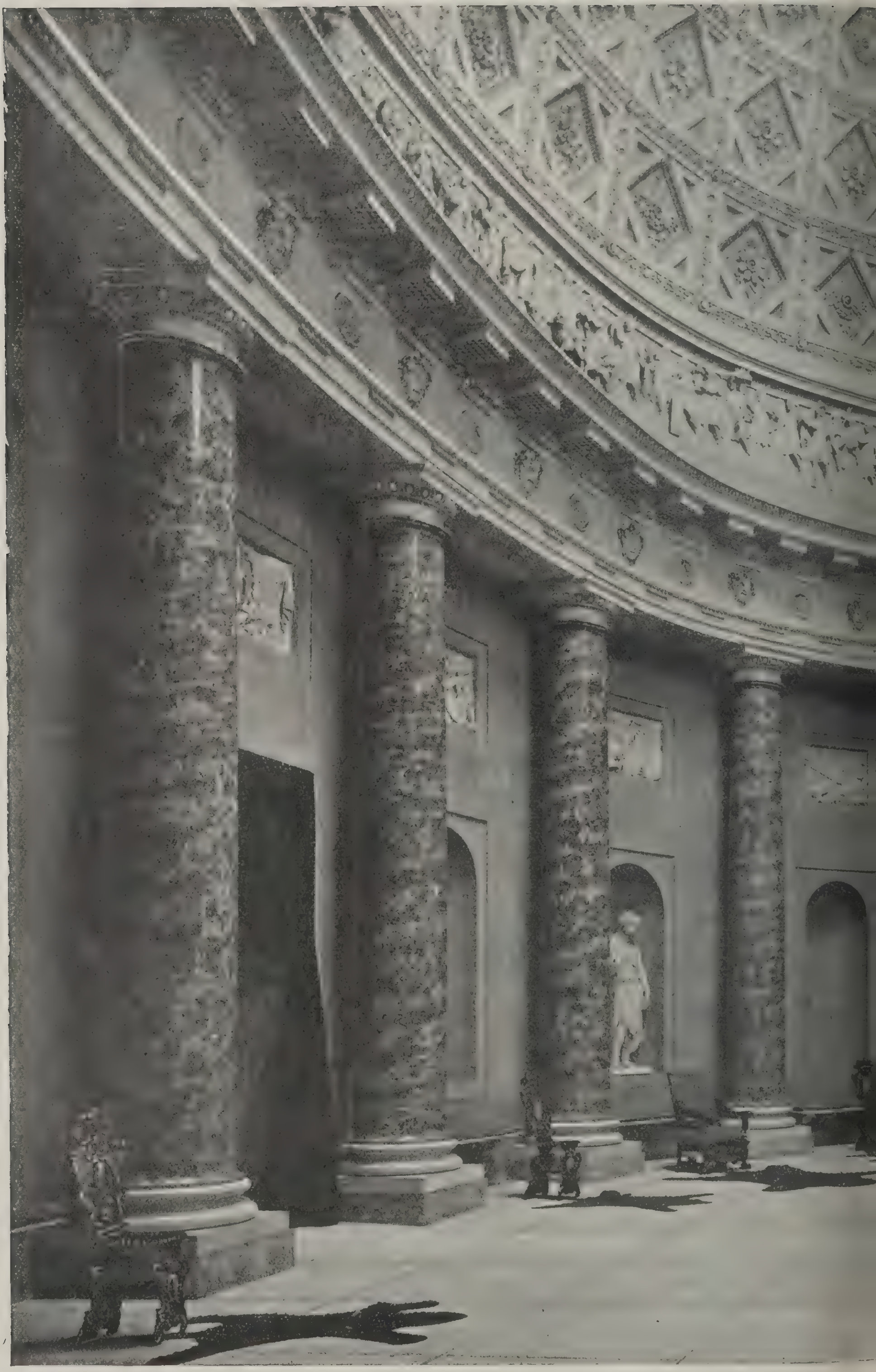


THE OLD STATE DINING-ROOM.
This will now be the Dining-hall for about 200 boys.



*Photos: R. & H. Chapman, Buckingham.*

THE GOTHIC LIBRARY.
This apartment—designed by Sir John Soane—is now the Headmaster's study.



STOWE, BUCKS: THE MAR

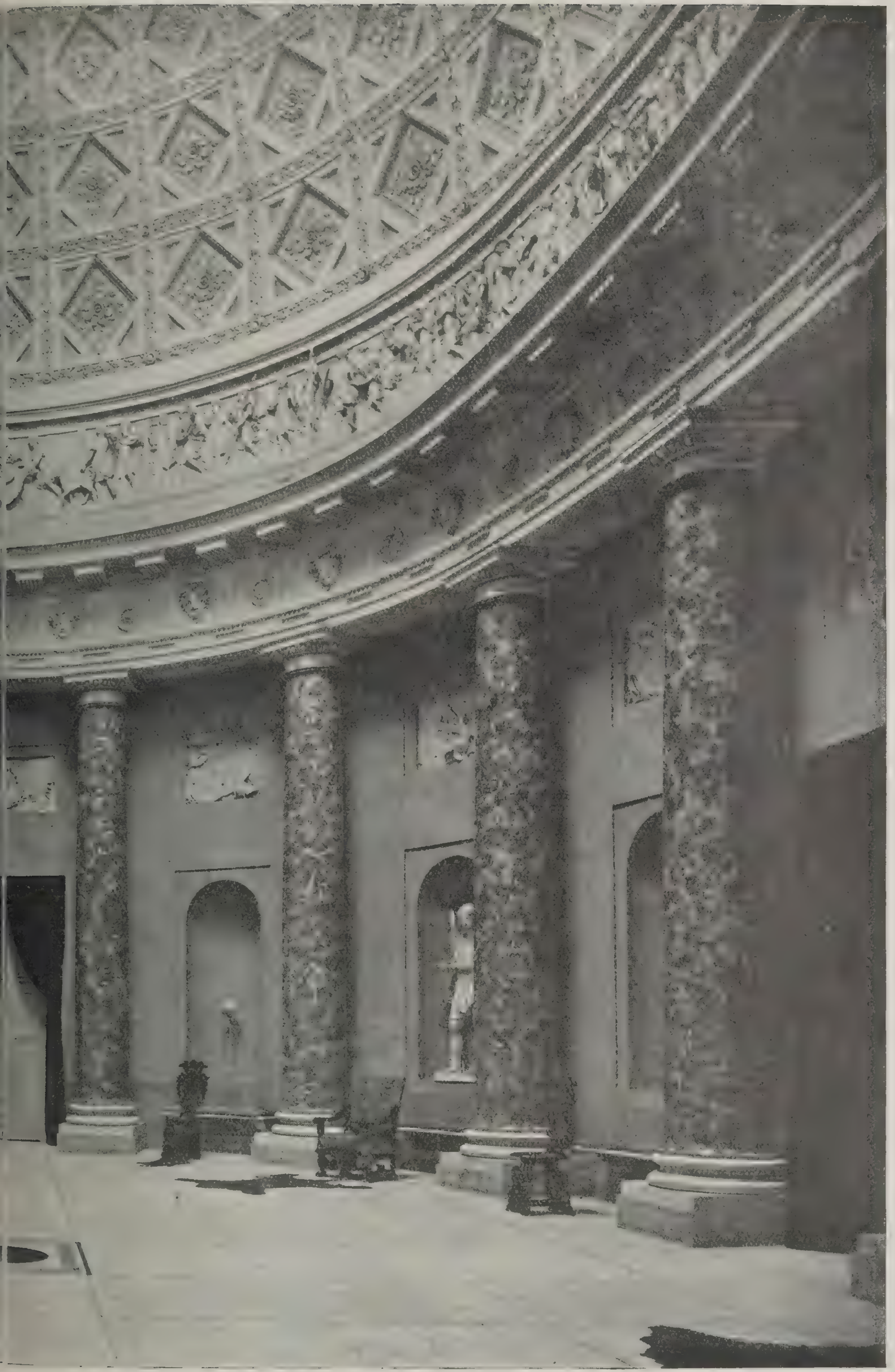


*Photo: R. & H. Chapman, Buckingham.*

E SCHOOL ASSEMBLY HALL.)

floors that provide for the running of pipes without undue labour or disfigurement in the most fortunate fashion—which is well, considering the generous scale on which sanitary fittings are being installed. The headmaster has been found a most attractive suite, facing south, on the lower ground floor, which includes the engaging Gothic library, designed by Sir John Soane; whilst the housemasters will be happy in the occupation of minor state rooms, some of which have considerable architectural pretensions.

For the present the beautiful little chapel, with its cedar-panelled walls and its Grinling Gibbon carving, will be used for the school services, whilst later on, and pending the building of their own chapel, the parish church, a stone's-throw from the house, will no doubt be used.

The dormitories fall conveniently and naturally into four main groups, served by four independent stone staircases, each suite having its appropriate toilet-room adjoining. A remarkable thing at Stowe is the abrupt way in which architectural interest ends at the tops of the staircases, where all the bedrooms, though spacious and well lit, are treated in the most severely practical fashion and with little or no ornamentation, except for here and there a good mantelpiece or a delightful eighteenth-century wallpaper, still in perfect and unfaded condition.

It is only from the highest point of the roof, which is mostly of lead and copper, that one gets an idea of the great extent of this prodigious house, and the ingenuity with which the numerous additions and subsidiary buildings have been welded into a coherent and still-balanced whole. Perched among the chimney-tops and great water tanks is a delightful little two-roomed observatory, sheathed in green copper and provided with telescope emplacements, that carry down in solid masonry to the foundations of the house—a feature of which the scientific side of the school will, no doubt, make great use, a fine telescope having been already presented by the father of one of the boys entered for the first term.

Of the unique collection of monuments and temples that grace the park we must speak another time, when the urgent work at the house itself may have been completed and Mr. Williams-Ellis may be free to give their preservation and repair the careful consideration which they so conspicuously deserve.

Mr. Roxburgh, the headmaster elect, in a recent speech, said: "Now, what exactly are we going to do? I was looking at Percival's Life the other day, and I seemed to read there that he made Clifton into a little Rugby. I understand, too, that something of the same kind was done at the foundation of Haileybury. Now, I am a Carthusian, and a loyal one, and I have been for many years at another public school. But Stowe is not going to be a little Charterhouse, or a little Lancing; it is going to be a little Stowe, and, very shortly, it is going to be a big Stowe. Lord Gisborough has also told you something of the stoics of the future, and I can only add this to it: that we have entries for every term but two till 1934, and this morning I received the latest entry of all—one for September, 1934. We have another for May, 1934.

"With regard to work. First of all, science. No one will suspect a new school of being about to neglect science. Our science laboratories are being prepared, but we have already at Stowe a first-class biological laboratory in our five hundred acres of beautiful English wood and lake and park, and when our boys have made a complete biological survey of this they will have learnt something and, I hope, enjoyed themselves. We hope to do well by languages also at Stowe, and there is one language in which I am particularly interested—a language of which all Englishmen have need—when they do their business, when they write their letters, when they discuss their golf, and when they propose to their sweethearts—the English language itself. Sir Henry Newbolt's committee pointed out, in their report, that the culture of France is not better than that of England, but only more diffused. It is based upon the French language, which is the common possession of all Frenchmen, and such a state of affairs can and should be reproduced in England. We shall see what we can do about that at Stowe. There are two other languages which often exercise the parental heart—Latin and Greek. Now there are some boys who are able to get no good out of even elementary Latin, and others who do get good out of elementary Latin but not out of advanced Latin, and for both these classes we will make provision. But for most boys I firmly believe that there is no more potent instrument for teaching clear thought and clear expression than the early stages of the Latin language. Greek we shall give to the boys who deserve it, and to no one else.

"One speaks of education with very great diffidence before an ordinary audience, for in no other science is the man who has thought about it more often and more flatly contradicted by the man who has not thought about it at all. But here we are all friends, and I can say of our profession what I have in my mind to say. We schoolmasters are a despised profession. People are polite enough, but in our hearts we know that the world in its heart despises us. We are held to be dull and dusty fellows—fossils, when we are not eccentrics—and socially, of course, no good at all. It is true that out daily business and our immediate interests are concerned with dull and dusty things—with blackboards and dictionaries and corrections in red ink; but the world should not forget, what we ourselves can never forget, that our ultimate hope and purpose is the making of men. I said just now that boys for the most part educate themselves, and we all know also that in the athletic and corporate life of a great school we have a man-making machine, which, on the moral and physical side, is unequalled in the world.

"There is one more thing that we can teach boys at Stowe, or one more thing that we can let them learn. You will know what I mean if you have ever looked up one of our long, green valleys at the great south front of Stowe in the soft light of a spring day. Perhaps you stood where you could see the lake, too, and, near by, where the wood comes forward into the green, you may have had a glimpse of an Ionic column, or the corner of a Doric frieze, just catching a glint of sunlight, like a shy nymph among the branches, and, at the back of all, the great pillared house itself. If you have such memories as that of Stowe you will know what I mean when I say that if we do not fail wholly in our purpose every boy who goes out from Stowe will know beauty when he sees it all the rest of his life."

The constructional and decorative work necessary to convert Stowe into a public school has been entrusted to Messrs. W. H. Gaze & Sons, Ltd., of 10 Conduit Street, W.1, and Kingston-on-Thames.

Messrs. Beaven & Sons are responsible for the heating, hot-water supplies, plumbing, sanitary work and water supplies, and Messrs. Girdlestone & Co. for the electric installation and electric steam cooking plant. The consulting engineers for the water supplies and drainage are Messrs. Rogers, Field & Bean, and the resident engineer is Mr. W. J. Leeming. The auctioneers for the sale of Stowe House were Messrs. Farebrother, Ellis & Co., of London.

The combined steam and electric installation at Stowe, by Messrs. Girdlestone & Co., is similar to that at St. Paul's Girls' School, Brook Green, Hammersmith. At St. Paul's the electric equipment includes a six-plate boiling table, two large roasting ovens, a two-tier pastry oven and two large fish fryers. The steam apparatus is supplied from an independently fired boiler, capable of working up to 60 lbs. pressure and comprises a carving table, hot cupboard, potato steamer, pudding steamer, vegetable boiling pan and soup boiler. There are two double-door electric ovens, each of which has a capacity of 130 lbs. of meat and a maximum loading of 8 k.w. Switches, fuses and pilot lamp are located on the oven top. The two fish fryers have a loading of 5 k.w. each and the two-tier pastry oven has a capacity of 9 cubic feet and a maximum loading of 5 k.w. each. In this type of oven the heating elements are arranged top and bottom, as that arrangement best meets the requirements for pastry cooking.

# The Restoration of Fallodon

## G. REAVELL, F.R.I.B.A., and W. A. TEBBS, L.R.I.B.A., Architects

N April 1917 this residence, the Northumberland seat of the Right Hon. Viscount Grey, K.G., was destroyed by e, the servants' wing alone escaping. The strictions in all the building and allied lustries, due to the war, prevented the mediate restoration of the house, but rk was commenced in 1921 and is now awing to a conclusion. The old house s a quiet type of Georgian, one of the v mansion houses in the county built brick, which, local tradition says, were ade for this purpose only from clay dug the estate. It was relieved by stone nices, copings, and window dressings.

The old plan has not been followed, but spirit of the old work has been reated. The mellow old bricks were efully salved and sorted to form the terior face of the new building, and ch of the old weathered stonework has en re-used. The roof is of green Westrland slates, and the windows and ternal doors are of oak.

Fire-resisting floors are constructed oughout the new building, and they covered with oak blocks.

The top-light to the hall is formed ch outer glazing in the roof and inner zing on the curved line of the ceiling. e electric lighting of the hall is arranged mediately above this inner glazing.

The staircase and its balustrade are in k, the latter being carried round the per part of the hall forming a gallery ing access to the principal upstairs ms.

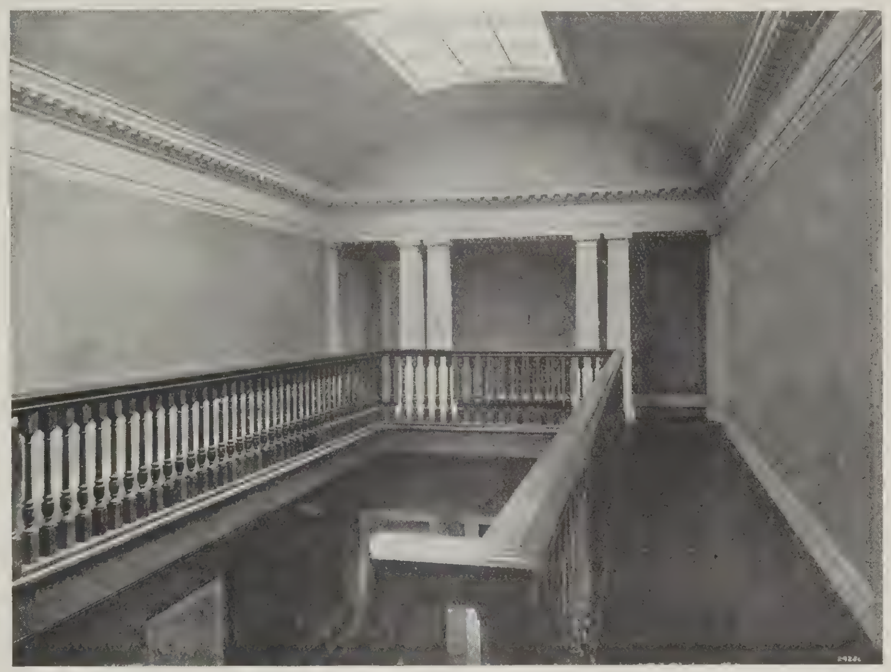
he bookcasing is on an extensive le and is built of cedar, preferred for fragrance, which is alike tasteful to human and distasteful to the literal kworm.

entral heating is installed. The fires of the "Well" type, and the mantelpieces have been designed for their various positions.

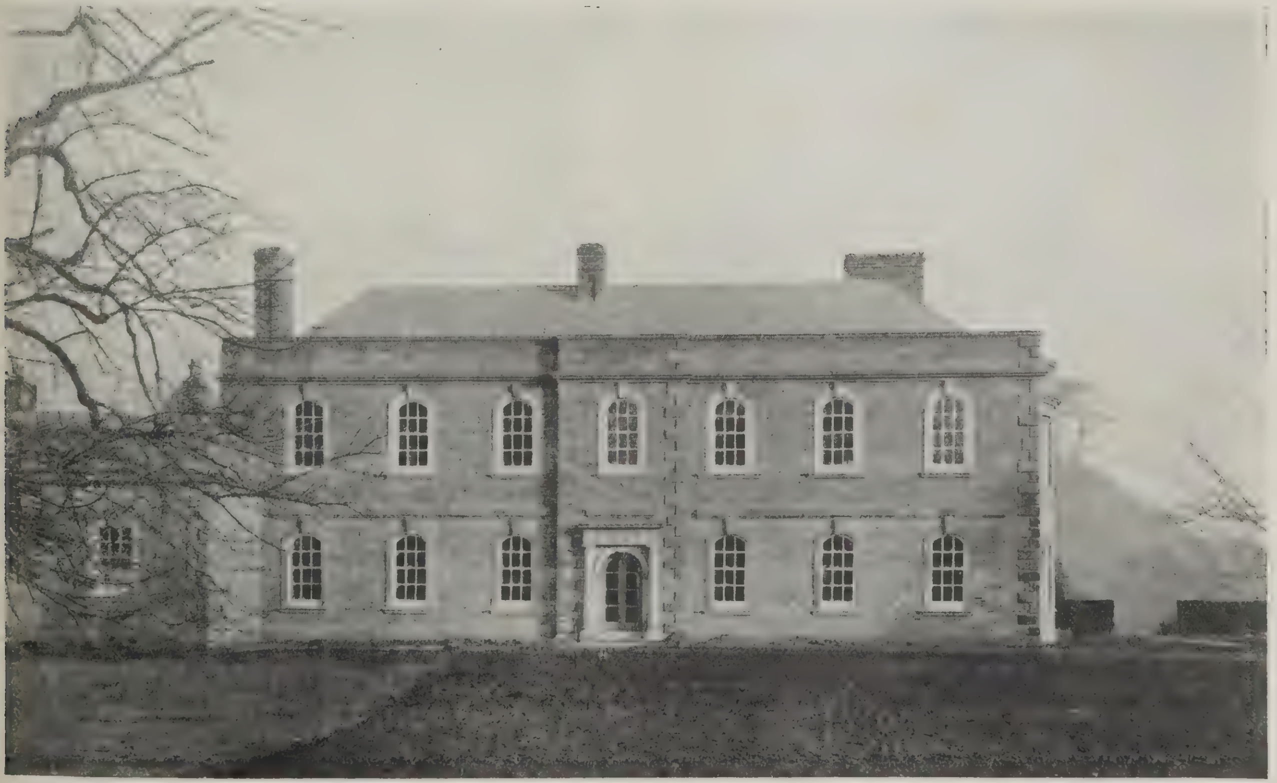
The work has been carried out by the following firms: General contractors, Messrs. R. and G. Brown, Amble, Northumberland; plumber, Mr. James Wood, Alnwick, Northumberland; slater, etc., Mr. H. Lyall, Amble, Northumberland; plasterer, Mr. J. Purdie, Alnwick, Northumberland; painters, Messrs. R. MacKenzie and Son, Sea Houses, Northumberland.

The central heating and grates were by Messrs. Henry Walker and Son, of Newcastle-on-Tyne; the bookcases and mantelpieces by Messrs. Sopwith & Co., of Newcastle-on-Tyne; the oak staircase by Messrs. H. H. Martyn & Co., of Cheltenham; fireproof floors by the Kleine Company; electric light by Messrs. Falconar, Cross & Co., of Newcastle-on-Tyne; block floors by Messrs. E. B. Burgess & Co., of Liverpool; and tile floors by Mr. G. Spence, of Newcastle-on-Tyne.

The whole work has been carried out from the designs of the architects, Messrs. G. Reavell, F.R.I.B.A., and W. Arthur Tebbs, Licentiate R.I.B.A., of Alnwick, who supervised its execution throughout.



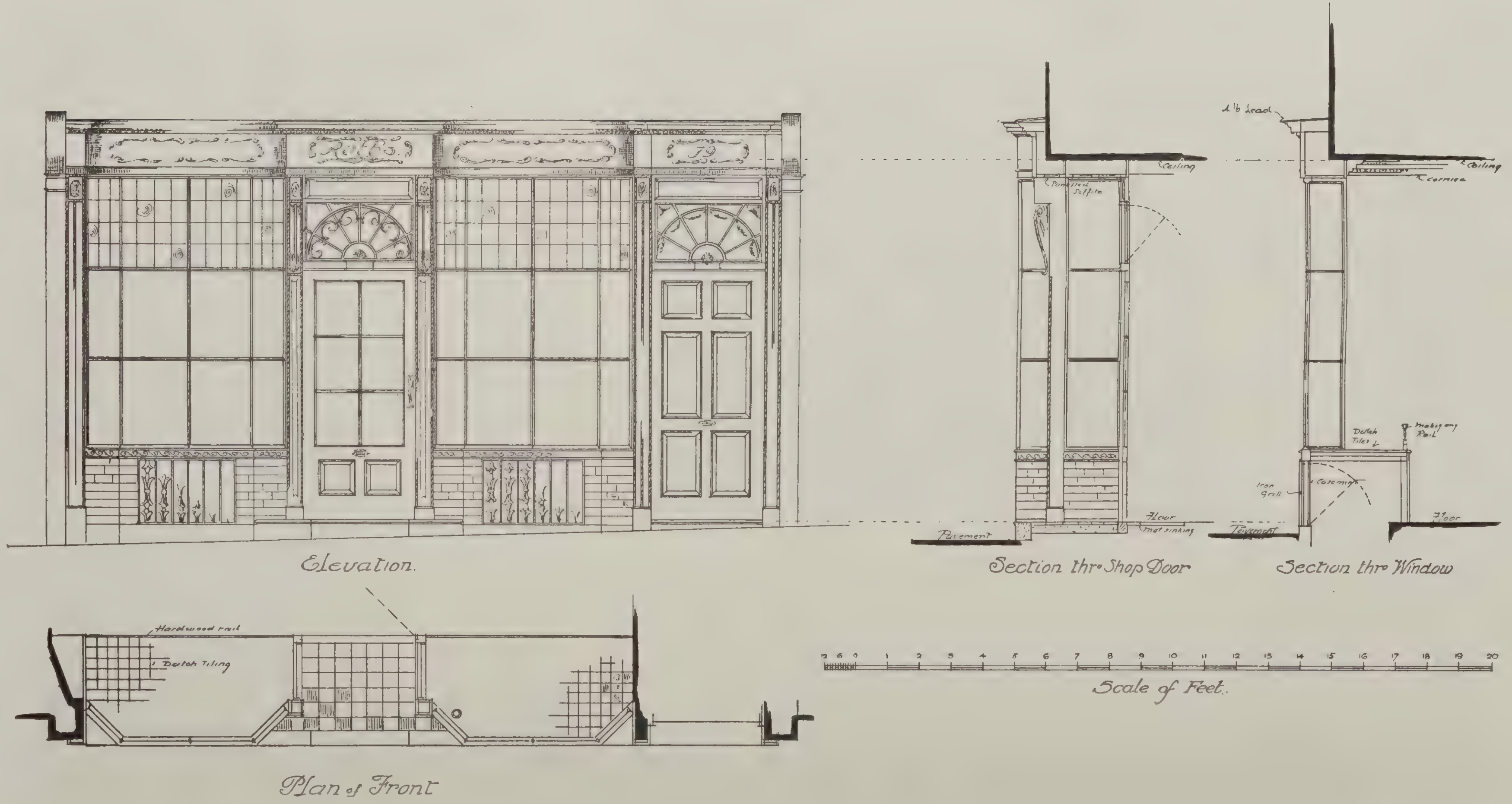
THE LANDING.

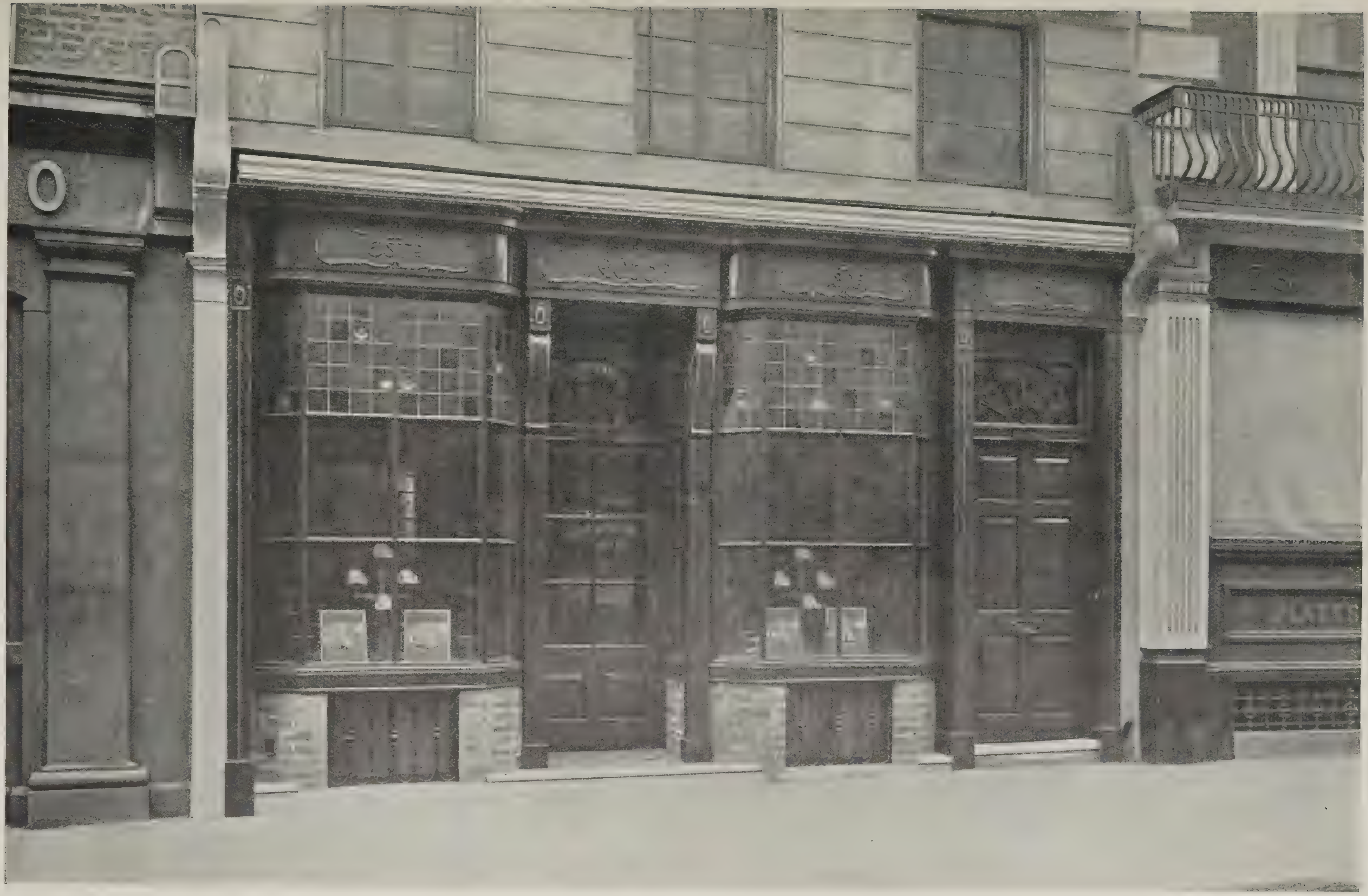


THE GARDEN FRONT.

# Shop Fronts. 12.—New Front for Messrs. Alex. Robb & Co., St. Martin's Lane, London

Delmé G. Mootham, A.R.I.B.A., Architect





This new shop front has been designed to conform with the old traditions of the firm. It replaces an old one of no architectural character. The new front is of American white wood and oak, and the moulding is hand carved, with the exception of a small rope pattern mould. Hand-painted Dutch tiles are used inside the windows, and the entrance lobby is in black and white square tiles with white marble step. The furnishing colour is apple green. The interior of the shop has been re-modelled to meet the requirements of a modern restaurant.

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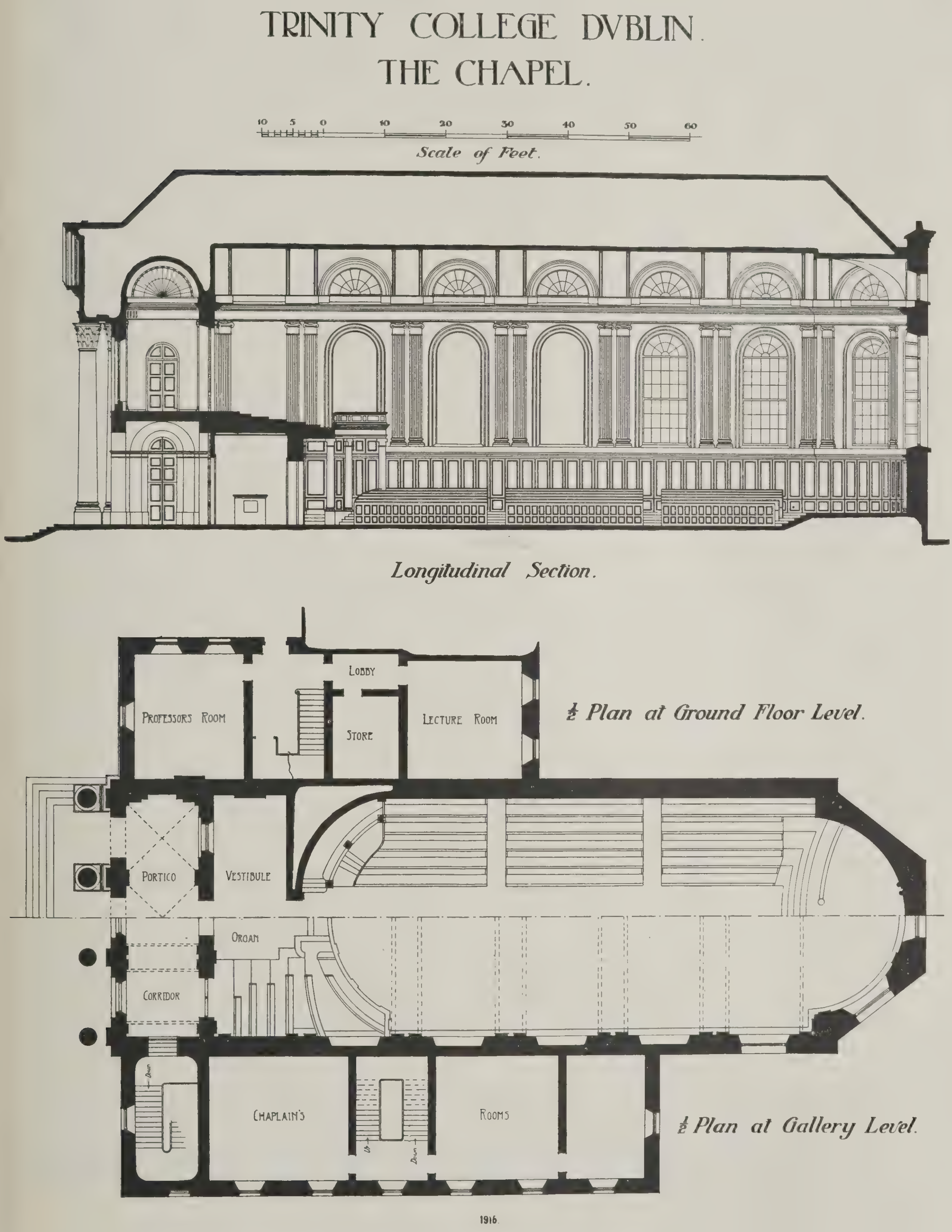
# Measured Drawings. 25.—The Chapel, Trinity College, Dublin

Measured and Drawn by Wm. N. Spence, A.R.I.B.A.



The Chapel is situated on the north side of the quadrangle facing College Green, and is balanced on the other side by the Examination Hall.

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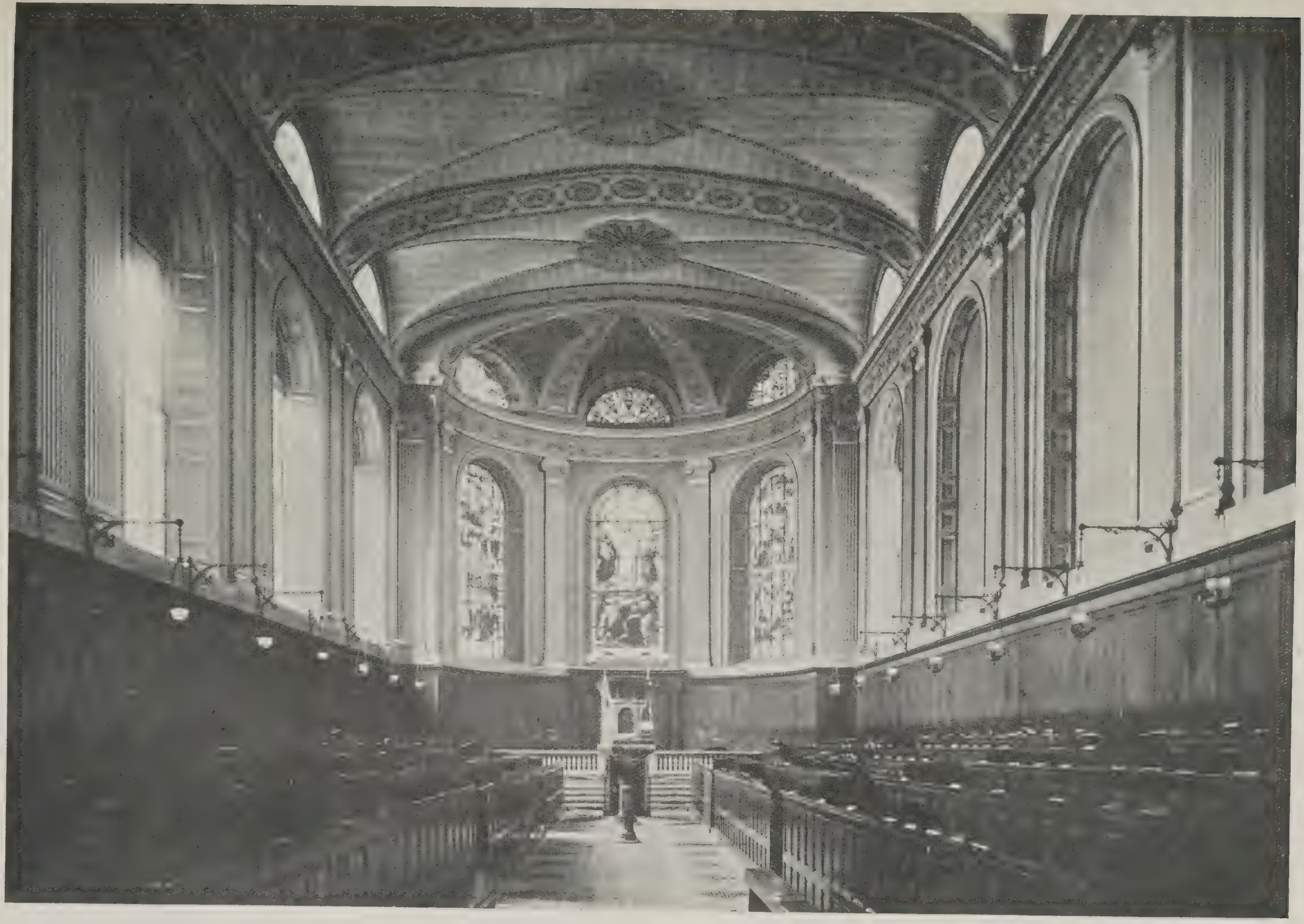
## Architecture of the Eighteenth Century. 22.—The Chapel, Trinity College, Dublin



The interior of the chapel is beautifully panelled in oak up to the sill level of the semicircular-headed windows ; the upper portion being treated in plaster with coupled Ionic pilasters supporting the cornice. The view shows the apse at the east end ; at the west end is the organ-gallery.

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# Book Reviews

## A Merry Mixture

. Simpson's book is good. It would So good that I had to read to the last page but one before I came grounds for the grumble without 1 no review can appear either com- or sincere. It is Twashtri that s me.

gh among the half dozen greatest ures of life is, I suppose, that of ging to the European civilization. doesn't often remember to give ks for the blessings of life, but he times gives rein to conscious pride 1 is a heathen kind of way of acknow- ng one's privileges, and I for one t that to be a descendant of Greece Rome, via the thirteenth century nown in Europe) and the Renais- (as practised in Italy), seems so esting an excuse for family privacy the mind says "not at home" to cal callers.

yhow, Twashtri has intruded on me than once, to my dismay.

ell remember Mr. Simpson's delivery ie scholarly address to students, 1, under the intriguing title of silio Manuque," figures as the last e in the present book. I resented trusion even then, partly, I admit, se being in the mood to "carry on" Simpson I should have preferred ords of his own to a quotation. (If ter or speaker is modest enough to a quotation at all he should start it, and it is only a certain degree of desty that encourages any human to write or speak at all.) But annoyed me most was the incursion oriental (god or not) into a quiet oean evening. If I could have got y predecessor in the chair of the ute before he prepared these papers e Press I would have entreated him it Twashtri back in his oriental n, even though this would have d Major Barnes of the second-best nce in his truly dainty preface. y is a poor word, but it fits the crisp remarkably soigné little patch of which stands as fore-court (the 's word) to the main building.

Simpson is at his happiest when he iting, as we can see, with two or brown-backed French octavos at bow and his mind outrunning his vith memories of the Paris that he s so well. It is in this mood and a shadow of John Bunyan very y disposed that he has given us his tract on Louis XIV and Colbert. s a cheery account of the works at illes, and the glimpse of parental gs between Colbert and the giddy Marquis who acted, when he could time from visits to Paris, as clerk rks at the Palace, is an illuminating e of the times and manners that ance synchronized with England's . The author has handled it all great sympathy, and his reserves of edge bubble out into footnotes ver his good taste has realized that would overweight the light going of xt.

h this essay should be classed that e Place des Artistes, a clever his- l study of town-planning in the of the French Revolution, and another styled the "Strange Fortunes of a King's Monument." Neither of these could have been written by anyone whose knowledge of the facts of Paris was in the usual sense merely derivative. Without suggesting that Mr. Simpson had means of personal access to Paris in the seventeenth and eighteenth centuries, I do wish to imply that no one who had not moved and lived, and had a good bit of his being among Paris streets, Paris men, and Paris archives could have put into these lightly-written records such a basis of historical reality.

If I say that Mr. Simpson is at his happiest among these things I do not mean that he makes his readers less happy in the others. Far from it.

There are only two things amiss about his lecture entitled "Architectural Principles in Engineering," and those two things are the third and fourth words of the title. The discourse is a useful exposition of certain main principles of architecture, and I take it that it was only a respect for his hosts on the occasion of its delivery that induced him to frighten architects away by the suggestion that it was food for engineers. There are some honest and true sayings in this little treatise; there is a forcible allusion to the value of that "recognition" which lies so near the heart of the secret of traditional architecture, a brave sentence on the danger an architect runs by "over-emphasis of some particular feature," and a canon or two whose aim is good.

For merriment choose specially "A War Memorial of the Last Century." And, if you are one of those dutiful architects who read their Laodicean over again at intervals of, say, five years, take it just after your next perusal. You will then have fresh in memory the identity of Mr. Havill, you will know how to take a ticket for "Toneborough"; Paula, the enchanting Paula, will not be to you a mere name, nor will you be lacking in sympathetic interest for Mr. George Somerset.

How strange it was that during the Wellington period two, three, or perhaps more designers of obelisks were deceived into the notion that something dignified could be made out of a *stele* of triangular plan. These things can be made to look sober on an elevation, but in perspective, save from three very limited and sometimes inaccessible points of view they are drunk—drunk as lords.

PAUL WATERHOUSE.

"Essays and Memorials." By John W. Simpson, PP.R.I.B.A. London. Price 12s. 6d. net. The Architectural Press. 1923.

## Ancient Egyptian Art

This admirable book is a translation by Mr. Warren R. Dawson of the introductory chapters of Professor Capart's "Leçons sur l'Art égyptien," published at Liège in 1920.

Monsieur Capart, who is keeper of the Royal Museum Cinquantenaire, Brussels, and professor of Ancient Art and Archæology in the University of Liège, is a well-known author and authority on ancient Egypt. The translator states in the preface that in studying the "Leçons" he was struck by the difference in plan between them and most other works on Egyptian art. The latter, he truly observes, although mostly excellent books, are really little more than catalogues of known works of art arranged in chronological order, or disconnected studies of special subjects. Monsieur Capart goes deeply into origins and motives and bases his work on evolutional lines, the result being a most suggestive book which will appeal to all lovers of ancient art, and which we are grateful to Mr. Dawson for giving to English readers.

The introductory chapters bear on the geographical characteristics of the country and its building materials. An account of the various dynasties and their dates follows, with a few examples to give a general idea of the works of each period. Prehistoric upper Egypt is dealt with, its pottery, and rude attempts at sculpture and painting. The first monuments of the earliest historic period are then shown to have reached the highest perfection in Egyptian art, often coupled with the extremest simplicity, and the persistence of forms and types from this first dynasty right down to Roman times is pointed out.

The architectural origins of certain hieroglyphic signs, in which plans denoting houses, castles, palaces, and granaries are shown, and the curious conventions of Egyptian drawing are ingeniously explained. A chapter is devoted to the elements of building and the use of various materials—mud, wood, plaster, stone, and metals. Examples of brick vaulting of the third dynasty, some 4,000 years B.C., are shown, and it is curious to note that although the ancient Egyptians were well acquainted with the principle of the arch from the earliest times, they only used it in brick. Stone roofs, semi-circular or semi-elliptical in form, are well known, but they are all constructed on the principle of the corbel, with level beds and not with radiating joints.

An illuminating study of the origin and characteristics of Egyptian pillars is given and there are many good illustrations of those derived from the lotus, the papyrus, and the date-palm. The architecture that has come down to us in the temples and tombs is very different from that used in their domestic buildings, which were probably of brick, wood, and stucco, as indicated on a Theban painting and described to be of elegant and slender proportions. In the opinion of the author the vast and majestic buildings which now survive give us no more than a faint echo of the real creation of ancient Egypt. He thinks that in copying the vernacular work into stone for their temples, which were to be everlasting, the Egyptian architects modified the character of these buildings to such an extent as to actually deform them.

The book is well illustrated, but unfortunately no reference is made specifically to any of the sixty-five excellent plates; in future editions it would greatly add to convenience if the plates were numerically referred to in the text. The term "pillar" and "column" are somewhat loosely employed, we also note that "grooved" should be fluted, "gorge" cavetto, and "basement" dado. The description of the curved stone ceilings in the temple of Deir-el-Bahari as being akin to the pointed or ogee arch is not correct; the shape of the ceilings in the chapels of Thutmosis I and Anubis closely approximate to semi-ellipses, the minor diameter being the span, and half the major diameter the rise. A useful feature of this book is the copious bibliographical notes which are printed at the end of each chapter, which show the erudition and learning of the author, and will be most useful to students.

J. E. NEWBERRY.

"Egyptian Art, Introductory Studies." By Professor Jean Capart. Price 16/- George Allen and Unwin.

## The Principles of Lighting

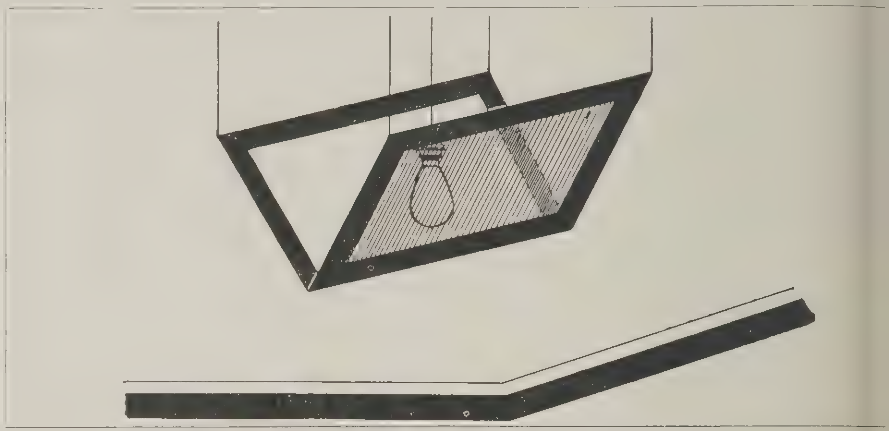
Although our knowledge of illumination, both natural and artificial, has, during recent years, advanced to the stage of a more or less exact science, the essentials of good lighting are by no means generally or adequately known amongst those whose business it is to apply them. For this reason alone, a work which purports to describe the elementary principles of illumination is to be welcomed. The fact that it is written by one who is not only a Master of Science, but also a Master of Arts, raises the reasonable anticipation of lucid as well as of erudite explanation; whilst the position of the author at the National Physical Laboratory is a pledge of scientific accuracy.

A foreword by Sir J. Petaval suggests the further ideal that the book should, within the limits of its scope, further that particular adaptation of knowledge to the requirements of civilized people in which science and common sense advance hand in hand.

The reader will find none of these expectations unfulfilled. Rather has the author added to them a studied simplicity of diction and a clarity of expression which will help to dissipate much of the false mystery with which the science has been invested by the use of unfamiliar terms somewhat terrifying to the beginner. The mental processes by which architects arrive at results are essentially practical and objective, and their well-known antipathy to the paths of abstract and mathematical science is neither unreasonable nor unwise. But, unfortunately, this renders them particularly sensitive to those inaccurate notice boards so often set up by interested specialists, to the effect that the fields of illumination are beset with scientific spring-guns and mathematical man-traps.

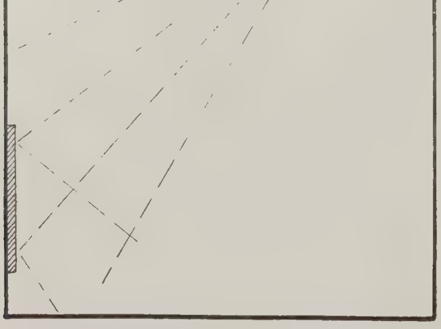
The freehold of illumination belongs of right to the architect, for the ultimate criterion of its merits or defects lies in the judgment of the human eye.

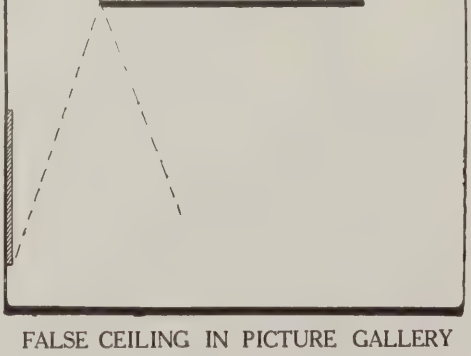
But architects must assert and prove their titles, and that without delay, if they are not to see them extinguished by the squatter's rights of lighting engineers, who ought to be merely their tenants at will.


TRANSLUCENT SHADE USED BY ENGRAVERS.

This book should appeal to the architect by its clear common sense, by its commendable restraint, and by the transparent honesty with which the author limits himself to statements of which he has reason to be sure; no less than by the courtesy with which he treats his readers as intelligent persons, and not as children who should run away and play when difficulties are encountered.

As a description of the elementary principles of illuminating engineering it is excellent; and it is only very occasionally when applying those principles that the author is apt to expect a little too much from the non-technical reader. The number of worked-out practical examples is somewhat meagre. This may be due to wise considerations of size and cost; but one principle applied to a practical problem and worked out in detail is worth a score left with mere explanation, however lucid. This will doubtless be rectified in future editions, but an arithmetical slip on page 189 in the application of the principles of reflection to a case of flood lighting might, v advantage, be corrected by an inser slip in the present edition.


METHOD OF NATURAL LIGHTING FOR PICTURE GALLERIES


FALSE CEILING IN PICTURE GALLERY LIGHTING.

The calculated figures of emis brightness of a surface receiving illumination of 10 foot-candles and to reflect back one half are given as average of 1·5 candles, viz., 3 can in a direction normal to the surface 0·75 candles in a direction inclined 60 deg.

These figures, casually read, do appear to be unreasonable, and therefore the more likely to confuse student later. They should be 1·5 candl a direction normal to the surface, or, n correctly, $\frac{10}{2\pi}$, say, 1·6 candles; average of the candle-power in all di tions, which is also the candle-powe 60 deg., being one half of this, or candles.

This is the only error revealed b somewhat careful perusal.

A list of publications and art dealing with the subject is given i useful bibliography at the end of the b This might perhaps have been m somewhat more complete in view of fact that the author gives its inclusio a reason for not stating in the text the sources of his information. Ur tunately, he generally does this regard to extracts from the Transact of the Illuminating Engineering Soc of New York; but he apparently assu that work in this country is too known to need any mention. Even name of the corresponding Illumina Engineering Society in London is mentioned, numerous extracts from Transactions appearing under the des tion of excerpts from "The Illumina Engineer"; or are given the general which is defined on page 198 as refe exclusively to the New York Society

The ordinary reader, noting the sence of names with which he is mo less familiar, can scarcely fail to ga the impression that little or nothing been done in this country to advance science of illumination, a subject which the architect is daily concer as distinct from the photometry of sources, a subject in which he is remotely interested.

Yet this book itself, if read with f knowledge of the authorities whic quotes, would show that this country no reason to be ashamed of the qu or of the volume of the original contr tions which British investigators made to our knowledge of illumina even in comparison with work on

ıtinent and in America, where re-
rch laboratories are far more numerous
l more generously equipped than ours.
'he custom which requires the compiler
ı text-book to communicate wherever
sible with any authors whom he
ires to quote is troublesome, and often
ns to be unduly punctilious. But it
its advantages, not the least of which
:he occasional disclosure of later or
:e accurate data, and the results of
er experience.

Vith this exception the book is in many
ʼs a model of what a scientific book
uld be. From cover to cover the
ler feels that, although he may be
ding strange and unfamiliar paths, it
ı the company of a most considerate
ıle, whose unceasing care it is to re-
ʼe all possible difficulties. The index-
type, and illustrations are excellent,
the book is one which can strongly
:ecommended as a sound investment
moderate price.

PERCY J. WALDRAM.

'he Elementary Principles of Lighting and
ometry." By John W. T. Walsh, M.A., M.Sc.,
t.P., A.M.I.E.E. 9 in. by 6 in. 220 pp., 85
ations. 10s. 6d. net. Methuen.

## Soane and the Bank

Not for many a year has the Bank of England been the centre of so much public interest. This is due, first, to the somewhat dramatic announcement of the owners that they intend to extend the building, and secondly, to the decision of the Corporation of the City of London to widen one of the flanking streets. As an architectural composition the building has character which is still the subject of many diverse opinions. Undoubtedly the bank is Soane's masterpiece, and the student would do well to take Mr. Bolton's advice and "examine it with respect and attention, and decide for himself what it may be that he himself finds to be lacking from the point of view of the highest standard of the old masters." It is, however, generally agreed that the building has a unity which gives no idea of the additions and transformations by which it assumed its final form. This was a remarkable achievement and an outstanding monument to Soane's ingenuity and skill. This unity is all the more remarkable when it is recalled that Wren spent thirty-five years in building St. Paul's, whereas Soane was for so long as forty-five years architect to the bank. The last work of Soane was the State Paper Office, of 1829–1833, in St. James's Park, now no longer existing. It shows the definite influence of the new star then rising, as it belongs to the Astylar Italian, which Barry was then introducing at the Villa Attree, Brighton, and the Travellers' Club, in Pall Mall. The career of Soane thus runs through from Adam and Chambers to Barry. Born under George II, he lived through the long reign of sixty years of George III, through George IV and William IV, the last of whom knighted him in 1831, and his death took place only five months before the accession of Queen Victoria. Mr. Bolton is a well-known authority on Soane and his period. He is the author of numerous publications, and ably occupies the curatorship of Sir John Soane's Museum, one of the most interesting architectural exhibitions in London.

"Life and Work a Century Ago: An Outline of the Career of Sir John Soane, R.A., F.R.S., F.S.A." By Arthur T. Bolton, F.S.A., F.R.I.B.A., Soane Medallist, Curator of Sir John Soane Museum. Price 6d. net. Sir John Soane Museum, 13 Lincoln's Inn Feilds, W.C.2.

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# The Acoustics of the Auditorium

## By G. A. SUTHERLAND

ƆR his third lecture at University
College, London, Mr. G. A. Suther-
land took for his subject "Special
ns of Auditorium and their Peculiar
ures." He said adequate loudness
he auditorium is assured if every
ber in the audience receives one-
nth of a second as much sound as he
d receive by a direct beam if situated
more than 50 ft. from the speaker.
small room this is automatically
ned if the speaker has an uninter-
ed view of the whole audience, no
ber of which is at a greater distance
him than 50 ft. In a larger hall re-
ng surfaces must be so arranged that
gh reflected sound reinforces the
t beam within one-fifteenth of one
ıd to make up the 50 ft. intensity.

e ceiling provides one obvious sur-
and in a long room some advantage
also be gained by splaying the side
at the speaker end. Where the
is higher and includes galleries it
also be advantageous to splay the
g. In general the position and in-
tion of suitable reflecting surfaces
be found by drawing the early pro-
of the sound wave on an "acoustic
am" according to the known laws
flection of sound. Where the sur-
are broken up diffraction must also
ken into account, and the diagram
nes more complicated. From the
n co-efficients of absorption of the
ces on which the sound falls it is
ple to calculate whether the inten-
condition given above is satisfied.
liagram also gives information as to
reflected paths that exceed the
path by a length of more than 75 ft.
involve a time difference of more
one-fifteenth of one second, and
hus tend to produce confusion or
The offending surfaces so located
e covered by the material necessary
luce reverberation and thus ren-
innocuous.

Curved walls, as might be inferred from the fact that all whispering galleries are dependent on the presence of curved surfaces, are almost necessarily a menace to good acoustics. Not only are there main foci of sound, but there are also subsidiary foci due to the phenomenon of interference. Thus the intensity distribution at head level in a room with a barrel ceiling whose centre of curvature is on the floor produces a complicated interference pattern involving points of silence and concentration. As these points vary for the different components of the same tone great distortion as well as nonuniformity of loudness results.

The conditions of loudness and distinctness are specially important in a council chamber where the speaking member does not face the whole audience and may turn his head from side to side when speaking, and where the entering and leaving of councillors during the progress of a speech, added to possible conversation in undertones, provides a disturbing noise.

The County Hall fails to fulfil the two conditions for loudness, viz., the uninterrupted path and the provision of hard reflecting surfaces in suitable positions. The Press is relegated to the worst gallery, and the resulting punishment of publicity has been at least commensurate with the crime. The ceiling is so high that it cannot be used as a reflecting surface, for any sound returning from a good reflector in that position would constitute an echo. The ceiling has thus to be made absorbent. If it could be made perfectly so, then all the sound reaching it would be lost. As it is, it is made partially absorbent, and instead of a discrete echo there is confusion.

For a large room where the speaker faces the whole audience, as long a reverberation as 1·6 or 1·8 seconds is tolerable, probably because in a large room a speaker expects to have to speak more slowly. In a council chamber a short period is specially important, but in the County Hall it would probably be unsafe to reduce the reverberation lower than about 1·6 seconds because this would mean a reduction in intensity in the galleries and also on the floor of the house. Nothing can now make the acoustics good in the same sense as they would have been good if the building had been designed in the first instance as a council chamber and not as a monument, but some improvement could be effected as far as the floor of the house is concerned by providing a large inclined reflecting board which councillors might face when speaking.

It has been stated at the same time that the reverberation period is excessive, that there is already in the room more absorbent material than the Sabine theory requires, whereas the Sabine theory requires the introduction of absorbent material until the reverberation is no longer excessive. A canvas velarium has been introduced of such a size and in such a position that it could not possibly accomplish the false ceiling effect that a velarium is meant to give. It is now intended to replace this velarium by one of muslin. This will have very little effect on the sound in the room.

Within the past year prizes have been awarded in competitions for designs of council chambers in Calcutta, Bengal, Colombo, and Cairo. These are all of the monumental type, and will serve as acoustic warnings. It is time that something was done to effect a change, and architects who act as assessors in competitions would do a public service if they specified the reverberation period appropriate to the purpose for which a building was intended, and refused to accept any design which did not conform to it. In the case of the Bournemouth Music Pavilion this might still be done before it is too late.

# The Hammersmith Housing Scheme

MR. G. E. S. STREATFEILD, O.B.E., D.S.O., F.R.I.B.A., read a paper upon the above subject before a meeting of the R.I.B.A. last week. Mr. Streatfeild said: In January, 1919, the Hammersmith Borough Council appointed a special committee, called the Housing, Improvements and Development Committee, to report upon and carry out schemes sanctioned by the council and H.M. Government, relating to the provision of houses for the working classes, and also to deal with schemes involving the demolition and reconstruction of certain areas in the borough. Schemes were at once submitted to H.M. Government dealing with (*a*) the construction of new houses on the Wormholt Estate, and (*b*) the reconstruction of an area generally known as the creek area, in the southern part of the borough.

The Borough Council then went to Mr. Hare, who was president of the Institute at that time, and asked him to undertake the work and to appoint three other architects to act with him as a panel in conjunction with Mr. Hampton Clucas, the borough surveyor. He therefore nominated Mr. Ernest Franck, Mr. Matthew Dawson, and myself to act in this capacity. Mr. Hare lived to see the various contracts for building new houses on the Wormholt Park Estate started, and when he died the Borough Council appointed Mr. Bertram Lisle, whom he had taken into partnership, to carry on his work.

The Hammersmith housing scheme, as originally proposed, was divided into two distinct areas, the northern scheme for new houses, the southern scheme for clearing and replanning insanitary areas near the creek, as mentioned above, and also a temporary housing scheme to meet the immediate urgent demand This scheme consisted of converting a munition filling factory of timber sheds into forty-one hutments at a cost of £18,000, the accommodation varying from two to four bedrooms. It was never intended that they should be anything but a temporary palliative, but owing to the condition in the borough they are still being occupied. With your permission, we will take the southern scheme first.

One of the main arteries coming into London from the west passes through King Street and Hammersmith Broadway. At one part King Street is only 45 ft. wide, and as trams also run down the street serious congestion is caused. In replanning this insanitary area, one of the important advantages to be gained was to construct a by-pass road, so that through traffic could be diverted from this part of King Street. From the plans of the borough here produced you will see the streets as they now exist, and the suggestions made to provide a remedy. There is also another serious defect in the communications of the borough, in that there is no good road from north to south joining the Uxbridge Road to King Street, and you will see on the plan how it is suggested that they might be remedied, by taking advantage of the existing roads and widening and connecting them up where necessary.

In dealing with this area it was impossible to avoid considering the treatment of the river front. As you will probably realize, the view of the foreshore round Hammersmith bend is very picturesque, but, as in so many cases, the old riverside cottages have become insanitary, and the portion between the creek and Waterloo Road has largely become a dilapidated area, containing also various derelict factories. We therefore felt that, while preserving any buildings of special interest, such as Kent House, Kelmscott House, and River Court House, we ought to consider in what way an embankment could be constructed, should districts adjoining Hammersmith ever decide to form embankments along their river fronts, as Chiswick is doing and Fulham has already done. It was not suggested that this embankment should be used for main traffic, but rather as a promenade for the benefit of the inhabitants of Hammersmith. This embankment would gain an average width of 50 ft. in addition to the present narrow roads, and would allow the people to enjoy the view of the river. Some of the old features, such as the fine old elm trees and the brick bastions, could be preserved on the front.

The creek, which was the outlet of the Stamford Brook into the river, and over which old inhabitants can still remember the bridge in King Street, could form a natural feature of great charm, provided a weir were built across it to hold up sufficient water at low tide to prevent it from being, as at present, a mere muddy ditch. I here show you slides of the foreshore as it is at present, and of various buildings of interest in this area, and a plan showing how the replanning of the district would affect it. It is suggested to make the mouth of the creek into a boating centre with club houses and boatbuilding yards. The open promenade is particularly necessary in this part of the borough, as it has at present only one open space or square. In developing the area to be cleared, it was proposed to build tenement houses round large quadrangles with grass in the centre of the courts, and I show you plans and elevations of these suggested buildings and a plan showing the general arrangement of these blocks. It was also proposed to put a building in the centre of the quadrangle, with small lock-up divisions in which perambulators could be kept, as it is impossible to expect women to drag their perambulators up two flights of stairs. It was also proposed to form in the roof of each block a common laundry, which would be available for the use of the various tenants. The accommodation generally provided is a living-room, three bedrooms, a kitchen, scullery, etc. Although for the present the development of this area is in abeyance, it is hoped before long to carry out a portion of this scheme.

We now turn to the scheme for new houses on the Wormholt Park Estate. This lies south of the Central London Railway Extension and of the London County Council Old Oak Estate; adjoining it on the east are the grounds of the White City. This altogether covers an area of 125 acres, which was bought at
an average price of about £593 per a
from the Ecclesiastical Commissioners

I now show you a plan of the gen
lay-out of this land, which was influen
to a considerable extent by the poss
future development of the White C
as a housing estate, which is sure to co
some day. It was suggested, when t
lay-out was decided upon, that th
should be a station in the centre of
north side of the estate, and you will
that the roads lead up to a central squ
in which would be placed certain pu
buildings and a number of shops to fo
the approach from the station to
estate and the termination of the no
and south road.

The whole of the estate is traver
from east to west by the new Great West
Avenue, and a width of 100 ft. is reser
for this road. Although at present i
only being made 24 ft. wide, it
ultimately become one of the m
thoroughfares into London and be c
nected up to Westbourne Grove
Marylebone Road. In laying out
estate it was decided to avoid cor
blocks and to keep, as far as possible,
corners of the roads open and to prov
ample open spaces. For this purp
certain blocks of the houses are set b
to form open squares, and playgrounds
the children are arranged behind
houses at the end of the gardens. Th
playgrounds were felt to be a very
portant feature as they keep the child
out of the streets and avoid the dan
caused by motor traffic; also the moth
can see what their children are do
from their windows. In this way acc
is given to the back door of middle hou
and wherever this has not been possi
a common passage is formed thro
the block of houses so that every ho
has a separate way to the back do
Thus all back roads and narrow all
behind the houses are eliminated.

As to materials. Against Mr. Ha
strongly expressed opinion we were co
pelled by the Ministry of Health for
sake of economy to adopt a parti
concrete block construction in the f
contract for sixty-eight houses, and
can add that experiment has am
justified Mr. Hare's opinion. The
mainder of the contracts have all
11 in. cavity external walls and m
internal walls of brick only. The di
culty of obtaining tiles was overcome
importing pantiles from Belgium, wh
were brought up to Hammersmith
barges. I believe these were the f
pantiles imported to meet the short
of tiles.

As to other points of constructi
The upper windows are all hung to p
tecting hinges, which make the outs
easy to clean, and in all bedrooms
small pane in a metal casement is hu
to give ventilation.

The frontages facing Western Aven
Old Oak Road, and Steventon Road
being reserved for houses of a lar
type, and are available for private bui
ings and for shops in certain selec
localities.

Sites for public buildings and churc
have been reserved at axial points, wh
they will close the end of a vista. It

n how this occurs with the church dy erected. An open-air swimming is already under construction by borough engineer. In spite of all has been done the condition of the ng in Hammersmith is still causing anxiety to the Mayor and the ugh Council. We should like to pay bute to the enthusiasm and public shown in the way this question of ng is being dealt with by the Hammith Borough Council under the ration of His Worship the Mayor, and the able guidance of Mr. Waters, the chairman of the Housing Committee, and also to the keenness shown by the Town Clerk, Mr. Leslie Gordon, who has been tireless and unflagging from the inception of the scheme.

A vote of thanks to Mr. Streatfeild was proposed by the chairman of the Hammersmith Housing Committee.

Mr. Raymond Unwin, F.R.I.B.A., in seconding, said there was only one way to solve the housing problem, and that was by getting good houses built and improving the standard of all houses in the country. That was the economic way of solving the question. If they congested houses on land they had to spend more on roads, and he questioned very much whether the great boon that had been emphasized that evening in having twelve houses to the acre instead of a possible twenty, had cost the country sixpence. His own impression was that it had been a considerable monetary saving. There was no economy at all in crowding the houses on the land.

# The Architecture Club Dinner

N Thursday evening last the Architecture Club held their third quarterly dinner at Grosvenor House, where, by indness of the Duke of Westminster, club's "Twenty Years of British itecture" Exhibition is now on .

. J. C. Squire, chairman of the club, ded. The following members and s were present :—

d, Professor S. D.
, Mr. J. Murray.
on, Mr. F. R.,
C.
er, Dr. J. F.
gton-Ward, Mr. L.
F.R.C.S.
gton-Ward, Mr. R.
D.S.O., M.C.
, Mr. Oswald,
A. (*Committee*).
, Mrs. Oswald.
t, Mr. H. A.
an, Mr. C. E.
ir Hugh, Bart.
Sir Chartres.
, Mr. Gerald M.
, Mrs. Gerald M.
eld, Sir Reginald,
., Litt.D.
Mr. Detmar.
Mrs. Detmar.
Mr. James (*Com-
e*).
Mrs. James.
ell, Mr. Darcy.
ell, Mrs. Darcy.
Mr. J. Annan.
nd, Mr. F. J.
nd, Mr. H. T.
aster, Mrs. M. A.
, Sir John J., A.R.A.
Mr. Theodore.
wood, Lady.
, Mr. E. Stone.
, Mrs. E. Stone.
Mr. Sidney.
Mr. Arthur J.
, Mr. C. F. W.,
.A.
, Miss M. V.
, Mr. Rudolf.
ds, Mr. A. Trystan.
Duncan, Mr. J. H.
y.).
Duncan, Mrs. J. H.
Rt. Hon. H. A. L.,
., P.C.
Mrs. H. A. L.
ald, Lady.
er, Mr. H. M.
er, Mrs. H. M.
t, Mr. G. Topham.
t, Mrs. G. Topham.
ue, The Hon. John.
rthy, Mr. John.
ie, Major H. J.,
O.
on, Mr. Ingleson C.
Rt. Rev. Bishop,
.
Mr. W. Curtis.
Mrs. W. Curtis.
r. H. Austen (*Hon.
s.*).
rs. H. Austen.
Mr. E. Vincent
*mittee*).
Mrs. E. Vincent.
, Mr. W. Alex.
, Mrs. W. Alex.
d, Mr. Lawrence.
od, Mr. William.
rth, Mr. P. D.
, Mr. Charles.
l, Mr. F.
l, Mrs. F.
, Mr. P. Morley.
, Mr. P. Morley,
t of.
g, Mr. G. J.
rd, Mr. P. W.
, Mr. Edward.
Mr. Sydney.
Mrs. Sydney.
Kitson, Mr. Sydney D.
Knott, Mr. Ralph (*Committee*).
Knott, Mrs. Ralph.
Lanchester, Mr. H. V.
Lanchester, Mrs. H. V.
Lawrence, Mr. H. W.
Livens, Mr. F. H., M.Inst. C.E.
Livens, Capt. W. Howard, D.S.O., M.C.
Lloyd, Mr. Nathaniel, O.B.E.
Lutyens, Sir Edwin, R.A.
Lynd, Mr. Robert.
Lynd, Mrs. Robert.
MacAlister, Mr. Ian.
Mackenzie, Mr. A. G. R.
Marillier, Mr. H. C.
Marillier, Mrs. H. C.
Marriott, Mr. Charles.
Marriott, Mrs. Charles.
Marsh, Mr. Edward, C.B., C.M.G.
Maufe, Mr. Edward.
Maufe, Mrs. Edward.
Maule, Miss F. B.
Maule, Major H. P. G., D.S.O., M.C.
Milne, Mr. Oswald P. (*Committee*).
Milne, Mrs. Oswald P.
Murray, Mr. George.
Newnes, Sir Frank, Bart.
Newton, Mr. W. G., M.C.
Nicolson, The Hon. Harold.
Nicolson, The Hon. Mrs. Harold.
O'Malley, Mr. Charles.
Phillips, Mr. R. Randal.
Phipps, Mr. Paul.
Plume, Mr. W. T.
Richmond, Mr. S. H.
Riddell, Lord.
Riddell, Lady.
Rothenstein, Professor W.
Rutherston, Mr. Albert.
Rutherston, Mrs. Albert.
Scott, Mr. A. Gilbert.
Scott, Mr. G. Gilbert, R.A. (*Committee*).
Scott, Mrs. G. Gilbert.
Sidebotham, Mr. H. M.
Sidebotham, Miss.
Spender, Mr. J. A.
Squire, Mr. J. C. (*Chairman*).
Squire, Mrs. J. C.
Sterckx, Capt. A. F.
Swedish Minister, H.E. the, and the Baroness Palmstierna.
Swinton, Capt. George, L.C.C.
Swinton, Mrs. George.
Tapper, Mr. Walter.
Tapper, Mrs. Walter.
Tilden, Mr. Philip.
Tilden, Mrs. Philip.
Todd, Alderman F.
Tollemache, The Hon. Mrs.
Troup, Mr. F. W.
Walter, Mr. John.
Ward, Mr. H. J.
Weaver, Sir Lawrence, K.B.E., F.S.A. (*Committee*).
Weaver, Lady.
Wellesley, Lord Gerald.
Whinney, Mr. H. C. D.
Worthington, Mr. J. Hubert.
Worthington, Mr. Percy S.
Wyon, Mr. Allan G.

After dinner, the toast of "The King" having been drunk, Mr. Squire announced that news had been received of the abandonment of the proposal to charge for admission to the museums, an announcement that was greeted with general applause.

Sir Chartres Biron then proposed the toast of "Architecture." He referred first of all to the club, which, he said, was a remarkable club. It was divided into three classes—architects, literary men, and the general public, an admirable combination. The architects built the houses, the Press wrote them up, and the general public paid. Architecture was the only art upon which people gaily embarked without any knowledge or experience. If anybody built a house he would usually say : "I was my own architect." Concealing your absence of astonishment you would do your best to say something sympathetic. It reminded him of the attitude of parents toward reformed offspring. One always had more affection for the child that had some defect about it. Turning to the architecture of London, Sir Chartres said he regarded St. James's Street as one of the finest sights in the world for the variety of its architecture. They had White's and Boodle's, and, in the corner, a bank that was five times too imposing for its site. Opposite, there was a comic opera castle, from which you would expect to see George Graves emerge singing a comic song. It appeared to him that the tragedy of London architecture had been a tragedy of lost opportunities. The greatest opportunity that was lost was after the Great Fire of London. If Sir Christopher Wren had been given a free hand they might have had a city which would have been the envy of the world. When one walked down the squalid and miserable Strand it would have appealed peculiarly to one's sympathy if there had been no south side and the Embankment had been raised, with steps leading down to the river. The club was doing much to interest the public in the architecture of England generally, and especially in the architecture of London. It was an unfortunate thing that the expansion of London came in the commercial days of the nineteenth century when the standard of art was not very high. Among the unsightly things of London that ought to go were the Charing Cross railway bridge and the bridge at Ludgate Hill. When bishops destroyed churches he did not see why railway companies should not destroy bridges.

Sir Reginald Blomfield, R.A., replying, said he had been studying the constitution of the club, and found that numbers were purposely kept small. There was provision for fifty architects and fifty writers. That they were all in earnest, and doing their best to stimulate interest in architecture, he did not doubt. But there were dangers. His colleagues, the architects, were handling a double-edged and formidable weapon — the Press. If they defied the Press they would wake up and find their necks under an extremely powerful heel. When the Press was dealing with facts it was doing an inestimable service to the community. But when it touched architecture it was dealing with opinions ; and how were they to arrive at these opinions ? They could consult experts, but it was a dangerous policy. Criticism should always be given under a man's own name and signature. It was better, he thought, for artists to leave each other alone. In Burlington House they had a very sound rule, which was that no reference should be made to the work of a living artist. This was the only way to ensure peace and goodwill among artists. The Press was apt to take the bit into its mouth and bolt—witness the support given to the Cubists, the Futurists, the Vorticists, and the Nothing-at-all-ists. It had taken two generations to recover from the rhetoric of Ruskin. These things, Sir Reginald concluded, should be said if one thought them. He regarded the club much as the British Government regarded the French enterprise in the Ruhr—with rather serious misgivings but wishing it all success.

The Rt. Hon. H. A. L. Fisher, M.P., P.C., proposing "The Club" (in the absence of Lord Charnwood), reminded his hearers of Johnson's definition of a club : "A company of pleasant fellows meeting together under fixed conditions." Architects were certainly pleasant fellows, also they were the most fortunate of men. The architect was an artist, a lover of the beautiful, a man of science, and a man of business. He could not help feeling that during his life London had become a less beautiful city, less picturesque, and less romantic. It had become more grandiose. Many very fine specimens of architecture had been added to the wealth of London in the last fifteen or twenty years, but why was London not so beautiful as it was forty years ago ? It was clearly not due to any failure in architectural taste in this country. He believed they never had enjoyed a period, at any rate during the last century and a half, which had been so rich in architectural talent, genius, and courage as the period in which they were now living, yet somehow, in spite of that great variety of artistic and architectural gifts, architects had not succeeded in making their full and adequate impression on the public. They had not succeeded in guiding the building policy in the country; they had not succeeded in preventing monstrosities being erected; and they had not succeeded in preventing conditions in sordid quarters which were a discredit to civilization. One of the most valuable functions of the club was to bring the full weight of architectural opinion to bear upon municipalities, who were the great spenders of the national wealth. At the moment, in spite of all the variety of experiment and of idea which characterized that exhibition of the club, it was true to the British type—there was no trace of American influence—and one felt he was in the presence of the works of English genius.

Sir Lawrence Weaver, K.B.E., F.S.A., replying, said he could not hope to emulate the jolly cantankerousness of Sir Reginald Blomfield nor the scholarly eloquence of Mr. Fisher, but he had one quality which would commend him to the club, and that was brevity. Sir Reginald had given them a gloomy picture of what would happen as a result of writing about architecture. But he (the speaker) remembered that Sir Reginald himself had written about architecture. He did not think that much would be gained by the abuse of bad architecture; they should point out the good work and leave the bad to its own evil courses. Something had been said about American influence. They would notice in the exhibition a model of Bush House, which was an added grace to London. They would always welcome such buildings, which showed that architecture could be international without creating jealousies. They were grateful to the Duke of Westminster, continued Sir Lawrence, for allowing them to hold their exhibition in Grosvenor House and to entertain their friends there in circumstances of some little jollity. The exhibition, instead of closing at the end of the week, was remaining open for another fortnight. Quite frankly, they were exceedingly proud of themselves. A great and distinguished architectural body held last autumn an exhibition in which a smaller number of architects were represented than was the case in Grosvenor House. This showed that the club was not exclusive. As a matter of fact, less than a quarter of the work on the walls was by club members. He himself had taken a slightly malicious pleasure in turning down a good number of works by members of the club. He felt that he was doing a righteous thing. Membership of the club carried with it no right to the exhibition of work, and this was one way in which they differed from Burlington House.

Mr. J. C. Squire said that the show had been an unqualified success. And not only a success with the Press, their dangerous collaborators, but with the public, who would not come to a show of that kind without really wanting to come. During the first few days their takings (to use rather a gross word) were small. But later, on a single day they took £35, so that those who rose so nobly to the appeal for a guarantee against loss would probably not be called upon to fork out a single sixpence. Mr. Squire expressed, on behalf of the club, the deepest possible gratitude to the Duke of Westminster for the loan of Grosvenor House, and to Mr. Detmar Blow, the estate architect, and to the estate staff for the magnificent help in arranging and carrying through the best exhibition of modern architecture that they had had in this country. Continuing, Mr. Squire pointed out that the club never said, and would never think of saying, that those in it were good and those outside bad. The aim of the club was not to establish a Press dictatorship in architecture nor the encouragement of the Vorticist or any other crank movement. Its aim was to encourage the public to take a greater interest in the art that came most closely to their lives—closer even than literature—and to help them to take advantage of the best talent available.

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# Societies and Institutions

### *R.I.B.A. Council Meeting.*

Appended are notes from the minutes of the last meeting of the Council of the R.I.B.A.:—

Australian Parliament Buildings Competition.—A grant of £105 was made to assist the Federal Council of Australian Institutes of Architects in the proposed legal action on behalf of the competitors in this competition.

Reinstatement.—The following were reinstated: As Associate: C. R. Winter; as Licentiates: D. Hoets, F. Howarth, and J. R. Musto.

Retired Fellowship.—Under the provision of By-law 15, Mr. Alexander Ross, LL.D., and Mr. W. H. Thorp were transferred to the class of retired fellows.

### *A.A. Visit to the P.L.A. Building.*

The visit of the Architectural Association to the new building of the Port of London Authority was attended by a large number of members. Sir Edwin Cooper, F.R.I.B.A., very kindly met the party and himself conducted a number over the building.

After an inspection of the interior of this great building it is impossible not to appreciate and admire the labours and the ability of its architect. It seems that a large number of departments of very complicated requirements have been arranged with great simplicity, and that their intercommunications are obvious and direct. Their needs in detail have been studied with great care and have been met with more than usual skill. The planning is decisive and large in handling and yet subtle in its smaller details—a quality in plans not yet very common.

It has the air and manner of a very soundly constructed building. The interior finish is almost lavish in its magnificence. The joinery, mostly in oak and walnut, is of a high quality. Many rooms contain fitments and furniture, evidently designed by the architect, that are simple and excellent in design and very well made. The central hall, the vestibule and the main corridors are clothed with a very beautiful fossilated stone or marble subiaco from Rome.

The general tone of the interiors, through the considerable use of subiaco, light enamelled walls and white plastered ceilings, is extremely light.

The entrance on the exterior is marked by a powerful order of fluted Corint columns, and these are also used to in and strengthen the ends of the façades of plain unmoulded openi The scale is large, and makes the rounding buildings appear in their na triviality and the pretty little Tri House becomes a toy.

V. O.

### *The A. & S.A.P.U.*

The Metropolitan Branch of the Ar tects' and Surveyors' Assistants' fessional Union recently paid a visit, permission of the architect, Mr. Waterhouse, P.R.I.B.A., to the Med School and Nurses' Home Extensio University College Hospital, Gower St W.C., to view the work being carried by the British Reinforced Concrete gineering Company, Ltd. The party welcomed by Mr. W. J. Fawcett, with the assistance of four representat of the firm, conducted it over that of the extension of most interest to members. The visitors were shown plans, elevations, and sections of proposed extension, which were expla by Mr. A. B. Dailey, A.R.I.B.A., visitors were subsequently enterta to tea by the firm.

A party of about sixty members friends made a visit of inspection to New County Hall, by kind permissio the official architect, Mr. W. E. Ri The party were met by Mr. W. H. H ham, the chief clerk of works, who the assistance of Mr. A. H. Castle, ducted the party in two sections thro the principal portions of the buildin

The Croydon sub-branch have their fifth dance of the season. attendance was very satisfactory.

### *The Institute of Builders.*

Following is a list of the officers of Institute of Builders for the ens year: Mr. F. J. Gayer, F.I.O.B., p dent; Mr. H. Willcock, F.I.O.B., M Ralph J. Holliday, M.C., F.I.O Messrs. A. J. Forsdike, F.I.O.B., Roland B. Chessum, F.I.O.B., v presidents; Mr. Jas. Storrs, J.P., F.I.O.B., treasurer; and Messrs. F. Hodges, F.I.O.B., and Frank W F.I.O.B., hon. auditors.

### *The South Wales Institute of Archit*

At the annual general meeting of Central (Cardiff) Branch of the So Wales Institute of Architects the foll ing officers and members were ele to serve on the Central Branch C mittee: Chairman, Mr. W. S. Purch M.A., A.R.I.B.A.; secretary, Mr. C. Jones, A.R.I.B.A.; treasurer, Mr. Teather, F.R.I.B.A. Members: Mes C. Wilson, Alwyn Lloyd, J. William Percy Thomas, I. P. Jones, T. E. Lle lyn, and L. Monroe. The following elected to represent the branch on council of the South Wales Institu Messrs. W. S. Purchon, M.A., A.R.I.B C. F. Jones, A.R.I.B.A., H. Teat F.R.I.B.A., C. Wilson, F.R.I.B.A., Al Lloyd, F.R.I.B.A., J. William A.R.I.B.A., Percy Thomas, O.B F.R.I.B.A., Ivor P. Jones, A.R.I.B T. E. Llewellyn, J. Grant, A.R.I.B A. G. Edwards, M.S.A., and C. J. W F.S.I., Lic.R.I.B.A.

## Parliamentary Notes

3Y OUR SPECIAL REPRESENTATIVE.]

*The Building Subsidy.*

'r. Neville Chamberlain said that the lt of the negotiations with the repre- :atives of the local authorities was an ement for a subsidy of £6 per house annum for twenty years, and legisla- enabling grants to be made would be oduced as soon as possible after the ter recess. In the meantime, local orities who proceeded to build with authority would in due course parti- te in the proposed grants. There , therefore, no reason for any delay proceeding immediately with their mes.

*Housing Progress.*

r. Neville Chamberlain informed Sir de Frece that on March 1, 157,235 e-assisted houses, erected by local orities and public utility societies been completed. There was no delay he occupation of these houses.

*The Kensington Cinema.*

r William Davison asked the Minister ther his attention had been called to fact that the London County Council, vithstanding the opposition of the sington Borough Council and of the lents in the locality, had recently ted a licence for the erection of a r-cinema in Leonards Place, Kenton, which would involve the de- ction of a considerable number of lle-class houses; and whether he ld make representations to the Lon- County Council and other local sing authorities that, during the ing serious shortage in houses, it was sirable for them to grant licences for erection of cinemas or other places of sement which would involve the ruction of residential property.

r. Chamberlain replied that he had e enquiries and had found that the s were as stated. He had no power ntervene in such a case, but the nts would have the protection afford- y the Rent Restriction Acts. The estion in the last part of the question ld receive careful consideration.

nswering a further query on the same ect, Mr. Chamberlain said he would ider, in connection with the new sing Bill, whether it would not be to take temporary powers to pre- the destruction of private houses ng the existing shortage in order to l cinemas and theatres.

*Unemployed Building Operatives.*

r M. Barlow, Minister of Labour, med Mr. D. Somerville that on uary 26, 136,261 were unemployed ne building trade in Great Britain, e up as follows :—

| | |
|---|---|
| rpenters .. .. .. | 13,876 |
| icklayers .. .. | 7,222 |
| asons .. .. .. | 2,017 |
| ters .. .. .. | 757 |
| asterers .. .. .. | 2,603 |
| inters .. .. .. | 27,545 |
| umbers .. .. .. | 4,639 |
| bourers of above .. | 59,553 |
| l others .. .. .. | 18,049 |

e total amount of unemployment fit drawn weekly by them was oo.

*"Building Rings."*

rd Wolmer, Parliamentary Secre- to the Board of Trade, assured several members that the Government were carefully watching anything in the nature of "building rings" or "trusts" which might force up the price of materials.

*Memorials to the Navy.*

Lieut.-Col. Jackson, the Financial Secretary to the War Office, informed Mr. Cassels that the Imperial War Graves Commission was in process of erecting three memorials to the memory of officers and men of the Royal Navy who were lost at sea. The total cost to the public of these memorials was not expected to exceed £70,000. The procedure adopted by the Commission when placing contracts for the construction of these memorials was that of competition among selected firms. Advertisements were inserted in the public Press inviting applications to be placed on a selected list from firms desirous of tendering, and the contracts were placed by competition among the firms so selected. The execution of a certain part, however, of these memorials, consisting of work to be carried out in bronze, was offered by tender to firms nominated by the eminent architect responsible for the design, the Commission, after full consideration, accepting the architect's advice that the work was of an artistic nature which necessitated this procedure.

## Law Reports

### Conversion of Dwelling-houses into Flats

*How* v. *Martin.*

Feb. 27. Court of Appeal.
Before Lords Justices Bankes, Scrutton, and Younger.

This was an appeal by the defendant, Mr. C. L. H. Martin, from a judgment of Mr. Justice Roche, of the King's Bench Division, in favour of the plaintiff, Mr. F. W. How, and raised an important point as to the legal effect of the conversion of dwelling-houses into a number of flats.

Mr. Croom-Johnson appeared for the appellant, and Mr. Bennett, K.C., for respondent.

Mr. Croom-Johnson said the facts of the case were that the respondent, the plaintiff in the action before Mr. Justice Roche, having converted what had formerly been a private dwelling-house, known as Ashfield, 7 Crescent Road, Hornsey, into two or more residential flats, had let under an agreement dated September 22, 1920, the major portion of the premises to the defendant, and he brought the action to recover possession at the expiration of the tenancy, contending that Section 12, sub-section 9, of the Increase of Rent and Mortgage Interest (Restriction) Act, 1920, did not in the circumstances apply. The appellant's case was that as the alteration was of so slight a character, and that the premises could easily be reconverted to their former condition, and that the flats were not self-contained tenements as contemplated by the Act, he was within the protection of the Act.

Mr. Justice Roche, in his judgment, said he entertained no doubt that at least two—he thought probably three—separate tenements had been constructed and that sub-section 9 of Section 12 of the Act applied. Although some of the alterations were of a somewhat flimsy character the plaintiff had done a great deal in providing additional lavatories, sinks, and so forth, which was really substantial. In his opinion the premises in the circumstances had lost their identity, and he gave judgment in favour of the plaintiff for possession with mesne profits, calculated on the basis of a rental of £150 per annum. From this result the defendant now appealed. Sub-section 9 of the Act was as follows : "This Act shall not apply to a dwelling-house erected after or in course of erection, on the second day of April, 1919, or to any dwelling-house which has been since that date, or was at that date being bona fide reconstructed by way of conversion into two or more separate and self-contained flats or tenements."

Counsel contended that what the section in the Act was contemplating was a real and true construction of premises into a block of flats and not of tenements, and what the Court had to determine was whether either of the two tenements in question constituted a separate and self-contained dwelling. He submitted that there was no evidence that the premises had been reconstructed or so reconstructed so to form the premises into two or more self-contained flats or tenements. All that the landlord had really done was to put up some asbestos sheeting for partitions, which could easily be removed.

The Court dismissed the appeal without calling upon counsel for the respondent, holding that the matter resolved itself into a question of fact for the judge in the Court below, and that he had evidence before him to support his finding of fact, viz., that what plaintiff had done was a bona fide reconstruction of the premises, converting them into two or more self-contained flats or tenements within the meaning of the sub-section.

### Claim for Work Done

*Combined Concrete Construction Co., Ltd.* v. *Hudson and Kearns, Ltd.*

March 13. Manchester Assize Court.
Before Sir Francis Newbolt, K.C.

This action was heard before Sir Francis Newbolt, K.C., official referee, at the Manchester Assize Court on March 13. The plaintiffs, Messrs. Combined Concrete Construction Co., Ltd., of Manchester, sued Messrs. Hudson and Kearns, Ltd., printers, of London and Manchester, for the sum of £2,464 for work done. Defendants disputed liability and counterclaimed for damages. On the opening of the court on the second day's hearing it was announced by Mr. Cyril Atkinson, K.C., who appeared for the defendants, that the action had been settled. The terms of the settlement were that plaintiffs (Messrs. Combined Concrete Construction Co., Ltd.) submitted to judgment in favour of Messrs. Hudson and Kearns, Ltd., and also to judgment for that firm on counterclaim for the sum of £5,000 to include costs, stay of execution and amount of damages being reduced to £2,250 if paid within times specified in the judgment. Mr. Eastham, K.C., and Mr. Burgess appeared for the plaintiffs, instructed by Mr. W. E. Laycock, of 33 Princess Street, Manchester; Mr. Cyril Atkinson, K.C., Mr. Arnold Inman, and Mr. Lawrence Mead appeared for the defendants, instructed by Messrs. Charles Humphries & Co., of 36 Basinghall Street, London.

# List of Competitions Open

| Date of Delivery. | COMPETITION. |
|---|---|
| March 31 | War Memorial for Troon. Cost £1.500 to £2,000. Assessor, Mr. James Miller. Premiums: £25, £15, and £10. Apply The Hon. Secretary, Town Clerk's Office, Troon. |
| March 31 | War Memorial in Crow Nest Park, Dewsbury. Assessor, Professor C. H. Reilly, O.B.E., M.A., F.R.I.B.A. A copy of the conditions together with plans of the site may be obtained on application to Mr. H. Dearden, A.R.I.B.A., Borough Surveyor, Town Hall, Dewsbury, on payment of one shilling. |
| April 15 | Buildings for the Polytechnic Institute, Reval. Premiums 200,000 marks, 150,000 marks, 100,000 marks. Apply Office National du Commerce Exterieur, 22 Avenue Victor Emmanuel III, Paris. (8e) The competition is an International one. |
| June 1 | New Municipal Buildings and Town Hall, Cork. Total cost not to exceed £120,000, Assessor Mr. Lucius O'Callaghan, F.R.I.A.I., A.R.H.A. The successful competitor will be appointed to carry out the work. Second and third premiums £200 and £100 respectively. Apply Mr. William Hegarty, Town Clerk, Cork. The competition is limited to architects living and practising in Ireland. |
| June 12 | Concert Pavilion, Bournemouth, to seat 2,000. Estimated cost £100,000. Assessor, Sir Edwin Cooper, F.R.I.B.A. Premiums: £300, £200, and £100. Apply Town Clerk, Municipal Offices, Bournemouth. Deposit £2 2s. (cheque). |
| June 30 | Bridge over Nygaardsstrommen in Bergen. Apply Department of Overseas Trade (Room 50), 35 Old Queen Street, Westminster, S.W. 1. |
| June 30 | National War Memorial at Melbourne to cost £250,000. Competition, in two stages, open to Australians, not necessarily residing in Australia, and British subjects resident in the Commonwealth. Preliminary designs to the Right Hon. the Lord Mayor of Melbourne, Chairman of the Executive Committee, Town Hall, Melbourne, Australia, by June 30. Apply Agent-General in London, Victoria House, Melbourne Place, Strand. Deposit £2 2s. |
| July 3 | Pavilion in Calverley Gardens, Tunbridge Wells. Assessor Mr. E. Guy Dawber, F.S.A., F.R.I.B.A Premiums £150, £100, and £50. Apply Town Clerk. |
| No date | The Crown Agents for the Colonies, acting on behalf of the Government of the Straits Settlements, invite competitive designs for the reinforced concrete work required in connection with the construction of a new general post office at Singapore. Tentative designs, for which no fees will be paid, are required in the first instance, from which it is proposed to select a design and specify its adoption in the contract for the construction of the building. The firm whose design is so adopted will be subsequently engaged to prepare full detail plans, specification, quantities, &c., for an approved fee. Drawings can be seen and further details of the competition obtained from the Crown Agents for the Colonies, 4 Millbank, Westminster, S.W. 1, quoting Z/Straits Settlements 5664. |
| No date | Five shops for the Prestwich Co-operative and Industrial Society. Premium 75 guineas. Apply General Manager of the Society, Warwick Street, Bury New Road. Prestwich, Lancs. |

# Competition News

### *Troon War Memorial.*

The secretary of the R.I.B.A. has received the following communication from Mr. Robert Young, hon. secretary of the Troon War Memorial Committee: "I have submitted your letter of the 5th instant to the Committee. I have pleasure in informing you that they have agreed that the competition should proceed in accordance with regulations A to F of the R.I.B.A., and I have to-day written Mr. Miller, the assessor, advising him."

### *New Masonic Buildings, Swansea.*

The president of the R.I.B.A. has nominated Mr. Arthur Keen, F.R.I.B.A., as assessor in this competition.

### *Ossett War Memorial Competition and Haifa Business Centre Competition.*

Members of the Society of Architects are notified that the conditions of these competitions are not in accordance with the regulations, and they are requested not to take part in the competitions without first ascertaining from the secretary that the conditions have been approved by the Council.

# Contemporary Art

### *The Whitechapel Art Gallery.*

A collection of paintings and sculpture, by modernist artists for the most part, is on view in the Whitechapel Road for some weeks, and it provides the opportunity of studying some phases of the work of the advanced artists in London. The most accomplished picture, however, is not modernist at all—G. L. Brockhurst's "Aglaia." It is based on the best of traditions, that of fine and exact drawing. Another arresting life-study is David Jagger's "Mischief," a free painting without the tendency to popularize which this artist sometimes displays. In contrast to these, I hardly think that Gilbert Spencer and David Bomberg come out well, and Meninsky falls below his own high standard in drawing. Leon Underwood and Vivian Forbes show interesting things, and Ernest Collings two arresting pieces.

It is refreshing to see an attempt made to bring forward sculpture. This gallery certainly lends itself better than most to its display, and it might have been used to even greater advantage. The few things there, however, are well worth while, the stone reliefs of Maud Wethered and Ethel Walker giving promise of a better understanding of the problem of relief carving. Herbert Palliser shows a stone sea-lion, and a torso in slate; Jean Milne a lead figure, "Sappho"; and Gilbert Ledward a fountain figure, "Fate." The best thing is the small brass "Madonna and Child" of Eric Gill, and there is a little wax "Childhood," by Grace Wheatley which is well modelled.

In the upper gallery is a collection of water-colour, pastel, and other drawings, including some by Austin Spare, Eric Kennington, D. S. MacColl, J. D. Innes, Augustus John, and Wyndham Lewis.

### *The Royal Institute of Painters in Water-colours.*

It is a big business to go through 500 water-colour drawings and say which are the best. Many of them are very noisy, for a flamboyant subject seems more flaring in water-colour than in oil. There are, however, some few restful and legitimate exercises, and between the two a vast mass of conscientious work more or less on a level. In a water-colour show the first impulse of the lover of the medium as practised in England is to look for the drawings that conform to the English tradition, for tradition in this case seems the right and only possible thing, because the English school started off so splendidly with its first masters, and has by no means disgraced them since. The works that conform in this exhibition are those of Leonard Richmond, W. Egginton, Norman Wilkinson, O.B.E., and Percy Lancaster. There are many charming drawings of a more p
sonal, if less traditional, character,
Terrick Williams, Graham Petrie,
Vanderlyn, Davis Richter, Carruth
Gould, Christopher Clark, and George
Haité. The president, Sir David Murr
sends a large work, "Ludlow," which
definitely a picture in water-colours a
not a water-colour drawing, and by
doing keeps strictly to the title of
Institute, "painters in water-colour
with all it portends, and as it is illustra
in the present exhibition.

### *Other Water-colour Exhibitions.*

At the Fine Art Society George
Elgood shows nearly eighty water-colo
of gardens.

More water-colours are to be seen
the Brook Street Gallery, where M
Hubert Barclay is exhibiting.

Still more are in the Pastoral Exhi
tion at the Walker Galleries, where
also examples of the work of Marga
Gosling, Murray Urquhart, and Be
Wigan (Mrs. Charles Marriott).

To see some of the authentic mast
of this purely British art, a journey
Kensington Town Hall will be useful,
the Committee of Civic Art in the Ro
borough has got together an admira
collection.

At the Greatorex Galleries there is
interesting exhibition of paintings a
drawings by the Dutch artist, J. Leurs

KINETON PARKES

# Coming Events

### *Wednesday, March* 28.

R.T.C.A.C.S., Glasgow.—Social Me
ing. 7.45 p.m.

Northern A.A.—Annual General Me
ing.

### *Thursday, March* 29.

Edinburgh A.A.—Annual General Me
ing. President's Valedictory Addr
8.0 p.m.

British Museum.—Lecture on "Egy
By Claire Gaudet. 3.15 p.m.

# The Building Crisis

Unless the Ministry of Labour
successful in ending the deadlock in
building industry there will be a natio
stoppage on April 1. The ballot ta
by the operatives resulted in a majo
of 98,346 against acceptance of the
ployers' proposals for a reduction
wages of from 1d. to 2d. per hour.
president of the National Federatio
Building Trades Employers, it is repor
says that an immediate reduction of wa
is essential. This, briefly, is how mat
stand at the time of going to press.

# New Associates of th Royal Scottish Acaden

An architect and four painters h
been elected associates of the R
Scottish Academy. They are: J.
Aiken (Aberdeen), J. Hamilton Macke
(Glasgow), W. Somerville Shanks (G
gow), E. S. Lumsden (Edinbur
painters; and R. Fairley (Edinbur
architect.

# The Week's News

### *Cliff Erosion at Scarborough.*

new sea wall, estimated to cost ooo, is suggested at Scarborough.

### *an Pavement found at Colchester.*

section of Roman tessellated pavet worked in seven colours has been d in a nursery garden at Colchester.

### *Road Widening at Cheshire.*

hemes of road widening involving expenditure of £122,000 have been oted by the Cheshire County Council.

### *New Baths for Leamington Spa.*

Plombiere suite of baths is to be lled at Leamington Spa at a cost of

### *Housing at Hendon.*

ans of nearly 250 houses and bunga- were passed by the Hendon District ncil at their last meeting.

### *Public Library for St. Marylebone.*

new public library, with a special ing department for children, is to be blished by the St. Marylebone ough Council at a cost of £10,000.

### *osed £50,000 Viaduct at Bedlington.*

further effort is being made to re- the old stone bridge over the River h at Bedlington with a high level uct, costing about £50,000.

### *New Flats for Hendon.*

is proposed to erect fifty-two flats and acquired by the Hendon Council ittacy Hill, Mill Hill. The estimated is £18,760.

### *Pontefract Infirmary.*

stimates for the expenditure of 383 on the provision of an additional k to the Pontefract Workhouse In- ary have been adopted by the rdians.

### *idderminster Poor Law Institution.*

ne Kidderminster Board of Guardians decided to apply to the Govern- t for loans for a new heating and ing system for the Poor Law Insti- on, costing £5,350.

### *Housing at Wolverhampton.*

ne scheme of the Housing Committee Volverhampton to proceed with the ion of 154 houses under their own ncial responsibility has been adopted he Town Council.

### *New Seaham War Memorial.*

committee has been formed at New am, with a view to erecting a memorial ne workmen of the colliery and other Seaham men who fell in the war. to cost about £1,100.

### *Liverpool Empire.*

ne Liverpool Empire is being ex- ed from the designs of Messrs. W. and R. Milburn, FF.R.I.B.A., architects. rs. Moss and Sons, Ltd., Lough- ugh, are the contractors.

### *ew Open Space at Golders Green.*

ne Ministry of Health have sanctioned application of the Hendon Urban Dis- Council to raise a loan of £2,300 for purchase of an open space at Golders n.

### *Croydon Housing.*

To provide additional work for the unemployed, the Croydon Town Council propose to spend £200,000 this year on further housing schemes, subject to the assistance offered by the Government.

### *More Houses for Sheffield.*

The Finance Consultative Committee of the Sheffield City Council have approved a scheme for the erection of 150 additional houses on the Manor Estate, at an approximate cost of £55,000.

### *New Arcade for Worthing.*

The Development Company, which has acquired the Royal Hotel site near the pier, contemplate constructing there a crescent-shaped arcade flanked on each side with shops.

### *Atherstone Slum Clearance.*

The Atherstone Urban District Council have adopted a scheme for the gradual clearance of slum areas in the town. The Council have also approved a site plan and lay-out for the erection of eighty houses.

### *Hop Exchange Sold.*

The freehold of the Hop Exchange, in the Borough, has been sold for a big figure, but the name of the buyer has not been disclosed. In October, 1920, three of the six top floors of the building were destroyed by fire.

### *The Proposed Embankment Extension.*

The Improvements Committee of the Westminster City Council recommend that the Council should contribute one-sixth, not exceeding £26,666, of the net cost of the scheme for the extension of the Westminster Embankment and the widening of Horseferry Road.

### *The Architecture Club Exhibition.*

The Architecture Club Exhibition has become a great success. Large crowds are now viewing it daily and on Saturday last the attendance was a record. The committee have determined to extend the exhibition to April 7. It will, however, be closed on Good Friday.

### *New Road for Morecambe.*

The Morecambe Town Council have decided to construct a new road to the west end of the town from Bare, at a cost of £75,000. The surveyor has been instructed to prepare schemes for a new bathing pool on the foreshore and for the laying-out of the park at Bare, at an estimated cost of £20,000.

### *More Escalators for London.*

Escalators are to take the place of lifts at the following Underground stations: Clapham Common, Clapham Road, Stockwell, Oval, Moorgate Street, Old Street, Shepherd's Bush, Oxford Circus, Bond Street, Tottenham Court Road, Trafalgar Square, and the Elephant and Castle. The scheme will cost about £800,000, and the work is to begin almost immediately.

### *New Church for Rochdale.*

Work has been commenced on the building of a large church at Rochdale from the designs of Messrs. Hill, Sandy and Norris, of Stafford, architects. It will be in the Byzantine style and seat 800 people. Messrs. R. and T. Howarth are the general contractors, and the reinforced concrete work is by Messrs. The Empire Stone Co., Ltd., of London.

### *Death of a Lighthouse Builder.*

Mr. William Douglass, who has died at Penzance, was the brother of Sir J. N. Douglass, builder of the famous Eddystone Lighthouse, which was completed in 1882. He himself was responsible for the construction of Hanois Lighthouse, Guernsey; the Wolf Rock Lighthouse, Little Basses, off Ceylon; and, lastly, Fastnet Lighthouse.

### *New Bridges for West Riding.*

The West Riding County Council's Finance Committee recommend that application be made to the Ministry of Health for sanction to a loan of £25,000 for the construction of a new bridge over the River Ouse at Boothferry, £38,300 for a proposed new road and bridge at Carlton, and £17,700 for the improvement of Wombwell Lane in the Wombwell Urban District area.

### *Empire Memorial Hostel.*

The foundation-stone has been laid of the Empire Memorial Hostel which is being erected at Limehouse in connection with the British and Foreign Sailors' Society in honour of the men of both Services who died during the war. The cost of the building alone will be £50,000, and when completed it will contain 240 beds, besides a restaurant and recreation room.

### *Professional Practice.*

Mr. J. F. B. Cowper, A.R.I.B.A., late superintending architect for the South of England of the Ministry of Agriculture, has resumed practice at 5 King's Bench Walk, Temple, E.C.4; telephone: Central 7746, and would be glad to receive trade catalogues.

Mr. C. Donald Allderidge, D.S.O., A.R.I.B.A., architect and surveyor, has commenced practice at 15 Bowlalley Lane, Hull, and is prepared to receive catalogues, etc.

### *Changes of Address.*

Mr. Percival M. Fraser, F.R.I.B.A., is moving to 32 Buckingham Palace Road, London, S.W., at the end of this month. Telephone: Victoria 9189.

Messrs. C. P. Walgate, A.R.C.A., A.R.I.B.A., and L.A. Elsworth, A.R.I.B.A., architects, have moved to new offices in Hilliard's Chambers, Church Square, Cape Town.

### *London Churches.*

We have received from Messrs. H. R. Allenson, Ltd., of Racquet Court, Fleet Street, E.C., a set of twenty-four postcards of London churches. The series includes twelve of Wren's City churches, and all alike are admirably illustrated. To those who do not know their London, and especially their Wren, these cards should prove a valuable stimulus to further enquiry.

### *King's College Lectures.*

During the summer term Professor Percy Dearmer's lectures at King's College, Strand, will be reduced as usual to six in number. They will be on

Tuesdays at 5.30 p.m., in the Great Hall, and will begin on May 1 with an architectural lecture on "An Old Town Unspoilt." The second lecture will be a retrospect on the early Great Masters before Raphael, and others will deal with Titian, Tintoret, and Veronese.

*Plan of New York and Environs.*

The committee on the Plan of New York and Environs, acting in co-operation with the Russell Sage Foundation, has appointed a group of city planners to make a preliminary study of the environs of the city. The area to be studied comprises about 5,000 square miles and extends for a radius of from thirty to fifty miles from Manhattan. It has been divided into six sectors, which have been allocated to the members of the following group, who have been appointed, under the chairmanship of Mr. Thomas Adams, to make a joint report on the opportunities and dangers in connection with the problems of the use and development of the land, communications, decentralization of population and industries, and open spaces: Thomas Adams, of Messrs. Thomas Adams and Longstreth Thompson, Town Planning Consultants, of London and New York; Harland Bartholomew, City Planning Consultant to the city of St. Louis; Edward Bennett, of Messrs. Bennett, Parsons, Front and Thomas; George B. Ford, of the Technical Advisory Corporation, New York; John Nolen, Landscape Architect, of Cambridge, Mass.; Frederick Law Olmsted, of Olmsted Brothers, the famous firm of landscape architects. The report to be made by the group is to be submitted before the first of October.

*Haileybury War Memorial.*

The fund for the Haileybury War Memorial now amounts to £35,000. The memorial originally proposed was to take the form of a new dining-hall, but it was felt that a small memorial should be erected at once. The committee accepted an Old Haileyburian's offer to defray the cost of a cross, and decided to proceed at once with its erection and with the completion of the roll of honour in the cloisters. The remainder of the fund will accumulate till there is sufficient money to complete the dining-hall scheme.

*R.I.B.A. Prizes and Studentships, 1923.*

The prizes and studentships pamphlet of the R.I.B.A. has just been published, and is on sale at the Royal Institute, 9 Conduit Street, W.1, price 1s. exclu of postage. Prizes totalling in v nearly £2,000 are offered for the cur year. The pamphlet contains particu of the R.I.B.A. Essay Prize; the Sc Medallion; the Pugin Studentship; Owen Jones Studentship; the R.I. (Henry Jarvis) Studentship at the Bri School at Rome; the R.I.B.A. (He Jarvis) Studentship at the Architect Association; the R.I.B.A. (Henry Jar Ex-Service Studentships at the re nized schools; the Grissell Gold Me the Arthur Cates Prize; the R.I. (Archibald Dawnay) Scholarship; Ashpitel Prize; and the R.I.B.A. Si Medal for recognized schools.

*The British Empire Exhibition.*

The machinery hall and the indust hall at the British Empire Exhibition more than half finished, and are to ready by August 11. These two buildi together cover more than twenty- acres. Five full-gauge railway tra have been laid in the machinery h which, with the help of overhead tra ling cranes, will make the placing in p tion of even the heaviest machiner comparatively easy task. A line also r into the industrial hall.

# Cavity Bricks: Their Manufacture and Use

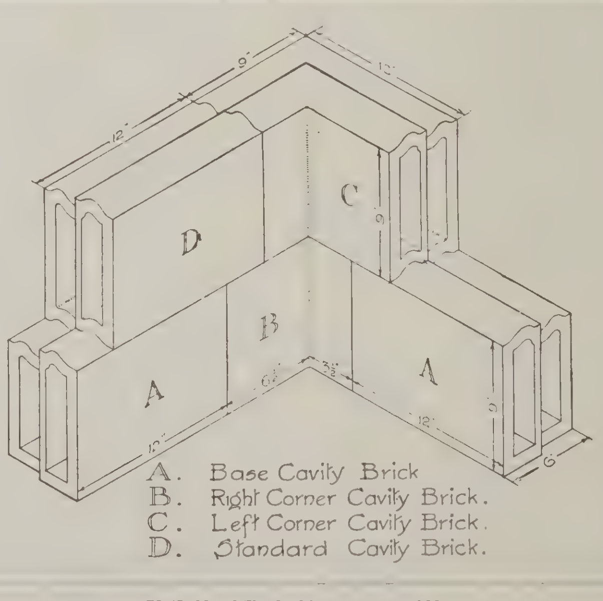
CAVITY bricks are becoming increasingly popular as a building material in this country. In America, where they are more precisely known as hollow building tiles, they have attained a place of distinction, and are used for a large variety of building purposes. In this country in the future they will probably play an important part in the erection of houses and be used in connection with the construction of a large number of commercial and other buildings. To attain the greatest success from the cavity brick it is important that the architect should consider several details with regard to their manufacture and the method in which they are used.

Good cavity bricks may be made of red or buff burning clays of high quality or of fire-clays possessing sufficient plasticity for moulding into shapes and sizes according to their particular use. Made of good clays, and kilned at high temperatures, cavity bricks, with only 1 in. in width of material in the sides and cross webs, should have an average resistance to crushing pressure of up to 60 tons per square foot of surface over the cavities when laid to construct a horizontal air Cavity wall, and up to 90 tons per square foot over the cavities when made to construct a perpendicular air cavity wall. cavity brick so made will be found to be relatively impervious to moisture; to possess good heat insulating and fire-resisting properties; to be poor conductors of sound; and of sufficient strength to meet all the needs of building practice.

From the standpoint of designs, the principal things to be looked for in cavity bricks would appear to be effective devices for interlocking at the points of juncture of adjacent cavity bricks in a wall; and due provision for the breaking of joints, as effective safeguarding against cracks developing at joinings right through from the outside to the inside of the wall. Cavity bricks which build a wall of inner and outer courses interlocking along the centre, with the horizontal line of the inner course "staggered" to that of the outer are considered to be good. It is also considered desirable that the cavity brick built wall should provide for a series of inner and outer air cavities, and that for very hot or very cold countries a system of wallage construction with cavity bricks should provide also for a series of central air cavities. To do away with condensation on the inner surfaces of walls it is contended that the air in each room of a cavity brick built house should be made to conform in temperature with the air in the inner series of cavities, which latter might be, and in many cases are, utilized also for the circulation of hot air during the cold seasons and cool air during warm seasons.

Although cavity bricks have only been used in this country during the last few years for building houses under the sanction of the Ministry of Health, the hou already built number considerably c 2,000. A large number of factories h also been built. A start is also being m in the building of large city premises w special types of cavity bricks interlock with stone facing slabs. In this way, in association with steel frame wo banks, hotels, blocks of offices and fl and other large buildings can be erec cheaply.

Firms who specialize in cavity b construction, who have available manufacture of their specialities the ri type of brick earth, and whose produ are known to and tested by the lead building contractors should only be d with for cavity brick supplies, as the ri production of cavity bricks of per quality and strength is a highly techn problem apart altogether from ordin brickmaking knowledge.


9"
12"
12"
C
9
D
B
A
A
6"
3"
12"
6"
A. Base Cavity Brick
B. Right Corner Cavity Brick.
C. Left Corner Cavity Brick.
D. Standard Cavity Brick.

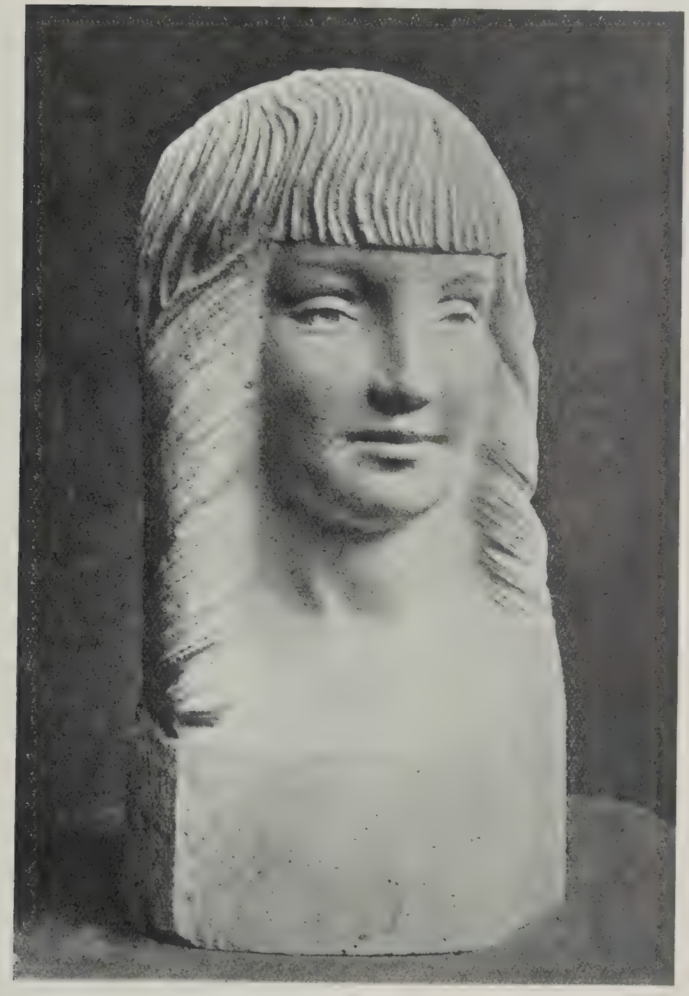
TYPES OF CAVITY BRICKS.

day, April 4, 1923

Vol. LVII. No. 1474

# THE ARCHITECTS' JOURNAL & Architectural Engineer

*With which is incorporated "The Builders' Journal."*



CARVED HEAD.

*Designed and Carved by Phœbe Stabler.*

27-29 Tothill Street, Westminster, S.W.1.

Chiddingstone, Kent: The Village Street

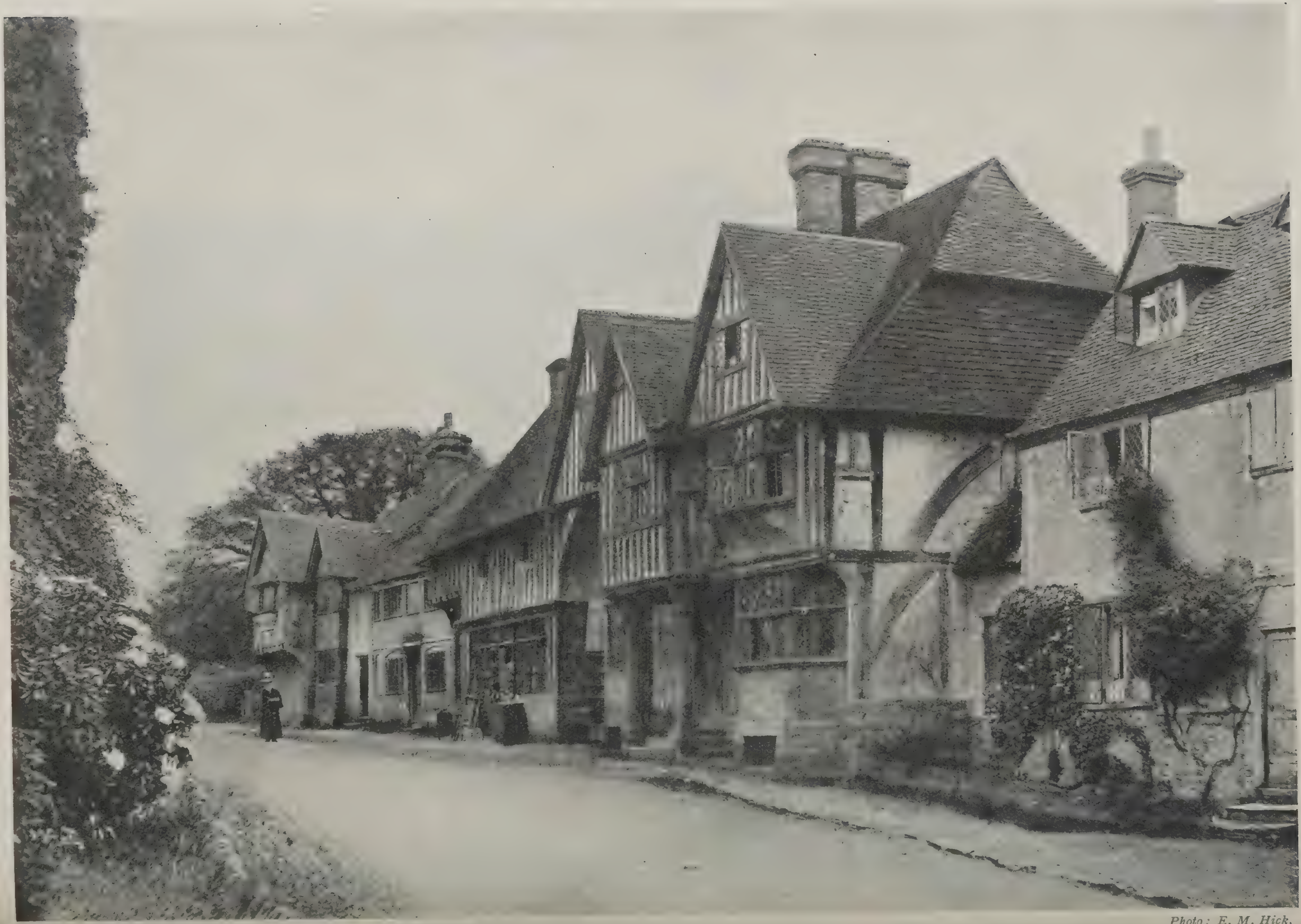


Photo: E. M. Hick.

This well-known village street—apart from minor alterations—is without a blot. It would seem impossible that anything more perfect of its kind could

THE
ARCHITECTS' JOURNAL
27-29 Tothill Street, Westminster, S.W.1.

nesday, April 4, 1923
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# Back to Simple Forms

MODERN architecture is in a state of flux, and it corresponds exactly to the temper of the times. There is about it a note of restlessness that points to an uncertain mind. We see about us y styles and many manners without co-ordination. ondon this is most evident for here there is more architural activity than in any other English city. Neo-Grec Byzantine, Renaissance and Baroque—name whatever ol you will, and you will find it represented in recent dings. Not that the architect is to blame for this, for s as much a victim of the spirit of the age as the clients m he serves. And with the restlessness of temper which anslated into brick and stone, we have a riot of ornatation and a standard of luxury in materials, the oute of the love of opulence which in these war-stricken 's marks our tax-ridden people.

is naturally in our buildings that we find the surest ession of the ruling passions of the nation. And most itects will agree that the dream of wealth and a driftn uncharted seas, where a maelstrom of unsifted ideas ideals, old and new, drags men down into unexpected perilous depths, are the main features of life to-day. ization, as we knew it before the war, is now on trial. h of it may be saved, but much may be discarded when st we emerge from the stress and strain of recreating urselves standards of belief and economics, of conduct living, that will fit the need of the post-war era. Meane we know not where we stand. And so there is a ng after false gods, a setting-up of strange standards t and life. But abroad there is now happily a sign of ing down, of a return to sanity, and with it a return nplicity. And a new note is creeping into architecture. et it is faltering, not sure of itself, but the encouraging vital fact is that it is there.

home it has not yet made its appearance, but there e no doubt that it is coming. In London architecture assed through many phases, but until the last thirty s or so these phases were well defined, and while inual architects gave to their work the impress of their personality there was at any rate a single style that enerally followed. This gave to the capital a symmetry it lacks to-day.

is to be hoped that soon we shall get back to the older which was certainly far better. And if at the same time implify, paying more attention to the value of mass lain surfaces, we shall have done much needed service chitecture. This feeling for mass is showing itself here there in the design of the modern factory, but is too lacking in many of our up-to-date offices where the nd for as many small rooms as can be crowded on to pper floors makes for the architect a difficult problem. numerous little windows spoil the elevation and give at might have been an imposing mass an air of fuss and They rob it of its essential dignity and destroy the ssive effect that bigness inherently produces. We name quite a number of buildings, otherwise fine, have been spoilt in this way. Some architects, as we , have solved the problem by a liberal use of glass, ating individual windows by bronze or copper frames ck from the façade. This method, while meeting the 's need, does not whittle away the mass effect. Another way, which other architects have used effectively where the classical style has been adopted, is to place the windows between pilasters. These pilasters, by their size, overshadow the broken surface and emphasize the sense of ordered mass which the architect intended to produce.

One of the best examples of a well-designed modern business building, which, while giving plenty of window space, loses neither impressiveness nor dignity in the process, is the Kodak office in the Kingsway. Here is mass without ugliness, plainness with style. And it is along these lines that commercial architecture seems most likely to develop. As yet we have evolved no distinctive twentieth-century character, but the Kodak building suggests that it is coming. It will undoubtedly be marked by a higher perception of the quality of mass and its handling, and by a recognition of the value of plain surfaces. There will be much less ornamentation and better workmanship, always the sign manual of simplicity in art. The production of a masterpiece along these lines is admittedly a task only for the greatest architect. But already some Continental architects are trying to set new standards in building, to give us simpler forms where clean lines, unbroken surfaces, and symmetry of shape alone are allowed to make the appeal to the æsthetic sense. If this century fulfils the promise of to-day we shall certainly have a new school of architecture. And it is time. It will owe much to tradition. It would be impossible to advance without levying some tribute on the past, but there will be a distinctive departure from the curious mixture of the styles of all the ages which too often mark the architecture of this century's opening. Luxury and ornament flourish most in decadence. There have not been wanting signs of decay of late, even in architecture, which is usually the last art affected. In times when sanity comes back to a people it is always heralded by the incoming of simpler tastes. The distaste for simplicity is not the evidence of real culture but its antithesis. Too often beneath elaborate ornament bad work is hidden. And a building that attracts the unthinking by its frills and its flourishes is anathema to those who live in the rarer and purer air of true architectural appreciation.

Any movement that takes us away from the hesitating architecture we find springing up around us in London from slavish imitation of foreign styles, alien to the grey skies of our northern land, must be whole-heartedly welcomed. If it leads us to a more austere reverence for beauty of form and content, a sincere love for symmetrical mass, a dislike for useless ornament, and a hatred for mere display, we shall have good reason to bless it. With its new needs, its new activities, and its new life, the twentieth century demands a new architecture. There are not wanting proofs that we shall get it. The lean years are ahead. It will be a time of anxious thrift and slow recovery from the ravages of a costly war and a still more costly peace. There will be no money to waste. We must get the very most we can for what we spend. And buildings will have to be strictly for use. Here and there there will doubtless be exceptions to the rule, but in the main this will be the condition under which architecture will have to develop for the next decade or two. Force of circumstance will compel to a simpler style. Architects will be obliged to satisfy bare necessities. And so they will have to face the problem of getting the biggest effect out of the smallest means. That will perforce lead to the recognition of the importance of the value of space and of spaciousness. In other words, mass and plain surface will receive the attention they deserve but have not yet obtained. This does not mean that we shall see an era of barn-like structures, too simple perhaps to be ugly, but too ordinary to have distinction. Every architect knows that good proportions are not so easily got as to be a matter of routine. Indeed, it is not too much to say that here is one of the most difficult tasks he has to face. And the task is complicated when the adventitious aid of embellishment is withdrawn.

But the age of plainer buildings is at hand. With sanity simplicity arrives. The sooner it reaches England the better for England, and decidedly the better for English architecture.

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## Architecture and Criticism

Sir Reginald Blomfield, in his speech at the Architecture Club dinner, raised an interesting point when he hinted at the possible dangers attendant upon the criticism of contemporary architecture in the public Press. With his claim that criticism should bear the signature of the critic no fair-minded person will disagree. All criticism is merely the statement of a personal point of view, and if that view is to have any value at all it is essential to know whose it is. But signed criticism is not necessarily frank; much of it, indeed, is obviously insincere. Human nature being constituted as it is, there is for most people a real difficulty in giving a frank opinion. And this does not necessarily imply cowardice; it arises merely from a desire to avoid hurting other people's feelings. Some brave souls there are who can lay lustily about them without thought of the friendships they are deliberately imperilling, but such heroes are rare, and they do not add to the amenities of social life. But there is no reason why architecture alone among the arts should escape criticism. Painting, sculpture, literature, the drama, all have to submit to it, and on the whole its influence is beneficial. Why should it not be so with architecture? Probably it would be. But there is a distinction to be borne in mind. Whereas the infuriated painter, sculptor, or writer can demolish his work at a stroke with no loss but to himself, the architect cannot destroy his without heavy loss to others. So for him, if he is highly sensitive to criticism, the only alternative is suicide! But even this extreme eventuality should not deter criticism when it is really required in the public interest. So long as criticism is fair and expressed moderately, we imagine that no reasonable architect will object to it, remembering, as we have already observed, that it represents nothing but an individual point of view.

## "The Business of an Architect"

The practice of architecture is distinct from that of most other professions in that it falls rather sharply into two divisions, the creative and the administrative. The business side, from the point of view of creating beautiful buildings, is of minor importance; but underrating its importance has wrecked many a promising career. In these days, when an architect has to be as versatile as Pooh-Bah (without, alas! the stimulus of multiplied emolument), it has become impossible for one man to discharge all the varied and onerous duties of practice. To ask one man to be simultaneously artist, constructor, lawyer, business man, hygienist, diplomat, and many other things besides, is asking too much; hence the rise within modern times of those highly successful ideal partnerships, often consisting of three or even four members, each concentrating upon a certain definitely limited aspect of practice. But many practices are not sufficiently large to justify a partnership, and it is then that one has to walk warily to avoid the pitfalls that beset the path. The creative art hates with a deadly hatred anything that is not intimat concerned with the creative side of his work. Corresp dence, contracts, builders' accounts, and other prac calities are anathema to him, and are likely to be neglect with dire results. The only certain thing in practice is t possibility of things going wrong, and the man who unprepared to deal with eventualities might just as w file his petition. It is with the idea of providing just t information that is wanted by the architect when c fronted with what may be termed "business" difficulti that Mr. C. Murray Hennell has written for this JOURN a series of articles entitled "The Business of an Arc tect," the first of which appears in this issue. Mr. Henn himself a member of a very successful partnership, wri with a first-hand knowledge of his subject, and he surve the whole field—from starting in practice to securi clients (there should not be too great an interval betwe the two)—from professional etiquette to penalty clauses contracts. We can promise our readers a very stimulati and instructive series of articles.

## Changing St. James's Street

St. James's Street, which has been rather longer than a other principal London thoroughfare in losing the cha of its eighteenth-century character, will shortly under in some part of its length the painful process of inevitab reconstruction. The houses Nos. 7, 8, and 9 are soon to demolished. No. 8 was the home of Byron, and, as a wri in "The Guardian" recalls, it was here that he was livi when "Childe Harold" appeared, and where he woke up o morning to find himself famous. The familiar brick fronts these old houses will be sadly missed; and it is little conso tion to learn that the Byron plaque is to be replaced on t new Portland stone buildings which are to be erected. Wh an old house is gone it is little use to tell us that hereabou was once the doorstep upon which the great man trod. us the doorstep might as well have never existed. B something of old St. James's Street will still remain White's and Boodle's. Club members will jealously gua these sacred treasures. Architects will also be glad to lea that Lock's hat shop, with its quaint old front and t beaver hats of other days, is not at the moment menace

## Temple Bar

Touching the subject of movable monuments, we c serve that efforts are again being made to secure the retu of Temple Bar to London, whence it should never have be taken. It makes a very fine entrance gate to Theobal Park, and doubtless Sir Hedworth Meux is loth to part wi it. But its spiritual home is London, and Sir Hedworth w receive the very grateful thanks of Londoners if he allo it to come back. There are many appropriate spots up which to re-erect it, but the best that has been suggest is the Embankment end of Middle Temple Lane. Here would again take up its old duty of marking the C boundary. Further, it would provide another Wren e trance to the Temple, balancing very nicely the gateho at the Fleet Street end.

## Disfiguring the Landscape

Without taking flattering unction to our soul, we a gratified to see, following so closely upon our recent leadi article on "Hoardings," that a Buckinghamshire lo authority has fined billposters for "exhibiting adverti ments on a hoarding on the Great Bath Road in such position as to disfigure the natural beauty of the landscap We wish that the powers which municipal authorit already possess in this respect might be more frequen exercised. Certainly there is good cause for taking acti The infliction of fines, especially when they are small on may not have a highly deterrent effect, but at least draws public attention to a nuisance which, if meekly tol ated, will mean the permanent disfigurement of town a country alike.

# As Others See Us

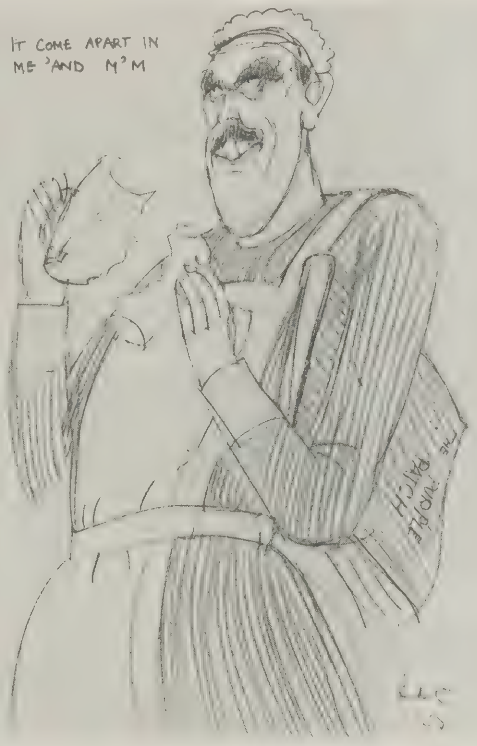
## Mr. MAURICE E. WEBB at the Architectural Association

MR. STANLEY HAMP (president) took the chair at the meeting of the Architectural Association, when Mr. Maurice E. Webb delivered an address entitled "As Others See Us." Mr. b said that it was good sometimes to get away from purely architectural problems which faced them and at life from a different angle. So for that night he e as the title of his paper "As Others See Us," and n quite eagerly to write it months ago. First he re- d his early childhood when he always told his mother as going to be a "house-made." He was an outside rver then and, no doubt owing to his inability to er the English language, was unable in words to rentiate between the work of his father, who made es, and that of the lady made the beds. He observed a somewhat similar pprehension among certain s of his acquaintance. They them not as house makers, as cupboard makers. It did matter what the house was what it cost, whether it was or badly built, if it wasn't of cupboards any other e it possessed was apt to nored. This wasn't archi- re; it was the fringe beloved e Press and the public. rtunately the fringe was the most attractive part of skirt. Women were an ctive part of life and could e altogether ignored.

t that was only one aspect e subject of his paper, the of which first occurred to during the war, when forty em from the Architectural ciation joined the Engineers hatham. The Colonel in ge sent for him and said: at the devil have you archi- joined the Engineers for? are no damned good to He asked why, and he ed, "You can't dig!" He ed with a reminder of a ise of Lord Kitchener' that friends should serve her and was floored with another, shot out in Army style. "What! put forty architects together? 'd spoil any company of Royal Engineers." That was the Army saw them at the beginning of the war.

ce Mr. Yerbury pinned him down to a date for read- he paper he had been introspecting on some other ts of "As Others See Us." In fact, it became a bur- and seemed to follow him everywhere. He decided the best way to compile the matter for the paper was rite for views upon architects from representative e who were outside the profession and who knew him iently well to give their views fearlessly. The people ote to were: (1) the wife of an architect; (2) a Member rliament; (3) a civil engineer; (4) a sculptor; (5) a actor; (6) a student; (7) a cook; (8) a painter; (9) a ure dealer; (10) a housing commissioner; (11) a High judge.

Webb proceeded to read the letters purporting to from these correspondents. They were full of humour ontained many amusing comments on the conditions obtaining in the architectural profession. The following extracts give some idea of the letters:—



MR. MAURICE WEBB
Admitted that the ambition of his life had been to be a "house-made."
*(From a caricature by H. de C.)*

A CIVIL ENGINEER.

"Your letter has come at a most opportune moment. My sister is building a house, and she asked me to run over the architect's specification. I did; and do you know what I found? He is actually proposing to use hand-made bricks 2 in. thick (I think they were)—now just fancy that! In these days of machinery, going out of his way to use hand-made bricks of a special, or what the bootmakers call, an 'outside size.' Of course, I stopped it at once, and had proper standardized machine-made bricks of a suitable colour and hard surface substituted, all in accordance with the particulars printed in the R.I.B.A. Calendar. . . . I don't altogether approve of the design of his foundations—projecting brick footings in addition to the concrete underneath. One or the other, but not both, seems to me as an engineer necessary, but I understand this is some absurd regulation of an antiquated by-law about which I have instructed him to send in a protest to the local authorities. He assures me this will not do any good, and that the R.I.B.A. have for years been trying to get the London Building Act brought up to date without success. . . . Of course, the outside of the house will be top hole now that we are going to use sensible bricks, and it ought to be, as the architect was trained at the Architectural Association, where they do, I believe, go in quite a lot for elevations and perspectives. Now that I've put him on the right track on some of the practical points it ought really to be quite a success."

A STUDENT.

"I am awfully glad of the opportunity you have given me, or rather I should say, we are, for I have laid your letter before the Students' Committee, and they have asked me to reply as follows: We divide architects into two classes, i.e., those who know what 'esquisse' means and those who don't. Probably very few architects over forty do, except those who are attached to a teaching staff of one of the modern schools of architecture. We shouldn't think life worth living without the twelve hours 'esquisse,' and it really is perfectly inexplicable to us how any architect can dare to practise architecture who has not been through this ordeal. There are, of course, lighter moments of our rigorous modern training, such as dances in the library, plays in the basement, and other incongruities which you old fogies never experienced. We look upon architecture as an art to be enjoyed like other arts, as part of life, not a thing of office routine and the other sordid details connected with a business. . . . No sir, the times are changed, we are learning real live architecture here, and when we come into your offices we are quite willing, in exchange for a small screw and an insight into the business side of the affair, to give you in return the very latest thing from the school in the way of design and draughtsmanship."

### A MEMBER OF PARLIAMENT.

"Another subject connected with architecture which, as a member of the House of Commons, is likely to come before my notice is the movement which I hear is on foot for the registration of architects. Now, my dear fellow, if you will take a tip from me as a very old House of Commons man, don't have anything to do with it in its present form."

### A HOUSING COMMISSIONER.

"I thought you knew that I had left this job and returned to architecture, a sadder and wiser man. Of course, Lloyd George fooled us all, and for a time we really believed we were in a Government office for the sole purpose of producing a new heaven on earth for the working classes. . . . Now that I am out of it I should like to congratulate the R.I.B.A. on the stand they have made for the proper remuneration of those architects who worked for months on schemes which were afterwards abandoned."

### A SCULPTOR.

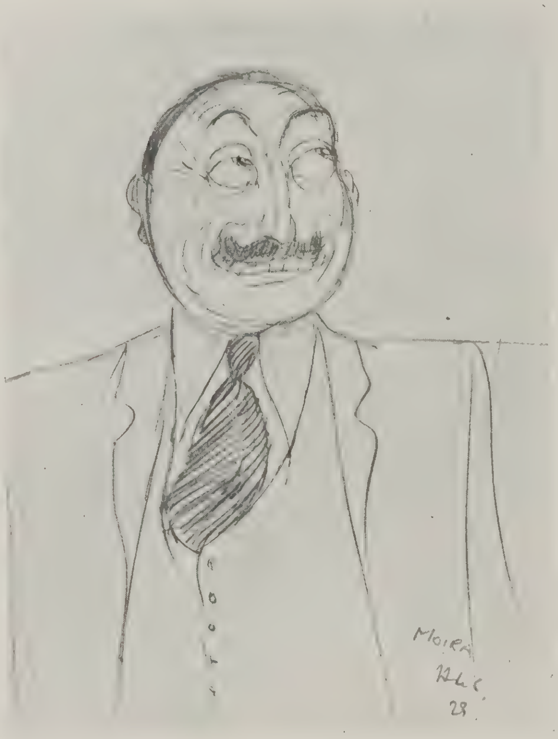
"I suppose we all have our faults, but I do think the architects are rather more troublesome than most men. I have worked for dozens, and they never will put enough sculpture into their buildings to suit my taste, and when they do it is generally high up on parapets or crammed into niches which are too small for the figures . . ."

### A CONTRACTOR.

"We also like the type of architect, of which we are glad to say we have met many, who realizes that he is not the only person engaged upon the building who endeavours to do good work. At the moment our principal criticism is in the matter of the form of contract which we are usually asked to sign. It is antiquated and out of date, but after some months of negotiations we do not seem to be getting much nearer to an agreed revised form."

### A PAINTER.

"I have two great faults to complain of amongst the architects I know: nine out of ten of them are devoid of colour sense, and in consequence no colour is now used, and everything is painted white; the other is that where any decoration is employed you all nearly always go in for panelling so that in any ordinary building there is not a square inch of wall space where my pictures can be hung. . ."



PROFESSOR MOIRA.

"The worries and troubles of the architect were nothing compared with those of the painter."

*(From a caricature by H. de C.)*

Major Barnes said that whether the letters were authentic or not they were very amusing. If Mr. Webb wrote them himself then he had missed his vocation and should have been a novelist. After all, what it came to was, architects were indispensable. Some years ago he felt that architects did not hold a great position in the House of Commons, but the status of the architect was improving. What they had done in regard to housing had done them good, but he believed the real reason was the improvement in architectural training. He had a son at the Architectural School, and he felt that good as was the training the best thing about the school was the kind of life which was blowing through it.

Mr. Voysey said he was glad that the last speaker had emphasized the importance of the humanities. It personal character which would make architects great not mere knowledge of style. They must break away fr the horrible convention of stylism and get back to hun buildings for human creatures.

Professor Moira felt that the architect had not yet q got hold of the use he could make of the painter. architect divided up his mouldings and expected the dec tor to bring the whole thing together. In America t gave the whole room to the mural decorator. The wor and troubles of the architect were nothing compared w those of the painter.

Mr. Fletcher said Mr. Webb had shown them that ar tects had to know everything which had been said, thou of, or occurred; all the discoveries of science, all the a all the processes of Nature—none of these came amiss architecture. To have good architecture the nation m have an architectural sense, and every year they w finding an improvement in this respect.

Mr. Goulden said if an architect was enabled to have the qualities he was expected to have he would be a g The most essential of all the qualities appeared to be faculty to interest man. Eve one would admit that architectural profession was only the most difficult master, but the most inter ing, since the study of m could not be beaten for interest.

Mr. Cresswell said that serious note had been struck t night. The whole root the matter was that whate people might think or about them it was their busi to be sure it was not true.

The chairman regretted absence of the students he was sure Mr. Webb had pected them. He was pres at a meeting of ladies who w ed to have a series of lect on architecture. They asked a live man who would them how they could c cize modern buildings. Yerbury was arranging a cou and he was sure it w do good. As a school t were keen about the hu interest the students were ing in their work. They an enthusiasm in the stud which was a credit to institution they could na and this was a sign that ar tecture would be better in the future than in the as it would have the human element in it.

Mr. Webb said he was greatly impressed with *esprit de corps* in the school. The only other he knew of with the same spirit was the Liver School. The student's letter was really an authentic and he had another authentic letter from a poet, wrote :—

> "Augustus of Rome was for building renowned.
> What in marble he left in brick he had found.
> Was not our Nash then a very great master?
> He found us all brick and left us all plaster.
> A greater than Nash has arrived it is plain,
> And has whitewashed the Abbey to keep out the ra

The evening was one of the most popular that been held at the Association for some time.

# The Business of an Architect—I.

## By C. MURRAY HENNELL, F.S.I.

*The purpose of these articles is not to expatiate upon building construction, design, or any other part of the artistic side of architectural work. They are written in the hope of giving some useful hints to those who contemplate starting in practice for themselves, and possibly to others who have already embarked upon the profession. The hints relate to the "running" of an architect's office, to dealing with clients, both prospective and real, to meeting the many contingencies that inevitably arise, and to the manner in which some, at least, of the pitfalls that await us all may be avoided.*

he following definitions and quotations are given by Johnson :—

rchitect :—

) A professor of the art of building.

"The architect's glory consists of the designment and lea of the work; his ambition should be to make the rm triumph over the matter."—WOTTON.

) A contriver of a building; a builder.

"The hasty multitude
Admiring enter'd, and the work some praise,
And some the *architect :* his hand was known
In heaven by many a tow'red structure high
Where scepter'd angels held their residence,
And sat as princes."

MILTON.

) The contriver or former of any compound body.

"This inconvenience the divine architect of the body viated."—RAY, on "The Creation."

) The contriver of anything.

"An irreligious Moor,
Chief architect and plotter of these woes."

SHAKESPEARE.

hese definitions and quotations give plenty of food for ight, and the words from "Othello" will provide the tance of gibes for the disgruntled building owner, even ey offer him no consolation. The modern architect will inly quarrel with Dr. Johnson for calling him "a ler." This leads to confusion, and often has to be ghtened out in the minds of laymen.

more recent definition which appeared in THE ARCHI-S' JOURNAL was : "An architect is a man who is engaged, very moderate cost, to make small mistakes with a penny pencil on a threepenny piece of paper, and to them out with a twopenny lump of rubber, solely in r to prevent his clients from making costly errors on able land with expensive materials."

. Johnson generalizes, and our whimsical friend par-arizes. Both, however, give a fairly clear idea of the utive functions of an architect, but it is only those experience who appreciate the extent to which it is ssary for this expert to act as guide, philosopher, and d to his clients, and how, in order to do all these things ently, he must needs carry on a very considerable int of administrative work.

usiness," that word and thing so distasteful to the ic temperament, plays a very important part in the ssful practice of an architect, but the business side not be distasteful if it is properly organized. It should e burdened with so much system and organization as d to the weight of the load which they are intended to n. If the human element is kept uppermost in every- connected with the "business," then the distaste will soon change into a pleasure.

is hoped that the word "business" here used will not isconstrued and narrowed down to its trade sense, for rofession of architecture is liberal and uncommercial. an architectural practice to be really successful and, above all, satisfactory to its clients, must be run in a businesslike way.

### CHAPTER I.

### *Training and Starting a Practice.*

The training of the man or woman who contemplates architectural practice must be thorough, practically as well as academically. It is not much use to be able to draw a well-proportioned building and make an attractive perspective of it if the designer does not know how the work can be carried out in all its details, for he certainly will be the person to whom the builder will refer when in difficulties, and he will be expected to solve any problem that arises. A good builder can, and often does, help the architect out of a hole, but he cannot be expected to translate into terms of bricks and mortar, timber and metals, a design the originator of which is not himself able to interpret.

These remarks may appear to be mere platitudes, but many men with but little knowledge of actual building work and its procedure attempt to practice as architects. Often they manage to muddle through somehow, but how can such a man really look after the interests of his clients, who must perforce entrust a considerable amount of their possessions to his care, if he does not know most thoroughly the practical side of his job ? Sooner or later he will encounter difficulties, and the fabric of his practice will then show that its abstract foundations were on a par with those concrete ones which he passed during some of his inspections of actual work.

The importance of a knowledge of "building" cannot be too strongly emphasized, and this word "building" has a wide meaning. There is, of course, always something to learn, and the more the architect knows about the actual work the better for himself, his clients, and everyone else concerned—even including the builder ! The aspirant to architectural practice cannot spend too much time on buildings during their construction from the digging of the first sod to the last coat of paint, and all trainees, whether articled pupils or students in architectural schools, should be given every possible opportunity of getting on to jobs themselves, and no opportunity once given should be missed.

Assuming that the training—in schools or office—is considered complete, and it is desired to enter into private practice, the immediate problem that arises is how it is to be done. A brass plate on a front door or railings, even though there may be a whole row of letters after the name, will not bring clients. The man wracked with toothache may, on seeing a dentist's name-plate, possibly go in and have the decayed tooth extracted ; but who is going to say, "Hullo, here's an architect ! Let's have a house" ? In small provincial places one's name and profession inscribed on the premises may bring a certain amount of local work, especially if there are no, or very few, other such notices in the district ; but in London and other large towns the most highly polished or artistic plate will attract few besides those gentlemen who travel in locks, latches, lifts, lamps, and so forth.

It should be realized instinctively that advertising is unprofessional. "Professional Conduct and Practice," which is printed in the R.I.B.A. Kalendar for 1920–1921, and which should be read and followed by all architects, puts it thus: "An architect does not publicly advertise, nor offer his services, by means of circulars or other means of publicity employed in trade or commerce. But he may publish illustrations or descriptions of his work, since these contribute to the common fund of knowledge. He may exhibit his name on buildings in the course of execution (providing it is done in an unostentatious manner), and may sign them when completed in a way similar to that adopted by sculptors of repute." Briefly, it may be said that the architect is permitted to have publicity for what he has done, but he shall not advertise what he could do if he had the chance.

The hardest thing of all is to obtain one's first commission, and a building of sufficient size or importance to attract other clients to its author. Competitions have given many young architects their start in life, but success in this direction is limited to a very small percentage of the vast number of entrants to the profession, and competitions are all "put" and no "take" except to the prize-winners.

Friends are the best things one can have at any time, and the social side of the architect's life is of the greatest importance to him, especially at the commencement of his career. The subject of building a house or something else is mooted on the golf course, at a dinner party, or in drawing-room. The young architect is on the spot. Gorgeous, or more likely her ladyship, takes a fancy to and he probably gets the job. If all goes well, and for the architect to see that it does, everyone is plea recommendations get afoot and the practice is launche

These things, unfortunately, do not always happen when one wants them to, There are often long and anx periods of waiting for the work to come in, and during t times the practician must not be too proud to do "ghost for other architects. Even though he may have suffi independent means to render this unnecessary, it is or the best things he can do, for he will have to work hard fast and keep in constant practice, and he will assim other men's ideas. Moreover, the majority of us, who not born with silver spoon attachments, can make s thing of a living at it.

My advice as to how to start a practice may be s marized thus :—

(1) Be sure you have a good training behind you.
(2) Cultivate the social side of life.
(3) Fill in the spare time by "ghosting."
(4) Enter such competitions as are suitable to training and past experience.
(5) Put your very best into every item of work that come your way.

(*To be continued.*)

# A New European Capital

## By H. J. BIRNSTINGL, A.R.I.B.A.

IS it not one of the most hopeful portents of the times that at a period when civil war wracked and devastated Ireland and all the awful forces of wild destruction were let loose there were those at work producing a stupendous scheme for the future development of Dublin? Construction prevailed in the midst of destruction. And now, as the country enters upon its new career of self-government, this plan is published; a fitting monument to celebrate so great an event.*

In 1914 a competition was promoted by the Civics Institute of Ireland for a scheme for the future development of Dublin, the Marquis of Aberdeen and Temair generously offering a prize of £500 for the best design. The competition was adjudicated in 1916 by Professor Patric Geddes of Edinburgh, Mr. Charles J. McCarthy, F.R.I.A.I., City Architect of Dublin, and Mr. John Nolen, M.A., Sc.D., F.A.S.L.A., Cambridge, Mass., U.S.A. The adjudicators were unanimously in favour of the scheme which forms the basis of this publication. It will be seen, however, that nearly nine years have elapsed between the inception of the scheme and its publication to-day, years during which tragedy upon tragedy has visited the town; the reverberations of war without, the devastation of civil war within. The heart of the city, Sackville Street (now O'Connell Street), has been destroyed, rebuilt, and destroyed once more, Gandon's masterpiece, the Custom House, is all but obliterated, the Four Courts and the Post Office are demolished. The scheme that is published, therefore, is not identical with that which won the competition; it has been amplified and elucidated by the addition of plans, and its original framework has been reinforced by the addition of material already in the authors' hands, but which was not fully embodied in their original work. The final scheme from which the ultimate Dublin will grow will be a synthesis of the plans submitted for the competition, but its main structure will take its form from the scheme which is the basis of this report.

Such work in the past has generally failed throug insufficiently comprehensive vision. There has bee the authors point out, either a subject or a regional centration. That is to say, reports have been made the utmost thoroughness on such a matter as housing housing, if inadequately related to the other civic prob is but a patchwork; and there have been schemes fo replanning of a particular area, but here again an within a city cannot be dealt with as an isolated ph menon. Every problem, in fact, must be considere part of an intricate pattern, and must be woven ine cably into the texture. It is the immense comprehen ness of their vision that strikes the reader of this r more forcibly than any other quality.

Dublin has many attractions to offer the town-pla It is full of historical significance. Its architecture, o whole, is good, for, owing to some mysterious reason, period of hectic development of the last century w wrecked most of our large towns left Dublin unscathed has broad and noble thoroughfares, it possesses in Ph Park one of the finest urban open spaces in Europe, i a port and docks full of possibilities for future expan it has natural charm of situation. It does not ther present the same depressing spectacle as do many o manufacturing towns, where so dense is the chaos nothing short of wholesale demolition can restore ord beauty. To plan the improvement of such a town is a heartless project owing to the remoteness of realiza Here, however, everything is practical; many of the gested improvements can be, and should be, inaugu at once, and the whole scheme is not more than can re ably be accommodated during a period of some tw years.

The form which the report takes is more or less dic by the conditions of competition. There are three parts: Part I—Introduction, Communications, and dustries; Part II—Housing; Part III—Metropolitan provements. These parts each have their detailed sect The volume also includes the assessor's report on al designs submitted for the competition. Ireland, of co thout the town-planning legislation which is in England onsible for the present town-planning activity, and the ors suggest the lines which legislation should follow. scheme is based on the method prevailing in the state assachusetts : a system of local and central boards.

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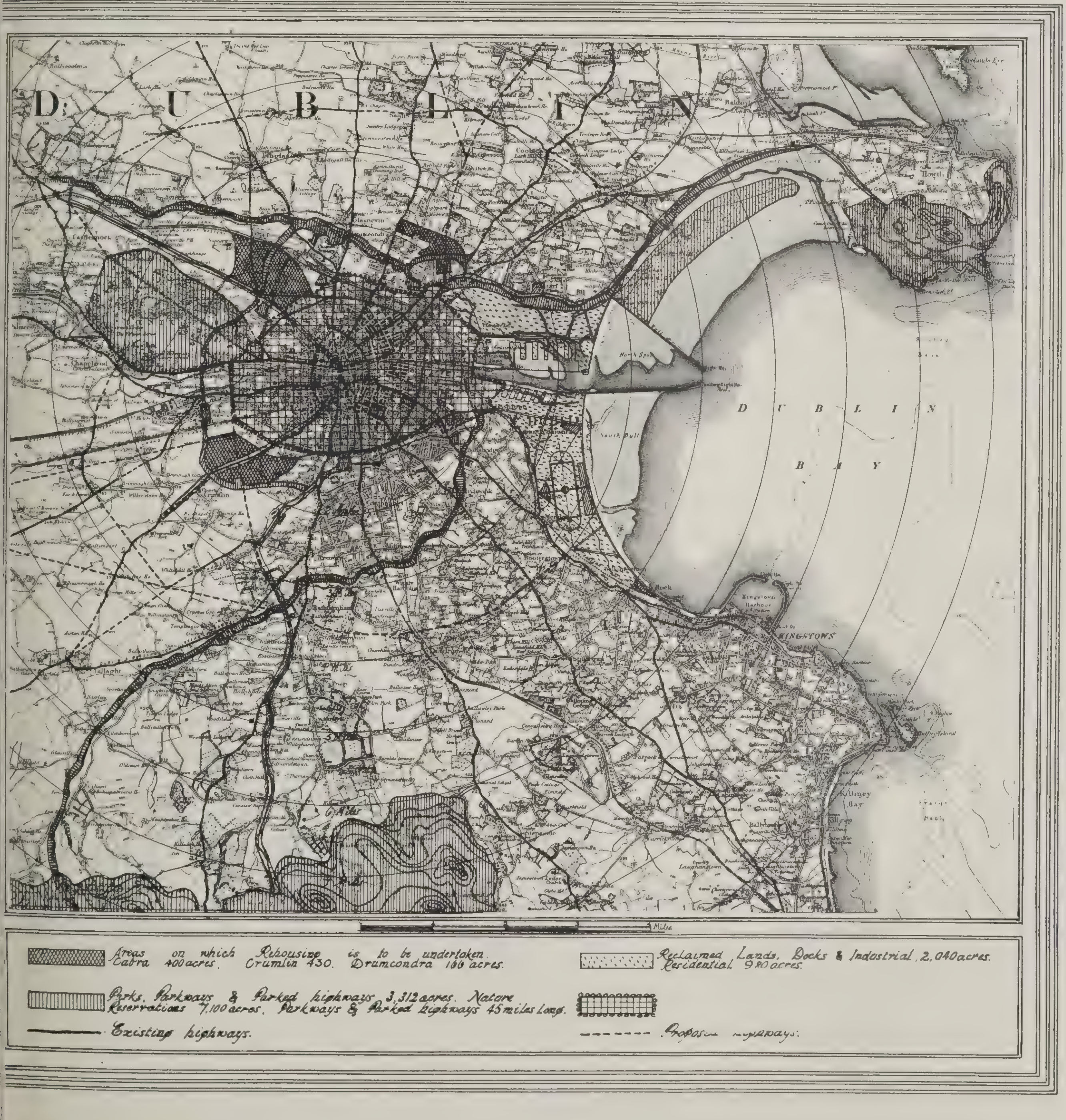
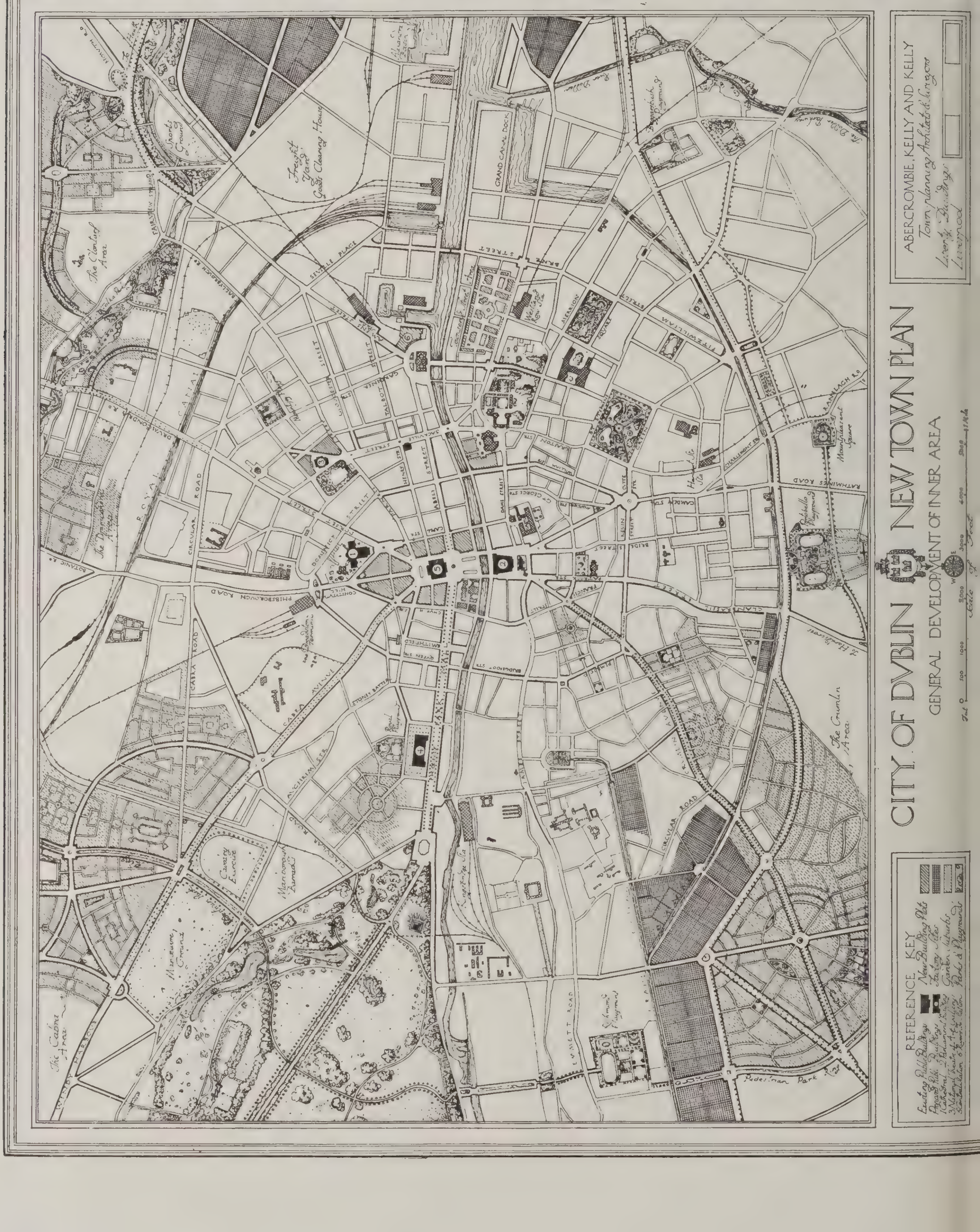
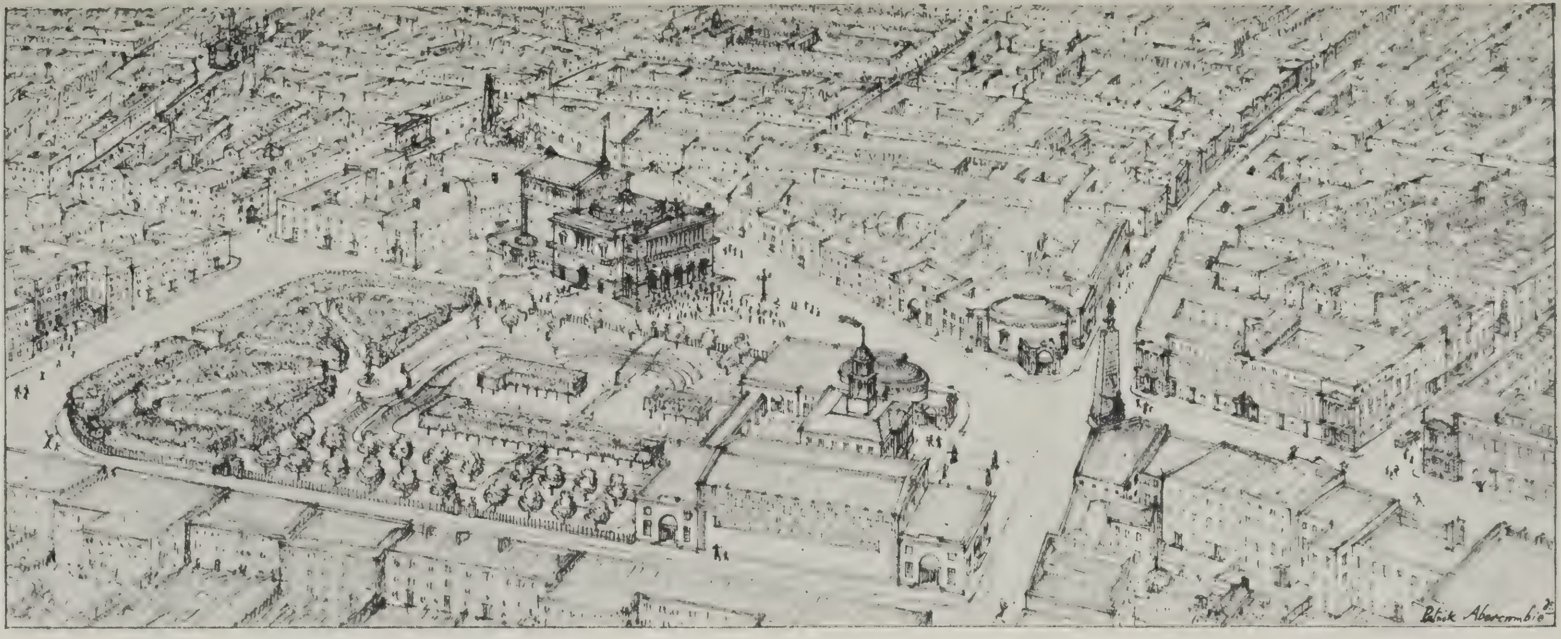
* "Dublin of the Future." By Patrick Abercrombie, M.A., A.R.I.B.A., Sydney Kelly, F.S.I., and Arthur Kelly. The University Press of Liverpool, Ltd., and Messrs. Hodder and Stoughton, Ltd., London. Price, boards, 21s. net; paper, 17s. 6d. net.

important suggestion in Part I is the formation of a al railway station. As pioneers in railway construction uffer by the number of termini which spot our towns. necessity for combining them in one vast and noble ture which shall have all the architectural significance ing the entrance to a capital city is acute. America rstands this for she has not our tradition of walled . We are slow to realize that paradoxically our city nces are no longer to be found on the perimeter ugh the growth or resuscitation of road transport is ng to restore them there) but in the heart of the city. the case of Dublin this will necessitate some tunnelling oid disfigurement. This is one of the most expensive cts in the report, but it is one which must be under- n. Another bold suggestion in this part is for the erection of a huge power station—a power citadel the authors call it—at Pigeon House Fort. If only the authorities will share the authors' breadth of vision they will realize that in this suggestion lies the key of a healthy and beautiful city. To rid ourselves of the smoke incubus is the first step towards the town beautiful, and the way to do this is to convert coal at a central station and to transform it locally into heat or power where and as required. The authors of this report have made the station into a mighty and imposing monument, a visible testimony they rightly call it of the city's "material sanity." It is possible that cheap water-power may necessitate a modification of this suggestion, but the idea of central conversion remains unassailably sound. Interwoven with this suggestion is one for the reclaiming of land adjacent to the docks for industrial purposes which must claim serious attention. The plans for a revised tramway system necessitate a new and more typical traffic centre, astride the river, having a focus on either bank near the demolished Four Courts, instead of as at present at the Nelson Pillar


DUBLIN
DUBLIN BAY
Howth
North Bull
South Bull
Kingstown Harbour
KINGSTOWN
Killiney Bay
Rock
Glasnevin
Castleknock
Crumlin
Tallaght
Laughanstown
Miles
Areas on which Rehousing is to be undertaken. Cabra 400 acres. Crumlin 430. Drumcondra 166 acres.
Reclaimed Lands, Docks & Industrial, 2,040 acres. Residential 980 acres.
Parks, Parkways & Parked highways 3,312 acres. Nature Reservations 7,100 acres. Parkways & Parked highways 45 miles Long.
Existing highways.
Proposed highways.

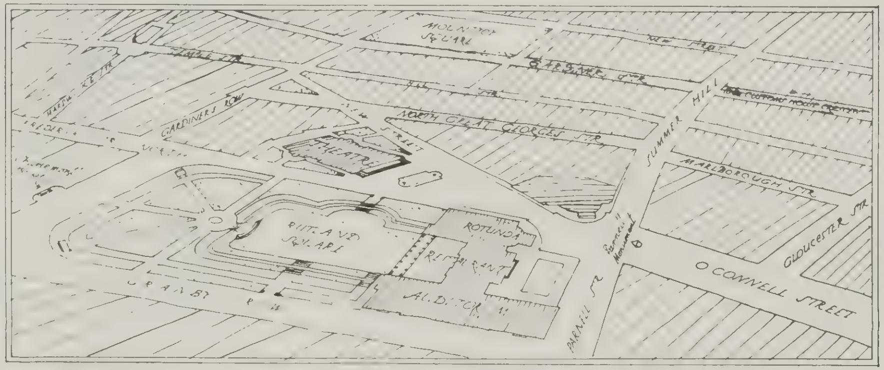
eral Plan of the district showing main lines of Regional Development ; the three areas for Re-housing ; the Nature Reserves and Parkways ; the Road System, including the outer Ring; the extent of Reclaimed Lands.


CITY OF DVBLIN NEW TOWN PLAN
GENERAL DEVELOPMENT OF INNER AREA
ABERCROMBIE, KELLY AND KELLY
Town planning Architects & Surveyors
Liverpool
REFERENCE KEY
Existing Public Buildings
Proposed Public Buildings
1 Cathedral 2 Parliament Buildings
3 National Theatre 4 Civic Buildings
5 Central Station 6 Roman Catholic Station
New Building Plots
Factory Sites
Garden Suburbs
Parks & Playgrounds
Feet 0 500 1000 2000 3000 4000 5000 1 Mile
Scale of Feet
W E
GRAND CANAL DOCK
Freight Yard
Goods Clearing House
Sports Ground
SEVILLE PLACE
ROYAL CANAL
CIRCULAR ROAD
DRUMCONDRA ROAD
PHIBSBOROUGH ROAD
CABRA AVENUE
STONEY BATTER
BRUNSWICK ST
SACKVILLE STREET
TALBOT ST
GARDINER ST
DAME STREET
ST GEORGE'S ST
CAMDEN ST
RATHMINES ROAD
RANELAGH RD
FITZWILLIAM
MERRION SQUARE
BRIDE STREET
CLANBRASSIL
The Crumlin Area
The Cabra Area
Monument Grounds
Cavalry Exercise
EMMETT ROAD
CIRCULAR ROAD
Pedestrian Park Way
The Clontarf Area
The Drumcondra Area
Portobello Playground
Mountpleasant Square



THE NATIONAL THEATRE AT THE TOP OF O'CONNELL STREET.

In the foreground is the new Auditorium and restored Rotunda; the centre block is to be a restaurant facing on to the Rotunda Gardens or Rutland Square.



KEY PLAN OF THE ABOVE.

in O'Connell Street, and the traffic falls happily into two divisions: radial and circumferential.

The most pressing need in Dublin—in common with most of the towns in Europe—is for more houses, but here the problem is met in its most acute form, for it is not merely a question of expansion, but, in addition, of rehousing 60,000 persons. Already two previous investigations had been undertaken, the one decided that 64,400 persons required rehousing, the other that 8,000 families required to be removed from congested areas. In the new report the ground has been gone over again with even more thoroughness, and the methods by which the ultimate results have been arrived at are such as may well form a prototype for subsequent investigations of a like nature in other towns. Questions of standards and definitions of gross and net areas are inevitably perplexing matters. A standard of twelve houses per acre indicates nothing until we decide what that acre is to include.

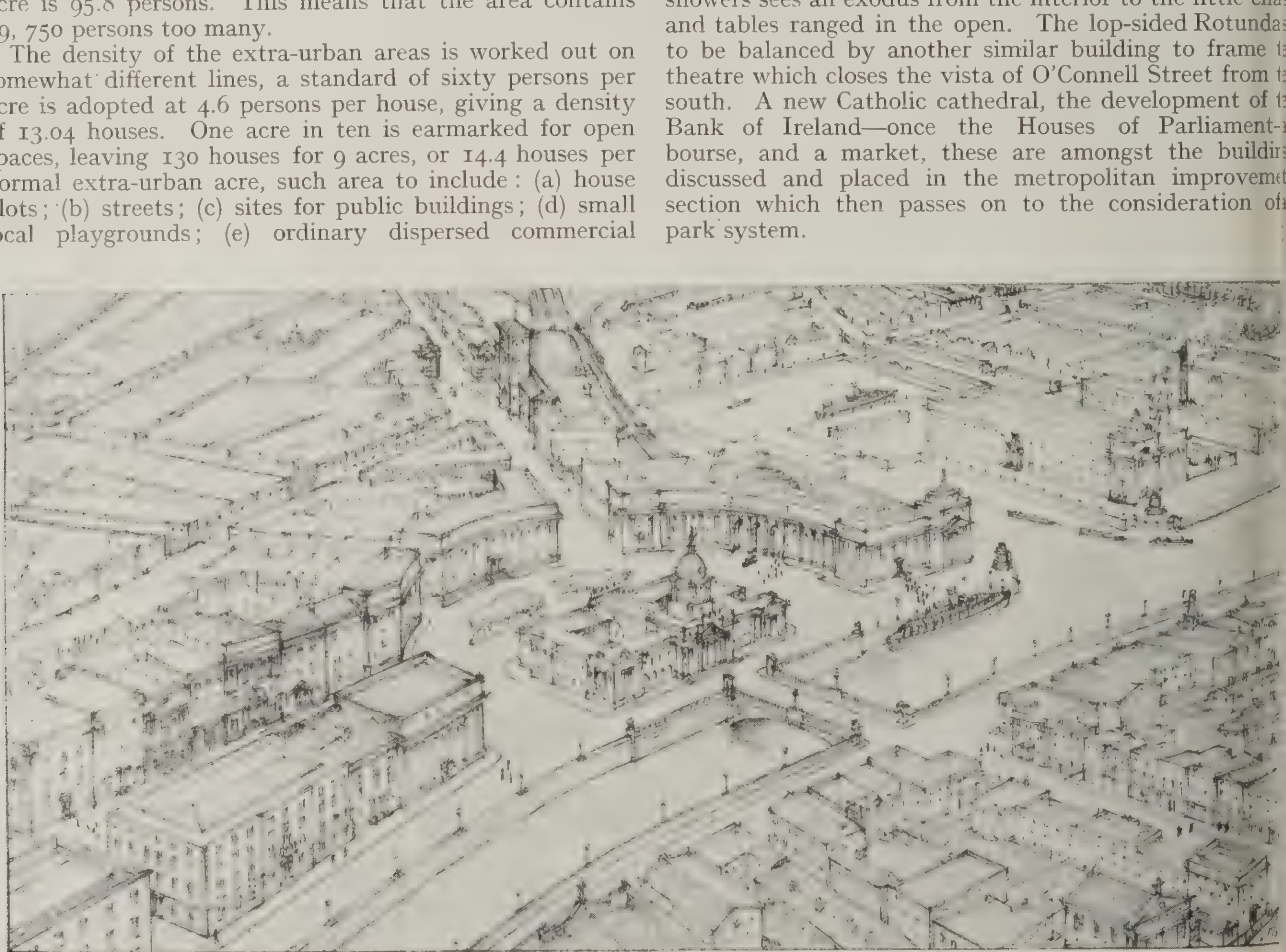
The first step here has been to divide Dublin into intra-urban and extra-urban areas—in itself an arbitrary but, nevertheless, very sound step. These are dealt with separately. To determine the intra-urban gross area, a schedule of non-residential areas was drawn up comprising water area, docks, railways, etc.; large institutions with enclosed grounds; the People's Park portion of Phœnix Park; unoccupied and derelict land. These totals having been deducted from the absolute gross acre the remainder is considered as a normal gross acre and must contain: (a) house plots; (b) streets; (c) sites for public buildings; (d) public playgrounds, town gardens, and squares; (e) ordinary dispersed commercial premises. For this acre a figure of seventy-five persons has been selected as a basis of calculation. At present the density on the normal gross acre is 95.8 persons. This means that the area contains 59, 750 persons too many.

The density of the extra-urban areas is worked out on somewhat different lines, a standard of sixty persons per acre is adopted at 4.6 persons per house, giving a density of 13.04 houses. One acre in ten is earmarked for open spaces, leaving 130 houses for 9 acres, or 14.4 houses per normal extra-urban acre, such area to include: (a) house plots; (b) streets; (c) sites for public buildings; (d) small local playgrounds; (e) ordinary dispersed commercial premises; (f) gardens or allotments. A maximum dens on any one acre of twenty houses is suggested.

We cannot describe in detail the various suggestions forward for rehousing and for increasing the number houses. They include the conversion of some of the eighteenth-century houses into tenements—in connect with this a competition was organized by the R.I. under the ægis of the Local Government Board which won by Messrs. Beckett and Harrington. The provis of cottages and flats and the utilization of the ro barracks site (barracks into houses may supplant swo into ploughshares as a slogan) complete the intra-urb housing. The extra-urban consists of three large sites Crumlin, Cabra, and Drumcondra.

Of the suggested metropolitan improvements we ha already referred to the establishment of a new tra centre. With this suggestion is, of course, bound up mu that is discussed in this part of the report showing, inde how inextricably traffic, housing, and metropolitan i provements are interwoven; the one cannot be consider without the other. The position of important pub buildings is a matter to receive careful attention, and least amongst them is a national theatre. The Irish thea movement, rich with a galaxy of famous names—Syn Lady Gregory, Yeats, George Moore, Lennox Robins Padraic Colam—which was associated with the Ab Theatre, is one of the most vital art movements in Euro It is only fitting that it should at last be adequat housed.

The proposed site for the theatre is at the head O'Connell Street. Adjacent to it is a music auditorium a a city restaurant with gardens; a welcome importati from the Continent where a pause between summ showers sees an exodus from the interior to the little cha and tables ranged in the open. The lop-sided Rotunda to be balanced by another similar building to frame theatre which closes the vista of O'Connell Street from south. A new Catholic cathedral, the development of Bank of Ireland—once the Houses of Parliament- bourse, and a market, these are amongst the buildi discussed and placed in the metropolitan improveme section which then passes on to the consideration of park system.



CUSTOM HOUSE CRESCENT AND RIVERSIDE STATION.

This sketch shows the railway across the Liffey taken underground; the Butt Bridge removed; a new road bridge facing the Custom House; the Riverside Station on the site of the old dock and the docks remodelled for the passenger steamers; the Crescent completed; and the approach to Amiens Street Station improved.

hœnix Park, as everyone knows, is not only one of the st in Europe, it is also one of the largest, with an acreage nputed at 1,600 acres (our own Hyde Park and Ken- gton Gardens have 638¼ acres), and enters wedge-like the heart of the city. Yet the proposal is to double acreage of park land in Dublin, bringing its total to 12 acres, exclusive of Nature reservations. This gives acre for every 100 inhabitants, a high standard only alled by Boston, and enormous when compared with w York's 716 or London's 680.

he park system is usefully scheduled under the follow- heads: small playgrounds; neighbourhood parks; town dens or city squares; local parks; the great town parks; kways, road, and river; park highways; the Nature serves. The most interesting of these categories is the ghbourhood parks; they are concentrated playgrounds h facilities for men, women, and children, with tennis, ls, gymnasium, and the like, and as it is proposed that barrack squares of Dublin shall reverberate with the ghter of healthy citizens rather than with the impreca- s of the sergeant-major, by converting them to these useful purposes, there will be no expense entailed in land acquisition. The publication of this volume so soon after the Doncaster Regional Planning Scheme certainly places Professor Abercrombie in the forefront of town-planning experts, and this volume will be valued, not only for its local use to the citizens of Dublin, immeasurably fortunate in its possession, but as one of the most important text-books that has yet appeared on town planning. The subject has been attacked with immense vision and imagination leavened with vast technical knowledge. It embraces the whole range of the human organization. It has been the good fortune of other great architects to bequeath noble buildings to the world. The present age, however, offers vaster opportunities to the profession, and fortunate are they who grasp them. As the whole is greater than the part so is the planning of a town greater than the planning of a building. Professor Abercrombie by such work is making for himself a name which will ring with the greatest through the ages.

[The review of the volume upon the Doncaster Regional Planning Scheme appeared in our issue for January 17.]

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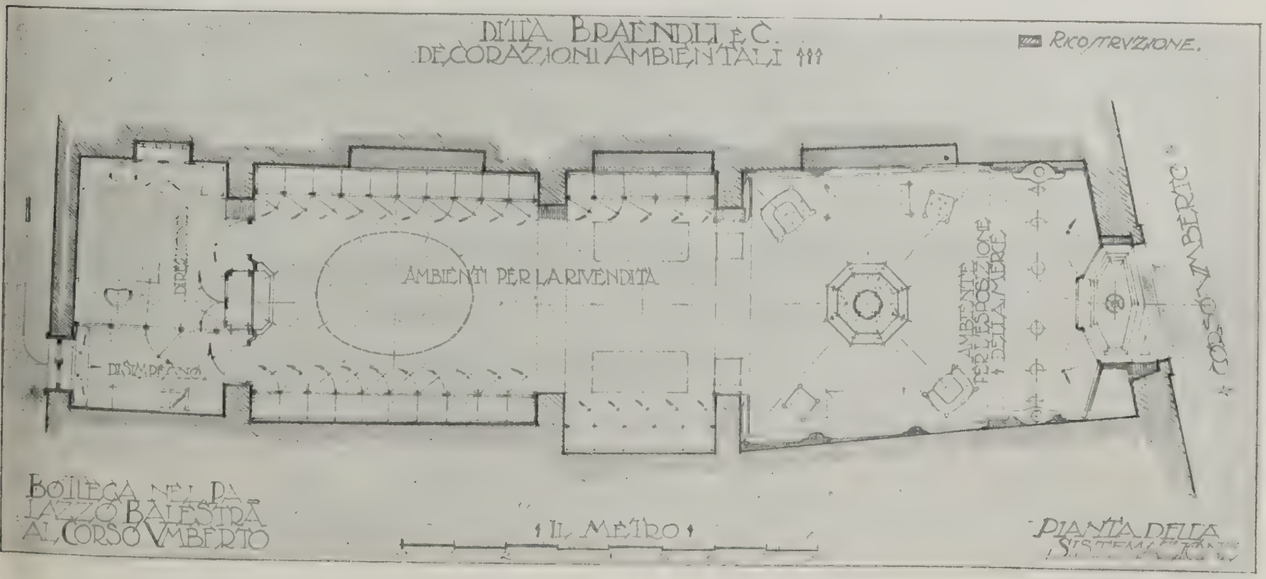
# A Modern Roman Shop

## By S. ROWLAND PIERCE (of the British School at Rome)

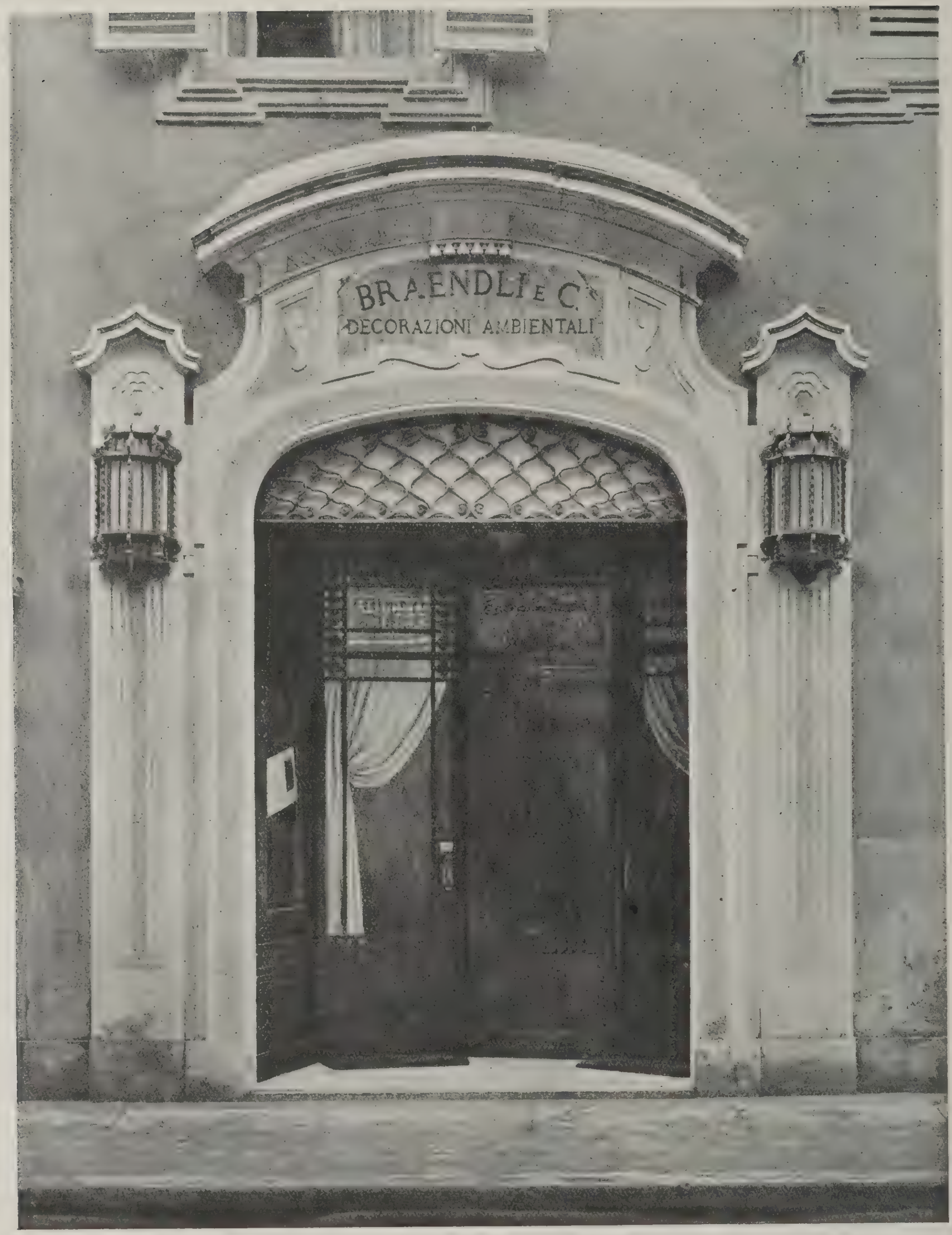
Professor MARIO DE RENZI, Architect

THE conditions existing in Rome with regard to shop premises are very different from the modern requirements in other great western cities. The former are influenced very largely limate and tradition, but more especially by the small ing that forms, through single shops, the principal part he retail system of the Italian "città." Most of the s are small, and extraordinarily specialist with regard e goods sold. It is only in exceptional cases that the lem of the large store or multiple shop has to be met, r example, in the case of the two chief multiple stores ome, the "Unione Militare" and the "Rinascente." ere has been, however, a gradual leaning towards the plate-glass protected areas of display so often de- ded by the modern shopkeeper of Paris or London, in most cases the same disquieting results on the t façades. But alongside this demand there always s to exist the tradition of the small shop, which is the t descendant of the ancient Roman and mediæval s, with their wooden or marble counters, wooden ters, and brightly coloured sun-blinds. There are still many such shops, but slightly modified, in every Italian town. Hence, where there is any architectural pretension at all, even in the most modern of Roman shops, there is a simplicity, a singleness of purpose, and a suitability for the respective trades that appeal to the English eye as something of a relief from the harassing conditions met with in the larger (and perhaps more interesting) problems of the large shop.

The "negozio," illustrated in this issue, has been finished within the last few months, and has many excellent points to commend it to the notice of the architect. It forms the showroom and office of Messrs. Braendli & Co., and is situated near the church of S. Carlo in the Corso Umberto Primo. The firm are manufacturers and retailers of wall-papers and fabrics, and of decorations in "stucco" or fibrous plaster. The design and the decorations of the building are of a lively character, and are interestingly original, though in many ways they are the direct outcome of the more florid and less truthful decorations of the Roman Baroque of the later Renaissance. Some difficulty was encountered on the plan on account of the

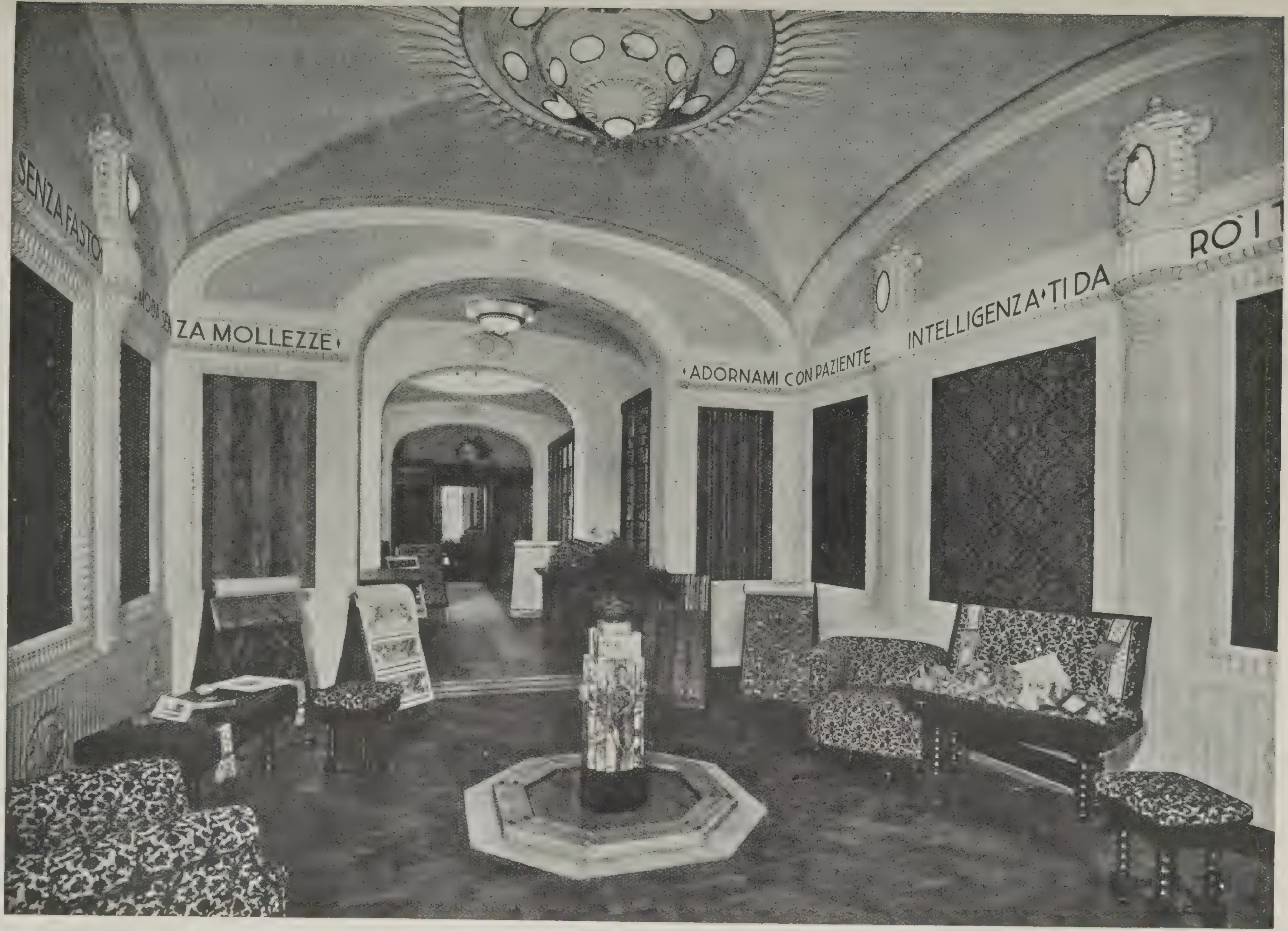

DITTA BRAENDLI E C.
DECORAZIONI AMBIENTALI
RICOSTRUZIONE.
AMBIENTI PER LA RIVENDITA
DIREZ.
DISIMPEGNO
AMBIENTE PER L'ESPOSIZIONE DELLA MERCE
CORSO UMBERTO
BOTTEGA NEL PALAZZO BALESTRA AL CORSO UMBERTO
IL METRO
PIANTA DELLA SISTEMAZIONE

PLAN.



A MODERN ROMAN SHOP: THE ENTRANCE.
PROFESSOR MARIO DE RENZI, ARCHITECT.

Professor Mario de Renzi, Architect



This showroom has been designed for the display of wall-papers and fabrics, and of decorations in "stucco" and fibrous plaster. Above the vertically fluted dado are panels, with moulded and enriched frames constructed to contain samples of wall-papers. These samples can be changed by swinging out the inner frames, which are on hinges. In the centre of the room is an octagonal marble basin, from which rises a variegated marble fountain.

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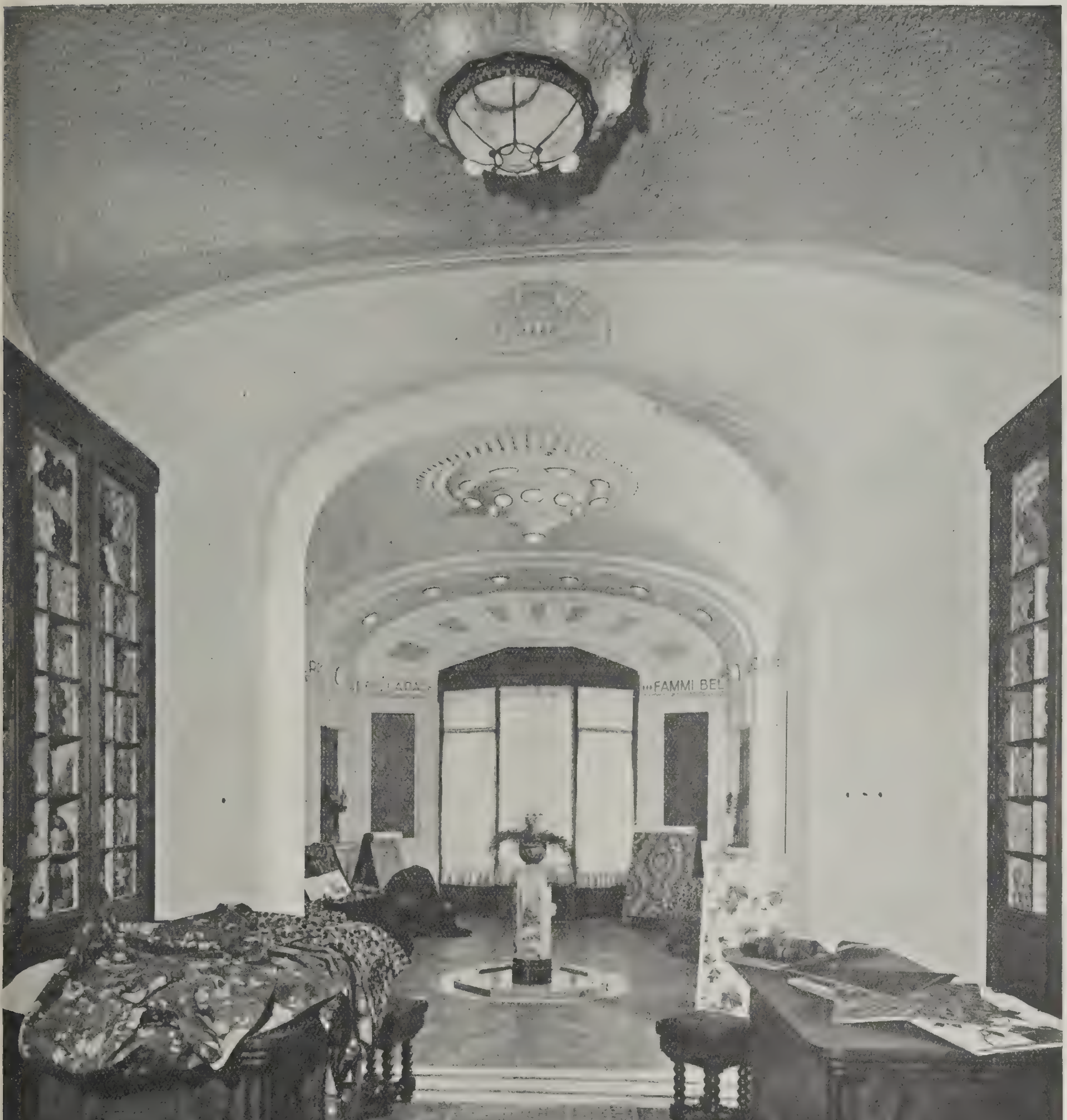
# urrent Architecture. 170.—A Modern Roman Shop : The Showroom

### Professor Mario de Renzi, Architect



This illustration gives a view of the showroom from the counter space. The walls behind the two counters are occupied by pigeon-holed stacks of the samples. The counters and the stacks are of lightly stained oak. The showroom is illustrated on the preceding plate.

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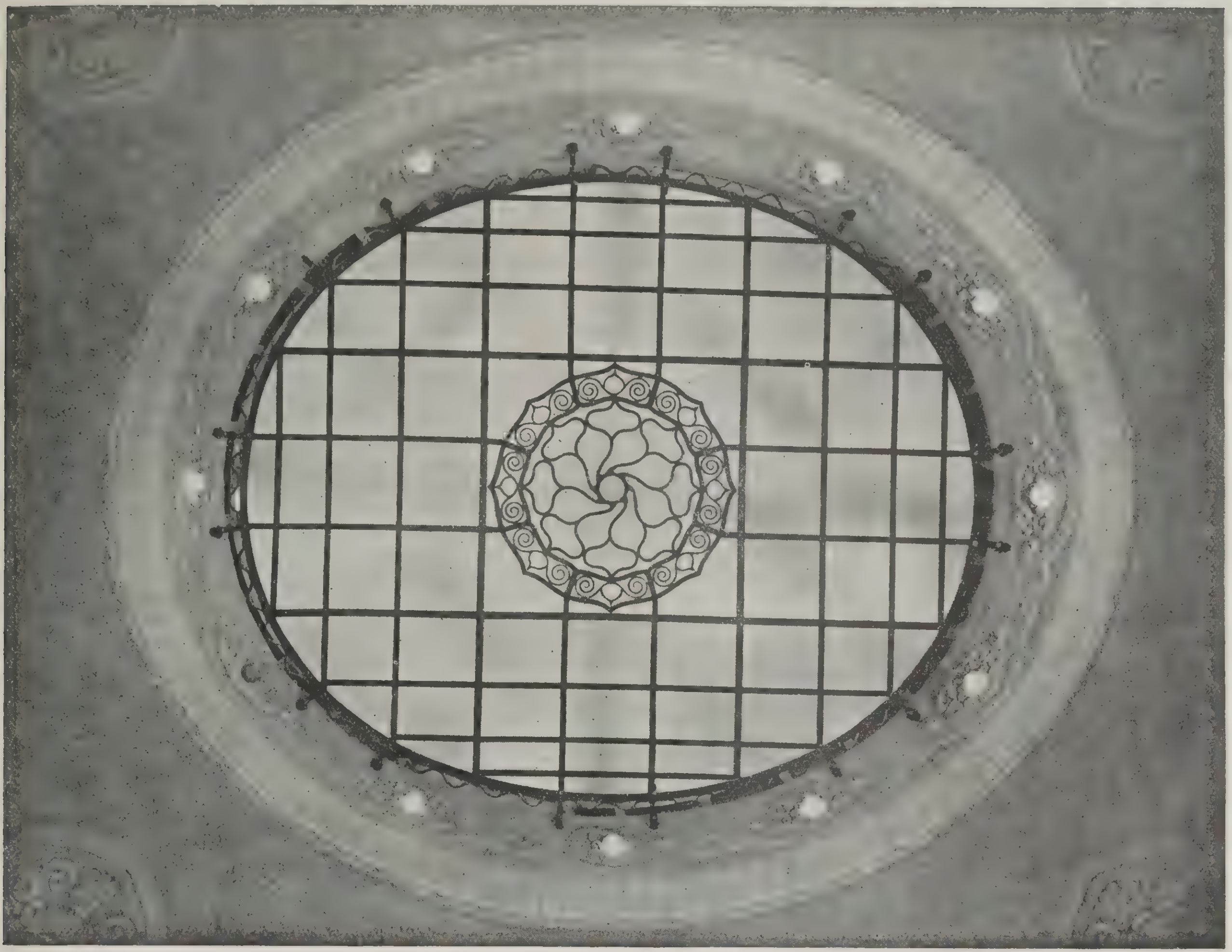


A MODERN ROMAN SHOP: A CEILING LIGHT.

inclination of the street to the axis of the shop and of the irregularity of the site, and this has been overcome by the architect in a change of axial direction on the building line itself. That this has been successful is shown by almost complete masking of this change from persons entering the shop.

The entrance is recessed in a three-sided manner, with the two sides as doors, and the centre fixed. This recess has a simple, marble-patterned floor, and the window-frames and doors have been constructed in steel and malleable iron, coloured to very dark grey. The elevation to the street is in stucco of varying textures finished to a light cream tint. Well-made and well-shaped bronze projecting lamps give an added charm to the quiet and modest exterior. Being on the south side of a street running almost due east and west, the problem of the sun-blind did not arise.

The showroom proper, which is furnished with easy chairs and cabinets of ebonized wood for books and catalogues, occupies the front part of the premises. In the centre of the space, which is ceiled by a flat elliptical vault, is an octagonal marble basin. From this base rises a variegated marble fountain of a graduated form with fluted surfaces, on the four faces of which are small enamelled ceramic heads, from which water falls into the low basin. It is the architect's intention to surmount this fountain shaft with a small group of figures in white marble.

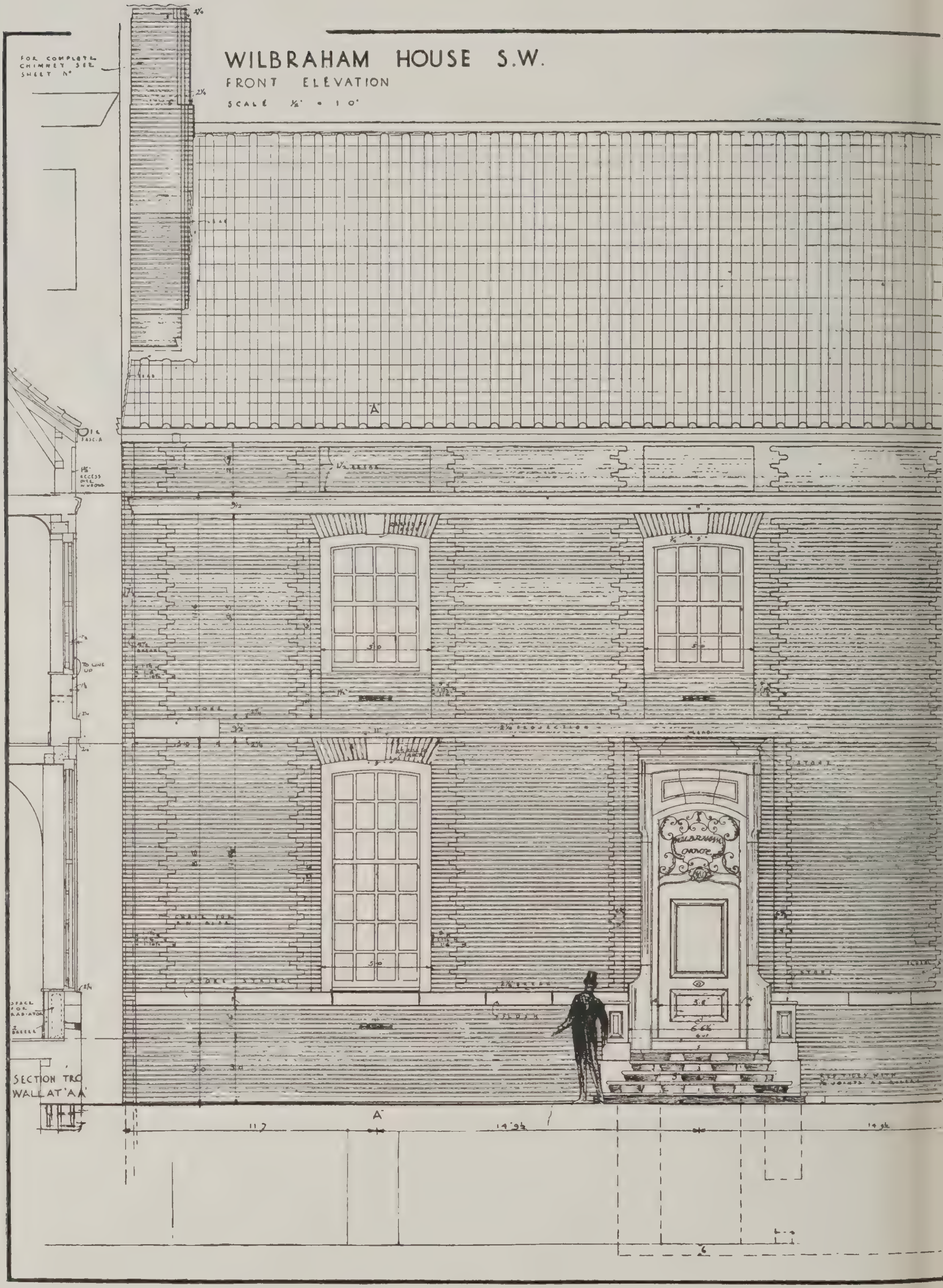
The floors throughout the building are of oak herring-bone parquet, in rather smaller sections than is usual in England as a precaution against climatic changes of temperature. The decorations of the walls and ceilings are carried out in fibrous plaster. Above the vertically fluted dado is a series of panels, with moulded and enriched frames, constructed to display samples of wall-cloths or papers which can easily be changed by swinging out inner wooden frames on hinges. Over these panels is a frieze enriched with raised square-section block-lettering, coloured a pleasant shade of greyish-brown, while arranged over the styles of the panels are stucco decorations, within which are set the electric wall-lights shaded by thin sheets of curved and figured alabaster. The vaulted ceiling is constructed on metal lathing, hung on steel joists, set below the floor of the existing house above. At the apex of the showroom vault is a radiating centre, enhanced in decorative quality by electric lights, inset behind alabaster shades. Behind the front showroom is a counter space, set between the piers necessary for the support of the house above, and the walls behind the two counters are occupied by pigeon-holed stacks for the samples. Both the counters and the stacks are carried out in lightly stained oak.

The back part of the premises open out on plan into a sort of sales room for the display of larger materials. It is again vaulted in plaster, and is lighted by an elliptical ceiling light, with electric lights introduced into the stucco surround. A door to the right side leads to a small office for the manager, while access to the street at the back of the premises is attained through a door to the left.

On so small a site a maximum amount of room has been given to the efficient working of a shop concerned with the effective display of samples; and in this case there has been introduced no small amount of originality and freshness of idea. Most of the stucco decorations were carried out by the building owners, Messrs. Braendli, and they have provided themselves with attractive showrooms, cool by reason of the cream-white "stucco" of the interior, and brightly coloured by reason of the many parti-coloured samples of material and paper in the panels and cabinets. The architect was Professore Mario de Renzi, now in partnership with Sig. Guiseppe Machin, at the Via Napoleone III 70, Rome. Prof. de Renzi was a pupil of that well-known Roman architect, Commandatore Macello Piacentini.

# Architects' Working Drawings. 59.—The Front

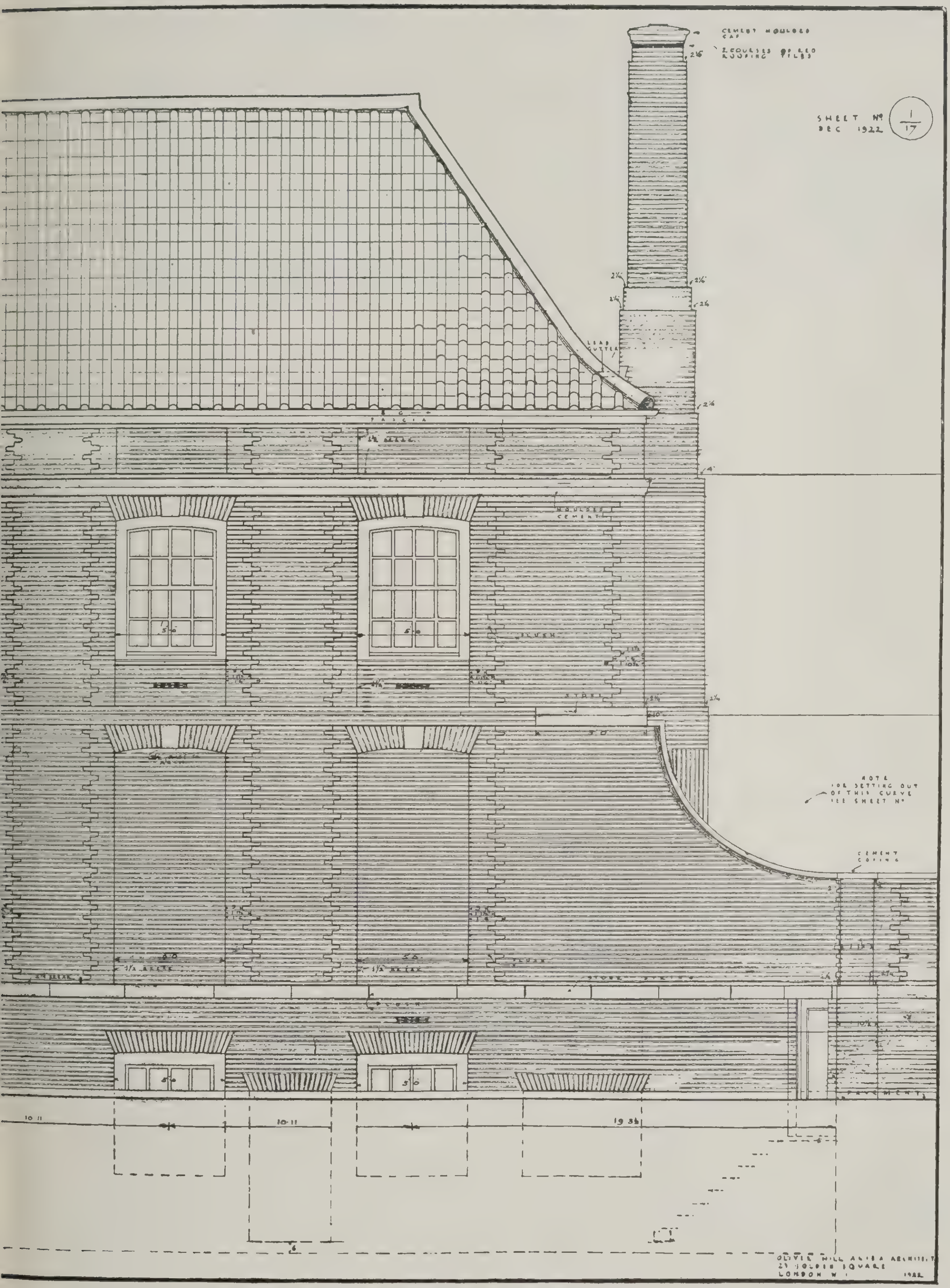
Oliver Hil



(For p

# of Wilbraham House, Sloane Street, London, S.W.

., Architect



616.)

## Wilbraham House

This house is nearing completion on a site facing Sloane Street, at the end of Wilbraham Place. The site is open on three sides, and the garden, which is also being laid out, contains some mature mulberry trees. The façades are faced with 2 in. silver greys with dressings of red bricks. The entrance door, plinth, etc., are in Portland stone. The accommodation includes some eight bedrooms and four bathrooms. The interior has been considered as a background for a connoisseurs collection of English furniture, pictures and oriental porcelain. The hall is paved with gold-coloured Verona marble. The staircase is in Portland stone with wrought-iron balustrade, and the principal rooms have vaulted ceilings. The long room which has a floor of wide oak boards, has a fireplace surround in statuary and lapis. The library and dining-room fireplaces are carried out with Hopton wood, tortoiseshell, and shagreen.

Mr. Oliver Hill, A.R.I.B.A., is the architect.

The working drawing, which is reproduced on pages 614 and 615, indicates the generous proportions upon which the design has been carried out. The doorway is a particularly interesting feature, and the great chimney which ascends on the right gives balance to the composition. Interest is given to the elevation by the use of stone strings, keys, and surround to the doorway.

## The Royal Society of Arts

The work of renovating and decorating the house of the Royal Society of Arts, John Street, Adelphi, has now been completed. It will be recalled that the house, which was formerly held on a lease granted to the Society by the Brothers Adam in 1775, was purchased by the Society last year, and a scheme of alterations, designed to restore the interior of the premises to their original state, was adopted, the architect being Mr. Arthur Bolton, an authority on Adam work. A new entrance hall has been formed, and by the removal of certain walls the effect of a miniature grand staircase has been secured. The walls of the staircase have been panelled, framing in the two large portraits of Queen Victoria and the Prince Consort, painted for the Great Room in 1860. The stone steps and landings inlaid many years ago with glass mosaic, by Messrs. Powell, have been left, but the plain iron balustrade has been ornamented with Adam anthemiums of cast lead, made and fixed by Messrs. Elsley. The two original Adam mantelpieces of marble have been reinstated in the library, and other Adam features have been restored.

## Contemporary Art

### *The Royal Society of Painters in Water-colours.*

There is a fine display of real water-colour drawing at the 180th exhibition of this old Society. Walter Russell, Cecil Hunt, Murray Smith, Reginald Smith, and E. T. Holding are true exponents of the art, and each artist shows several drawings. "Stow's Boat-yard," "The Riverside," "In Dock," and "The Jetty," by Walter Russell, are some of the fruits of the artist's recreative week-ends at his seaside cottage at Shoneham, and their ease and comfort is a reflection of the mood in which they were done. Cecil Hunt's drawings convey a similar impression, although there is more intention about the various Scottish subjects which he paints, but no more evidence of labour. Murray Smith's Norfolk scenes are a little on the prettier side, but these and Reginald Smith's range with Russell's and Hunt's and Holding's in forming a set of drawings apart—the product of an appreciation of the art of the early masters.

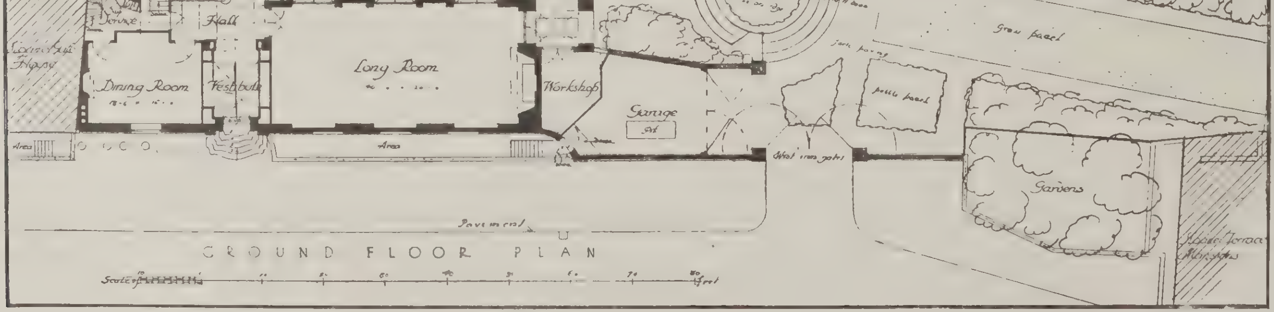
Charles M. Gere represents the new. His style is original and entirely and charmingly naïve as befits the leading member of the Cotswold group. His little scholarly drawings, at first tentatively, then absorbingly, claim you; you get to like them more and more and to feel that in them there is a consistent development from earlier work. There is a sense of decoration in them, and the drawings of W. T. Wood possess this sense too, in a much more robust fashion. Indeed, Wood seems, so far as this exhibition is concerned, to have adopted decorative landscape as a profession, and his things are excellent in that direction. The president, Sir H. Hughes-Stanton, has a handsome drawing, "Segovia," which is a really fine picture, and James Paterson has some spot-esque studies which are of interest. Lamorna Birch, R. Thorne-Waite, J. C. Dollman, and Harry Watson exhibit pictures rather than drawings, and there are some delightful figure drawings by Russell Flint, Charles Sims, and Gerald Moira.

### *The Royal Society of British Artists.*

The Centenary Exhibition is one of the best exhibitions the R.B.A. has ever held. Here are real water-colour drawings by Varley, James Stark, Cotman, Cox, Tom Collier, and a superb W. Callow—"The Market Place, Lille." Here are large drawings—illustrations, as always, on subject-pictures, as they are called—by Sir John Gilbert; small ones by Birket Foster, Sir Alfred East, Francis James, and Henry Moore. There are also line-drawings and wash-drawings by Lord Leighton and Charles Keene. And the oil paintings! Whatever may be felt as to the anecdotage of the British school during the Victorian period, there is no manner of doubt as to the excellence of the painting of those days. How W. J. Müller and Thomas Faed could paint! They had paint mixed with their blood. They knew that a painting had to be a painting and they saw that it was.

Why does not the R.B.A. encourage sculpture? The galleries might quite well be adapted for its display. Meanwhile everybody will be grateful for this most interesting and in many ways excellent show. Everybody should go to it, for there are some fine things to be seen there.

KINETON PARKES.

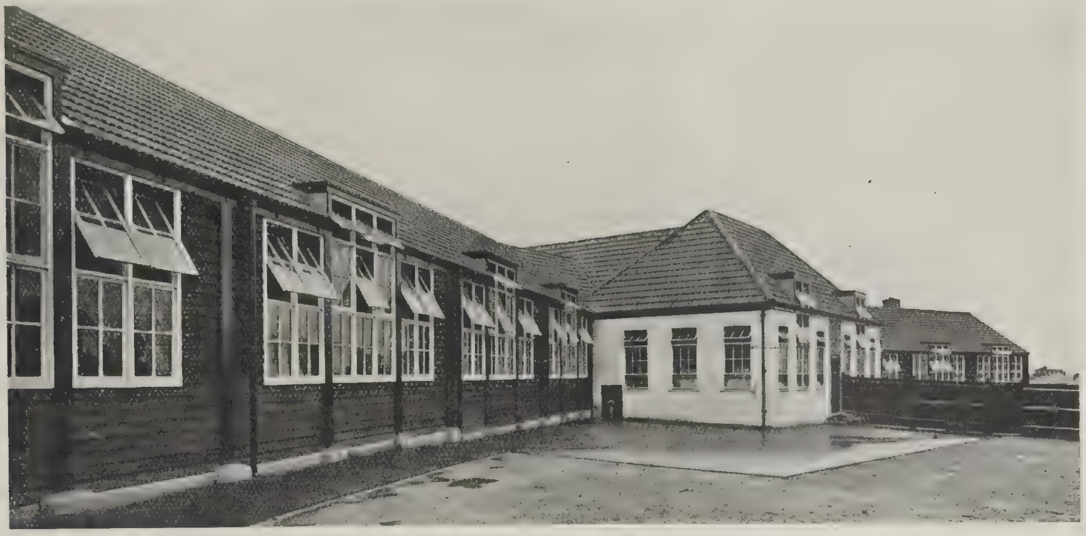


GROUND-FLOOR PLAN OF WILBRAHAM HOUSE. OLIVER HILL, A.R.I.B.A., ARCHITECT.

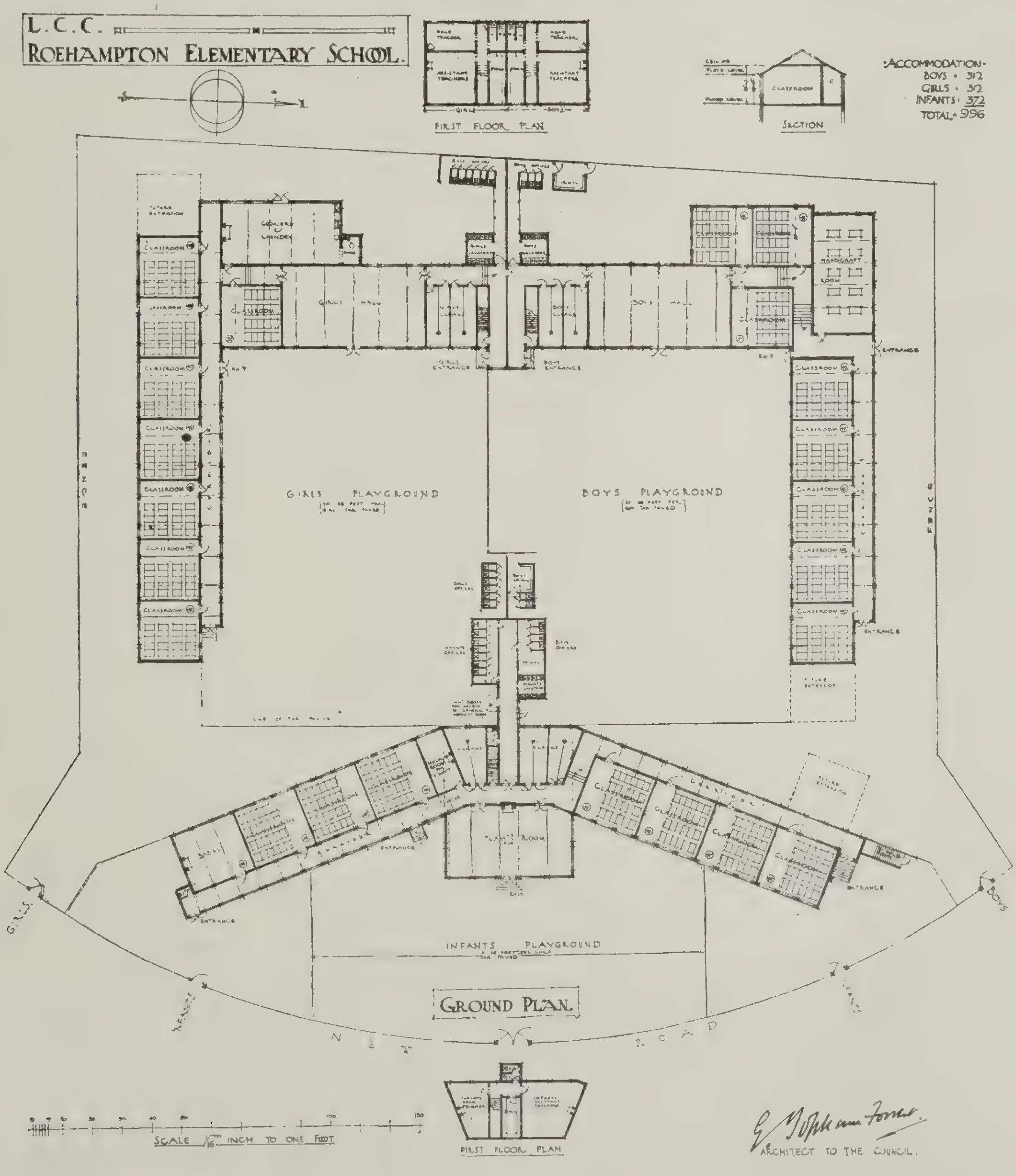
(*See also double-page Illustration.*)

# Current Architecture. 171.—New Elementary School at Roehampton

G. Topham Forrest, F.R.S.E., F.G.S., F.R.I.B.A., Architect to the London County Council



THE FRONT OF THE INFANTS' DEPARTMENT.



This school has been erected on the new housing estate of the London County Council at Roehampton. It is a new type for London. The administrative portions of the building are of permanent construction, and the classrooms are semi-permanent to enable them to be altered or adapted to meet new conditions or even demolished with the minimum of expense. The school embodies the results of the latest researches into the value of fresh air in the life of the child.

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# Correspondence

## 3uilding "Rings" and Houses

*To the Editors of* THE ARCHITECTS' JOURNAL.

IRS,—The prolonged and irritating
rtage of houses has undoubtedly
ated a wealth of feeling, and the opera-
ns of all and sundry engaged in the
lding industry have—quite properly—
n closely scrutinized from time to
e during the past few years.

he disappointment resulting from the
bility of the Government to supply
requisite houses promised under their
lding scheme has probably contri-
ed very largely to the revival in the
ss of the subject of "rings" and com-
es, and, notwithstanding that in the
t the builders' merchants have been
arly absolved from all responsibility
the present state of affairs, as it is
dent that considerable misapprehen-
still exists in the public mind as to
ir functions, it would not appear in-
portune to reiterate certain facts, so
t such misunderstandings may be dis-
led.

he building industry consists of three
in divisions—the manufacturers, the
lders' merchants, and the builders.
g experience has proved that all three
indispensable to the proper carrying
of the trade. The manufacturer pro-
es the various descriptions of building
terials. The merchant is the large
l stock-holder of the goods so pro-
ed, delivering them to the builders as
uired for the erection of the houses
n which they are engaged. Provided
point is clearly appreciated, the
lders' merchants welcome the fullest
tilation in the Press of the much-
cussed subject of the high cost of
lding.

wish to emphasize the following facts,
ch speak for themselves :—

. Far from making exorbitant profits
builders' merchant who has seen a
profit on his business during the last
lve months has been fortunate, especi-
if he has been dealing with the cast-
s side of the trade.

. Criticisms in the Press appear to
rlook the very important fact that
lding material costs have fallen very
siderably during the past twelve
nths—in some cases from 25 per cent.
45 per cent. Practically every item
shown a decrease (castings and hard-
e in particular), and merchants stock-
the goods have suffered very heavy
es as a result.

. Builders' merchants as a body have
ays been only too pleased to assist
enquiries instituted by official de-
tments relative to prices, and no
of has been, or can be, adduced that
y are in any respect profiteers. The
austive investigations of the Govern-
nt Profiteering Committees gave them
ean bill of health in this respect, and
Builders' Materials Central Committee
ntioned recently in some of the
cles) actually lodged their price lists
h the Board of Trade for several
nths, with full details showing how
prices were arrived at, and the margin
ed.

. The high cost of building is not the only obstacle to the erection of new houses. Equally important is the Rent Restriction Act, which not only deters private enterprise from building, but renders it impossible for the general public to appreciate what is a proper economic rent. There is ample capital available for investment in building immediately an economic return is obtainable, but while the Rent Restriction Act is continued private enterprise is deterred. Rent Restriction is the real obstacle, and not the high cost of materials. It is, therefore, to be hoped that a speedy solving of this problem to the satisfaction of all concerned may be brought about by the Government in the near future.

5. Production costs are kept from falling by heavy taxation, dear fuel, excessive railway rates, high cost of living, the burden of unemployment "doles," and all the other ills affecting society generally. It is therefore futile to endeavour to saddle the responsibility on the builders' merchants.

In view of the widespread publicity given to this subject, and the desire by the Press at all times to probe the full facts, I trust that, in common fairness to the builders' merchants of the kingdom, their point of view may be given equal publicity. SIDNEY NEVE.

Secretary of the National Federation of Builders' Merchants' Associations.

## Professional Publicity

*To the Editors of* THE ARCHITECTS' JOURNAL.

SIRS,—Mr. C. McArthur Butler, in his letter printed in your issue for March 14, informs us that a friend expressed the view that architects, in not advertising, were a "funny lot."

I do not know what the point of Mr. Butler's letter is. It appears to express a wistful yearning for that licence in discarding principles which is enjoyed in certain commercial circles. It seems hardly necessary to remind your readers that the reason professional men do not advertise is that, in spite of the growth of commercial claptrap for exploiting the public, they retain some of those instincts of self-respect which are the heritage of human nature as distinct from pig-nature; nor to point out that they hold to their traditional precepts instead of adopting the undisciplined licence of trade, because they are not fools, which the representatives of typical modern commercial enterprise demonstrably are in spending the greater part of their time and energies in bettering, obstructing, and out-boasting one another instead of getting work done.

The natural consequence of professional men adopting the methods of commercial enterprise would be that all dignity would be cast aside and a front of greasy benevolence displayed to the public. Barristers would send solicitors tasty glass paperweights with their names, addresses, and attainments stamped into them and beg the honour of acceptance of a gift sent as a token of admiration and respect; doctors would circularize the patients of their rivals with those unctuous "follow-up" letters which are claimed (by those who compose and sell them) to "bring business," employ agents to talk over the servants and distribute at Christmas, each, several tons of cardboard calendars: and so with other professions. Can anyone doubt that directly the first step was taken—directly the principles of human nature upon which the dignity of professional callings rest—was thrown overboard, such loss of dignity would proceed step by step until the professions fell to those depths already reached by commerce where scarcely a vestige of dignity remains? Is there, I ask, any degradation of the wholesome instincts of self-respect to which commerce would not lend itself if consequent advantage accrued? My conviction is that if Dean Inge offered the dome of St. Paul's, and the Dean of Westminster the fly-leaves of the Abbey hymnbooks as sites for advertisements, forty of the shrewd, hard-headed business men we admire so much would tumble over one another to secure the monopoly.

May I in conclusion say just this: that the position won for our modern system of advertisement by continued insidious attack upon the dignity of human nature is no more nor less than the apotheosis of the braggart. The threatened reign of the secret publicity agent, for whom truth is represented by mere plausibility, will stand as the apotheosis oft he liar. We architects ought to thank God that it is not only possible, but necessary for us, to pursue our calling uncontaminated by these things; and we should arm ourselves to secure that by no sophistries are we persuaded to allow such influences to enter among us and victimize us and degrade our calling as they have victimized commercial men and degraded trade. H. B. CRESWELL.

## The Housing Subsidy

*To the Editors of* THE ARCHITECTS' JOURNAL.

SIRS,—The proposed subsidy of £12 per annum on working-class houses of about £400 value may, or may not be a good thing. It may for instance, produce the houses required and it may favour that sturdy independence which is, or was, one of the many good points in the character of the English workman.

On the other hand, it may not do anything of the kind.

Now, a curious problem in economics is about to be presented to, say, a bricklayer's labourer with an inquiring mind, and a pressing need for houseroom.

He is finding it necessary to threaten to strike in order that his wages may not be reduced by about seven shillings a week. At the same time a benevolent Government offers to pay part of the rent of the new house which he may, or may not, get up to about five shillings a week.

It appears then, that were his wages left as they are—and they are low enough in the opinion of many—he would be slightly better off in his new cottage without the proposed subsidy at all than he would be if both the Government and the master builders' proposals are carried through.

As it would appear to be the great middle class which will bear the most of the burden of either new taxation for the subsidy or continued high cost of building if wages remain as at present, one is driven to the conclusion that it is a very queer state of things.

One hopes that the politicians and the economists may be able to get us out of the housing mess, for it needs the wit of a Gilbert to show us any humour in the situation. ARTHUR WELFORD.

## Sewage Disposal from Hotel

*To the Editors of* THE ARCHITECTS' JOURNAL.

SIRS,—I have read " Architects " query and Professor Adams's reply to it with interest. It is quite probable that the septic tank is too small, and that the depth and content of filter are not sufficient. The tank should have a capacity of twenty-four hours' dry weather flow, and the percolating filter bed should be 4 ft. 6 in. deep, and contain not less than the cubic content in feet, found by dividing the dry weather flow in gallons by seventy. But is it necessary to treat the tank effluent if it discharges under the shingle foreshore ? I was recently called in to advise in a similar case, and found that the clogging of the system was due solely to the fats from the kitchen sinks. The installation of a specially designed grease trap has had the desired effect, and the whole system is now working quite satisfactorily. Before going to the expense of enlarging the tank and filter, I advise " Architects " to pay attention to this detail, clean out the tank, and take out the filtering media and replace it after a thorough washing. It would also assist the filter if more ventilation and light were provided, always remembering that the bottom of filter should be as well ventilated as the top. It may also be advisable to take the drain from the beer cellar directly into the outfall drain.

A. J. T.

## Congested Areas

Mr. H. V. Lanchester (president) took the chair at an adjourned meeting of the Town Planning Institute held at the Institution of Mechanical Engineers, when a discussion took place on a paper by Mr. L. C. Evans (Town Clerk of Salford) on "Acquiring and Replanning Congested Areas."

Mr. A. Horsburgh Campbell (City Engineer, Edinburgh), who was to have opened the discussion, was unable to be present, but his contribution was read by Mr. G. L. Pepler. Mr. Campbell laid stress on the necessity of preparing town-planning schemes concurrently with unhealthy area schemes. In practice he did not think local authorities had found the difficulty of deciding what buildings might be included as subject to an improvement scheme, as was suggested by Mr. Evans. Dealing with the steps taken in Edinburgh with regard to unhealthy areas, he said several houses which were sound in themselves, but were embedded in slum property had been included in the scheme, and this did not invalidate the scheme, and he thought the Board of Health would regard them as subjects which should be included to make the scheme efficient. The recent inquiry in Edinburgh related to two of the oldest districts of the city, viz., Cowgate and the Grass Market. In these districts were thoroughfares redolent of history, but the houses were the survival of an earlier age, and their preservation or extinction was one of the thorny questions of the moment. He might say, for the comfort of the lovers of old Edinburgh, that the policy of preservation would win. They had found already that preservation of the individual building was quite consistent with the programme of reconstruction of the area where vision and foresight were applied in time to co-ordinate those two ideas.

Mr. Orr said he was pleased to hear that Edinburgh had been able to proceed under the 1919 Act, because he had thought that Section 9 of that Act would have prevented any scheme going forward, as, in his opinion, it tended towards confiscation. The owner of property, even if it was slum property, ought not to be made to bear any loss occasioned by the land being put to anything but its best use. In London a good many small areas had been cleared by the London County Council, and in consequence of the obligation to re-house on the site, the Council had written down the value of the land by £1,000,000. As he understood it Section 9 of the 1919 Act was to put that loss on the slum owner, but if the State said that houses should be placed on the site which was more valuable for factories and business premises, then the loss should be borne by the public. Speaking from his experiences in Bombay, he thought the difficulties met with under the 1890 Act could be overcome by the provision that the value of the land to be bought should be based on the value at the date at which notice was given that a scheme was to be prepared. What they wanted was to combine slum clearances with what they called in Bombay "street improvement schemes." If they wanted to make re-housing cheaper they could do so by erecting block buildings, and he did think that some authorities had carried out the policy of re-housing only in the suburbs rather too far.

Mr. Evans said that when he was requested to read his paper he was asked to say how they could clear and re-plan congested areas under the law as it was, and not under the law as they thought it might be. To do this they had to consider the conjoint application of Section 4 of the Act of 1890, and the puchasing clause of the Act of 1919, and upon the interpretation depended the price they had to pay. If they could prove that certain houses were dangerous or injurious to the health of the inhabitants of the houses or of neighbouring houses, they could make such an unhealthy area, but he submitted that they could not make anything else an unhealthy area, and, therefore, under the Act of 1919, they could only purchase such property at site value. It was perfectly true that they could put in other property for the purpose of making the scheme efficient, but this property would have to be bought at full value. The question was a perfectly simple one if they had plenty of money. They could clear the whole of Manchester and Salford if they had plenty of money, just as Baron Housman, over a century ago, re-made Paris, but Paris had had to pay for it by a tax on all food which came within the city. He knew a widow lady who owned property which her father had bought legitimately and honestly in the Hulme district of M chester, where there were eighty houses the acre, and he would ask if that la was to be dispossessed of her property

Mr. Morris (Town Clerk of Chesterfie said that before 1919 there was lit difference in the price paid for the p perty included in an unhealthy area a that outside, but since 1919 the situati was very different, and a great injust would be done to owners of property cluded in the official representation the medical officer of health if such pr perty ought not to be included. anticipated that this question of wh could be included in the official repr sentation must sooner or later, and pro ably sooner, be contested in the courts law. The point was not going to settled by the Ministry of Health or t arbitrator, but by the courts.

Mr. H. Steward considered that t issue had been confused by the questi of cost. It seemed to him from the figur given that the whole cost of clearing th slums of Salford would be only £14,0 per annum. If the problem was confine to the clearing of slum areas it lost a gre deal of its magnitude and came ver largely to a question of building hous at the lowest possible cost.

Mr. McG. Eagar expressed his opinio that town-planning was the solution many of their social problems, but h deprecated calling Clause 9 in the 191 Act a confiscatory clause. The poo widow had been produced in oppositio to every effort at social reform for th last hundred years, but in dealing wit these things they could not conside the one case of individual hardshi With regard to congested areas ther were some which were slums and other which were not, and they found bloc dwellings which had become slums i fifty years. Mr. Evans had spoken of th reluctance of people to live in bloc dwellings, but he found that people wh lived in the Tabard Street area were over coming their reluctance to such dwellings They said they were pill-boxes, but sti they had open space in front. He be lieved if they could get decently buil buildings arranged on that plan roun an open space of fair size with plenty o air people would prefer a tenement o three rooms to the small houses.

Mr. Plate (Manchester) said that wit regard to the point raised by the autho of the difficulty of dealing with a factor in good condition in an unhealthy area whatever the compensation paid for i under the present system of valuatio would be a fair price, and it ought not t be beyond the wit of the person re designing the area to utilize the factor and save taking it down.

Mr. W. R. Davidge felt from the town-planning point of view that very littl in a big way would be done under the particular clauses they had been discussing. There would be a series of nibbles which would be useful in themselves, and if they were to deal with the thing as it should be done it had to be carried out in a comprehensive way, and greater powers were required for the acquisition of property than were at present possessed. In the new Town-Planning Act which must come for dealing with built-up areas, they would require much more comprehensive powers for dealing with a large area over a long period of time.

# Daylight Lamps

## By P. J. WALDRAM, F.S.I.

/E are accustomed to consider the
matching of coloured fabrics and
pigments to be the principal opera-
; for which daylight is essential; but
e are many other key operations in
rent industries which can only be
ed out in daylight, or under a light
milar colour, composition and physi-
properties. A still larger number of
rtant operations can be performed
r ordinary artificial light, but entail
eby the loss of so much accuracy that
iction of daylight, whether by bad
her or obstructed windows, may
e serious monetary loss.

addition, practically all industrial
ations which involve fine work and
observations can be carried out
much greater accuracy and con-
ably less eye-strain under even
equate daylight than under ample
icial light.

ne problem of an artificial illuminant
h can successfully reproduce day-
has, therefore, offered a tempting
pect not only to the scientist and
inating engineer, but also to the
ness man. Its evolution has not
expedited by the fact that complete
accurate knowledge with regard to
ight and colour is somewhat rare,
among scientists. Like so many
r matters which are open to the
tant observation of everybody, these
y-day phenomena have attracted
interest, and in spite of an emphatic
and and lucrative prospects, day-
lamps have only recently become a
tical proposition, mainly because the
ber of really efficient workers has
so small. Lamps which are now on
market, although they have been
ingly successful and have rapidly
loped from a scientific novelty into
mmercial necessity, are by no means
perfect, and much still remains to be done before they can properly occupy the great field of usefulness which awaits them.

The problems involved are by no means simple, and even to appreciate them it is necessary to modify completely many of the ideas which we have been accustomed to accept as undoubted facts, the logical and obvious results of common experience.

We know, for instance, that our eyes can measure the intensity of artificial light, at least approximately. The difference between the light of one candle or two, or between an 8- or a 16-candle-power lamp is obvious to us; and when we are working under a comfortably adequate artificial light our eyes appreciate at once the comparatively slight variation which will serve to change that illumination to one which is either inadequate or dazzling.

Naturally we expect our eyes to be able to distinguish similar differences in daylight, and it is somewhat disconcerting to find them absolutely incapable of forming any idea of the huge variations in daylight which are revealed by the photometer or the camera. In adequate daylight the eye seems to lose nearly all sense of light intensity and will accept almost everything which is offered to it with bovine placidity and content.

The photographic plate may insist upon having the exposure to light in one position outdoors restricted to one-fifth of a second, whilst in another position (inside what we call a well-lighted room) it may demand 10 minutes. The normal eye, however, will not only read fine print in both situations with almost equal ease, but will actually fail to perceive any difference between them, and even ask us to believe that this difference of 3,000 per cent., which can easily be verified by a photometer, does not in fact exist.

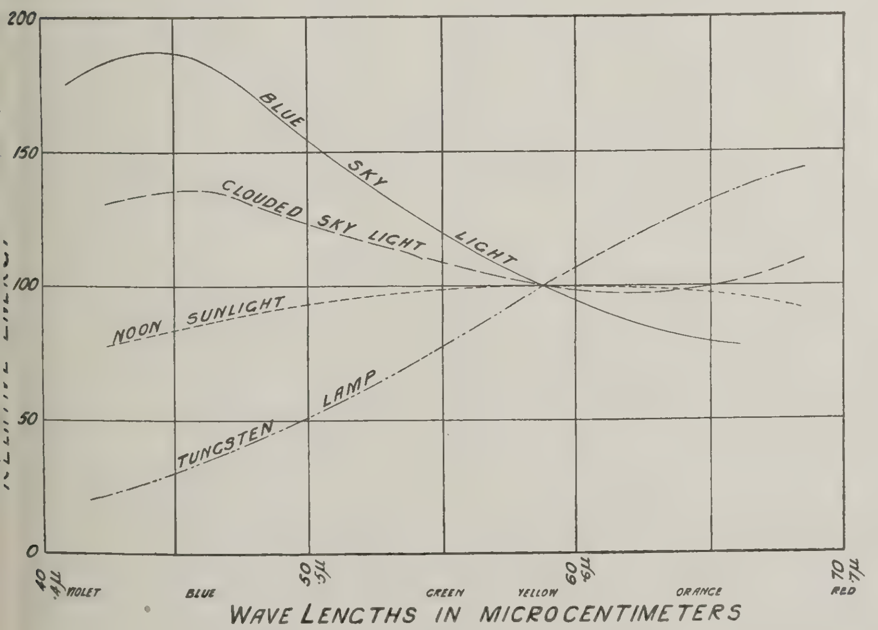


FIG. 1

We know, of course, that the iris diaphragm of the eye makes crude efforts, only partially successful, to protect our eyes by trying to shut out excessive artificial light; but what we do not appreciate is that under natural daylight it is constantly at work reducing large amounts of available light down to the very moderate quantity which the optic nerve can safely receive, and that it performs that task with the most delicate and successful accuracy.

Our eyes have only been accustomed to respond to the stimulus of artificial light for a paltry generation or two, and although they make obvious attempts to close the pupil aperture in the presence of glare, they have not yet learned to protect the optic nerve from the very minor irritations which we associate with variations in quantity of artificial light.

But in natural daylight, under which the human eye has developed for thousands or millions of years, the action of the iris diaphragm is so perfect and so automatic that it reduces nearly everything between bright sunlight and dusk to one common level of uniform comfort, without our having the slightest idea that it is even at work; and where the eye is blissfully unconscious of any variation it suspects none.

This is an important and valuable factor with regard to daylight lamps, for if it were necessary to attempt to reproduce the great powers of daylight, the cost and heat involved would be hopelessly excessive. It is, therefore, very fortunate that as regards the perception of small detail and colour contrast the eye, under appropriate conditions, is just as satisfied with 2- or 3-foot candles from an artificial source of the same colour and physical composition as daylight as it is with the very small amount, probably 2- or 3-foot candles, which it is accustomed to accept from the prodigality of nature.

With regard to the colour of light, and to its effect on coloured fabrics and coloured surfaces of lights of different tints, it is necessary completely to disregard all experiences as to the effect of combining or separating *pigments* of different colours when considering the effects of combining or separating *lights* of those colours. There is an unexpected but fundamental difference between the two operations, and the effect of the former must of necessity be the exact opposite of the latter.

For instance, blue and yellow pigments mixed together give us green pigment, and when green paint is separated out again by the action of the sun and weather in destroying the more volatile yellow it reverts to a slaty blue. But a mixture of blue and yellow lights does not give us green, but white. White light also results from mixing lights of crimson and moss-green, scarlet and peacock, orange and turquoise, primrose and violet, and green, yellow, and purple; but the effects of mixing pigments of these colours is anything but white.

Some mixtures of pigments, such as

green and red, yellow and purple, blue and orange, or blue, yellow, and red, will sometimes turn black, but no mixture of pigments will give us white; and although several mixtures of coloured lights give us white, no mixture of coloured lights produces darkness. A mixture of orange and green lights is yellow, but a mixture of orange and green pigments is grey. Blue-violet and green lights together produce peacock blue, instead of the muddy neutral tint which results from mixing together pigments of these colours.

It is, of course, well known that all white lights, including daylight, are not really colourless, but are composed literally of all the colours of the rainbow—a rainbow being, in fact, colourless white daylight split up by rain-drop lenses into its constituent colours of red, orange, yellow, green, blue, indigo, and violet, in the definite order and proportions of the solar spectrum; just as the scientist splits up light from any source into similar spectra by means of glass or crystal prisms in the spectroscope.

What is known as the colour of objects is really the result of the destruction of certain constituents of the spectrum of the light which is illuminating them, the object merely reflecting back such of the spectrum colours as it does not absorb. The colour composition of the light reflected from it and by which we see it is therefore due to a process of subtraction, whereas the combination of coloured lights is a process of addition.

We are accustomed to consider red, yellow, and blue as the three primary colours simply because they cannot be produced by any mixture of pigments of other colours. But to the eye, these are not primaries, for it is concerned solely with the colours of the light which enters it and not at all with the methods by which those colours are produced.

The optic nerves have three primary colour sensations, viz.: a sensation excited by a particular kind of red, a sensation excited by a full and slightly yellowish green, and a third caused by a violet inclining towards blue.

Lights of these colours each stimulate but one of the three primary sensations—all other colours stimulate two or more. The sensation of yellow, for instance, is really caused by a simultaneous excitation of the primary red and green sensations. For this reason a beam of light from a monochromatic yellow (sodium) lamp therefore appears to be of the same colour—i.e., it has the same effect on the brain—as overlapping beams of red light and green light. Similarly purple is a dual excitation of the primary red and the primary blue-violet; peacock blue is that of the green and the blue-violet primaries, whilst the sensation of white is produced when all three primaries are excited simultaneously.

The puzzling differences between the effects of mixing coloured lights and mixing pigments becomes obvious when we consider the effect of colour combinations on the eye, always remembering that objects are not seen by the light which falls upon them, but by that light which they can reflect back into the eye or can emit by incandescence, etc. Unless they are luminescent or phosphorescent or are heated sufficiently to cause them to throw out visible (i.e., light) as well as invisible (i.e., heat) waves, they can only be seen by what they reflect.

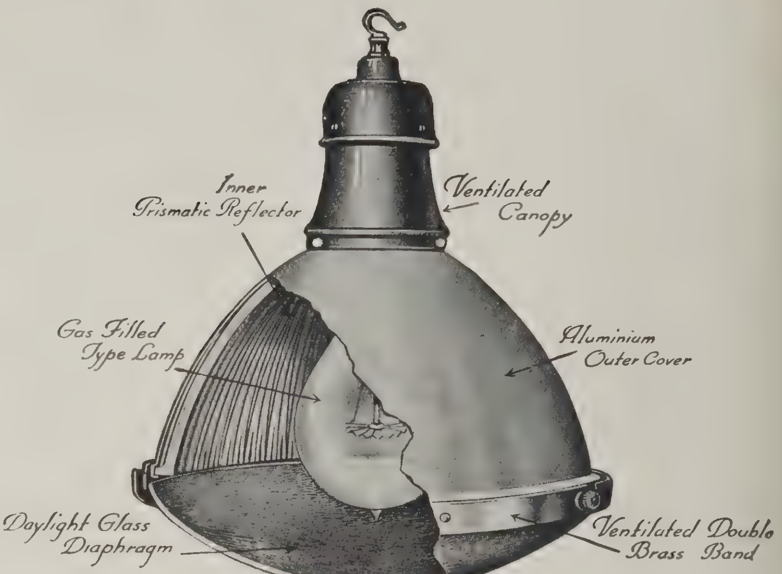


Fig. 2. HOLOPHANE DAYLIGHT LAMP.

Blue light does not emanate from a piece of blue cloth viewed in daylight. Daylight, consisting of a combination of constituent colours, falls upon it. It absorbs some of these — the red, orange, and yellow—and all that can come back to our eyes out of the complete spectrum is a mixture of green, blue, and violet, and the effect of this particular colour mixture on the eye is the sensation of blue. What we call a yellow pigment is one which absorbs from the spectrum the red, blue, and violet constituents, and reflects back only the green and orange, a mixture which, like that of red and green, excites the mental sensation of yellow. Obviously if we mix blue and yellow pigments the combination of two such mutually destructive agencies can only leave green to be reflected back to our eyes.

Sometimes this devastating warfare of pigments leaves no survivor at all. A full red, for example, will absorb everything but red light from the spectrum, and a good green will be destructive of everything but green and a little blue. A mixture of both pigments naturally turns black. Mixtures of pigments are essentially destructive not only to other colours, but also to each other, and whilst with them we can easily obtain black by mutual extermination we can never obtain white.

But by intermingling beams of coloured light colours are gained instead of lost, so that mixtures of lights can never produce black, the sensation of black or darkness being the mental realization of the absence of all colour sensation. The frequent production of white light from intermingled coloured lights is due to the persistence with which the eye registers as white mixtures of light which happen to include those tints which excite the three primary colour sensations.

Hence there are many forms of light which appear to be as white as daylight, but which differ materially from it in actual colour composition, and can have strange and unexpected effects upon delicate tints. The eye is not unlike the palate, which can recognize the more pronounced flavours in a combination, but cannot be trusted to detect ingredients which may have strange a
unexpected effects upon delicate dig
tions.

We can readily recognize that light fr
a resinous torch is more red than daylig
that the light given by a wax candle, a
flame, or a carbon filament lamp, has m
yellow and less blue than daylight, wh
that from a mercury vapour lamp
much more green and far less oran
But it is by no means easy to de
the colour difference between natu
light and some forms of arc lamps
some glow lamps with slightly tin
globes. Frequently we can only det
the difference by means of the cru
test of colour matching by contrast
certain shades.

Obviously an object which is,
instance, blue by daylight, seen in
light which is somewhat deficient in
blue constituents of the daylight spectr
cannot give back to our eyes as m
blue as it would by daylight. W
which is an obvious blue by dayli
becomes an equally obviously black
night. As the reflected light which is
characteristic colour of nearly all obj
in nature is seldom monochromatic,
is generally a combination of surviv
constituents of the daylight spectr
some of which may be mutilated, i
not surprising that complex and app
ently erratic changes of tint can t
place under artificial light. Some obj
can even change colour complet
Certain flowers will do so, and the
gem alexandrite, for instance, is g
by day and a rich red by artificial lig

It is a comparatively simple opera
to combine in the light of an artif
daylight lamp all the colour constitu
which go to make up the spectrum
daylight. Light is known—or, at le
is believed—to consist of waves,
length of which, although extrer
minute, has been measurable since
time of Newton. It is also known
each colour constituent of the spect
has its own particular wave-length
more correctly, that light of a partic
wave-length excites a particular co
sensation in the eye. The primary
for instance, can be defined as a
which has a wave-length of 65·2 millic

centimetre (microcentimetres), the ary green 53·5 millionths, and the ary blue-violet 45 millionths.

spectroscope will instantly analyse light from any artificial source, and s is generally the case, such light rs in constitution from daylight only possessing relative excess of yellow deficiency of blue, a light can be ined which *resembles* daylight by posing glass of a slightly bluish

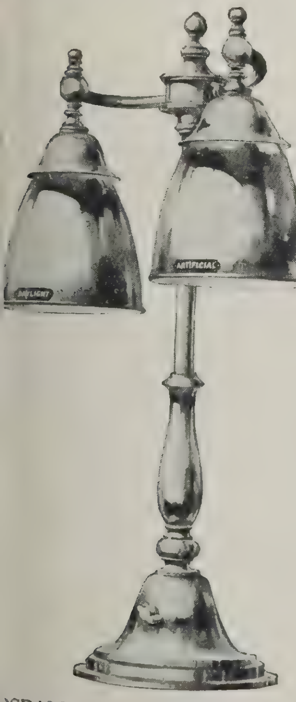
t merely to obtain a lamp which has ame colour constituents as daylight t sufficient, even when those con- ents are in approximately the same ve proportions as in the daylight rum. The so-called daylight lamps few years back, which depended crudely tinted globes, were quite ss for colour matching of any degree ecision.

ey could certainly imitate daylight, . amateur band can imitate a pro- nal orchestra. Daylight is not only st perfectly blended orchestra of rs, but every one is accustomed to its ence, and the eye is very delicately l of contrasted shades of colour.

wever desirable and necessary it may r industrial economy and even for trial health to make good the ncies and vagaries of our climate, ally during the winter months, few will buy daylight lamps for rial purposes which will even onally emit false tones of colour.

conductor of a successful band not only make sure that the cor- nstruments in the propor proporare played in time and tune, he also control the energies of the mers. The big drum must not be nsistent, and the brass must not wer the wood, nor the shrill notes flutes be allowed to overpower the and more delicate tones of the .

maker of a successful daylight must, similarly, secure a band of s which are not only of the correct wave-lengths and in the right proportions, but one also of the correct relative energy, always bearing in mind the varying sensitiveness of the eye to different colours, so that the shrill yellows and greens will not dominate the reds, blues and violets. A yellow or bright green ball dress will by contrast often render delicately beautiful costumes in its vicinity comparatively dull and insignificant.



SRAM TABLE TWIN-LAMP, FITTED
RDINARY AND DAYLIGHT GLASS
BULBS.

The amount of energy which a lamp throws into the red waves may be three or four times as much as that which it throws into the green; but the sensitiveness of the eye to green is about eighty times that of its sensitiveness to red, so that in a spectrum the green waves would on balance be twenty to twenty-five times as powerful as the red. To a lesser degree the eye is relatively more sensitive to blue and yellow than it is to orange or violet.

Obviously the task of devising a successful daylight lamp is scientifically by no means simple, but the economic restrictions are scarcely less onerous. The light source must be one which is readily available, preferably incandescent electric bulbs. The correction must be adequate, but at the same time it must be kept within the narrowest possible limits, for correction by absorption is most wasteful. Even the best daylight lamps at present available have to waste some 60 per cent. of the original light. The net light available must be powerful, because the coloured objects which daylight lamps are specially required to illuminate often absorb a great deal of light. White printed paper under 3-foot candles of illumination may be quite dazzling; the texture of dark cloth under 9- or 10-foot candles may be almost invisible.

But practically all modern illuminants depend upon incandescence and generate heat in proportion to their candle-power. Yet it is most important that temperature round the lamp should not be excessive, not only out of consideration to the worker, but on account of the temperature requirements of different operations, such as the testing of seeds and tobacco leaf samples, surgical operations, etc.

A further difficulty arises from the fact that daylight, the model to be copied, will not sit still or retain the same expression for any length of time. The depth and intensity of clouds through which the direct rays of the sun must pass, and by which those rays may be diffused and reflected, exercise a profound influence upon the composition and the real and apparent colour of all light which reaches us from the heavens. Probably also the particles of the atmosphere which are more or less completely clear of aqueous vapour also affect daylight by diffusing the short blue and violet waves. Both of these agencies are constantly varying on account of varying thicknesses of cloud and smoke layers and the varying obliquity of the sun's rays, which, of course, have to traverse a longer path through the earth's atmosphere at sunrise and sunset than at noon. Hence the well-known phenomena of the morning and evening reddish tints in a cloudless sky which is clear blue at noon. Abney has anlaysed evening light from which nearly all the constituents except red and orange had been absorbed.

The curves of radiant energy and wavelength of different spectra (Fig. 1) show that the wave-lengths of unobstructed noon sunlight possess approximately the same radiant energy throughout the spectrum. Those of the light from blue sky are more powerful in the violet or short wave-length end of the spectrum, and decrease rapidly in radiant energy towards the red or long wave-length end; whilst the exact reverse occurs in the spectrum of an ordinary tungsten lamp —the violet being weak and the red more powerful.

Fortunately most people are content to carry out all colour matching operations by the light from a northern or sunless aspect, and will accept that as a criterion for daylight lamps. But the method adopted for correcting ordinary artificial light, whatever it may be, should obviously be flexible, for wholesale and retail drapers and their customers, and the manufacturers and dealers in nearly all branches of the great textile industries require to match goods irrespective of the weather, season, or time; summer goods in winter and vice versa, Bombay goods in Bradford, etc. Whatever method therefore is adopted for correcting an artificial light to stimulate daylight should possess at least some degree of flexibility.

In the practical solution of these complex and conflicting problems this country has no unworthy record. The invention by the late Prof. Langley of the bolometer, a beautifully delicate instrument which measures the intensity of light radiations with extreme accuracy, has enabled scientists to explore the spectra of daylight and of various kinds of artificial light, and to define the differences between them, not only in terms of wave-length, but also in terms of the radiant energy with which the eye is specially concerned. Pari passu with this research opthalmic surgeons, many of whom are scientists of no mean order, have studied the varying effects on the eye and brain of the different wave-lengths

Fig. 4. TABLE TWIN-LAMP, FITTED WITH ORDINARY AND DAYLIGHT GLASS BULBS.

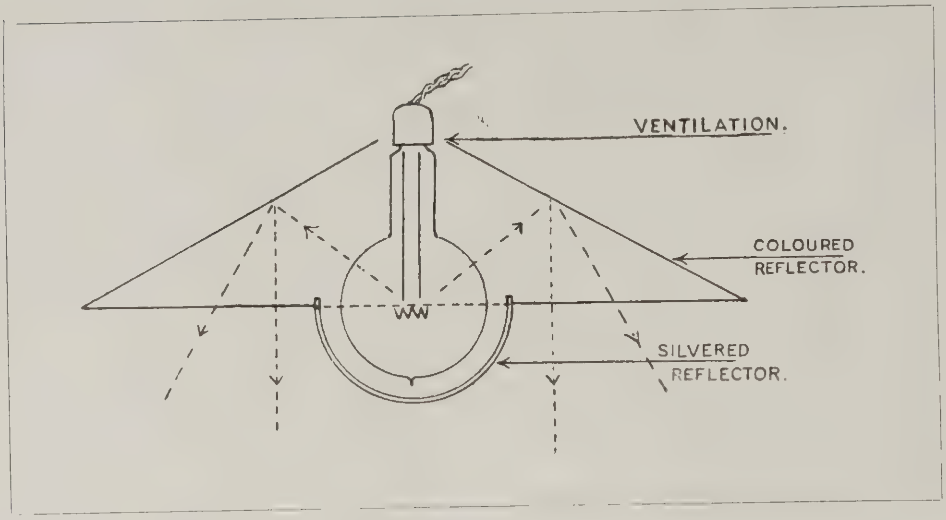


Fig. 5. SHERINGHAM DAYLIGHT LAMP.

and radiant energies of colour components. By the data thus gained it has been possible to ascertain the practical limits of the problem and to concentrate on essentials rather than upon complete research into factors of negligible importance.

The artificial light source which has been adopted by practically all makers of daylight lamps is the high-power electric incandescent gas-filled bulb. The two principal methods at present in use for correcting its spectrum to that of daylight are :—

A. To sift out the excess of red, orange, and yellow constituents by causing the light to pass through specially prepared glass.

B. To achieve the same object by causing all the light used to be reflected from specially coloured surfaces.

Both methods are necessarily uneconomical. As far as the author is aware, with no lamp at present in use is it possible to obtain reasonably complete correction without sacrificing about 60 per cent. of the total flux of light from the bare lamps.

But we do not customarily work under bare lamps, nor do we utilize their total flux for any particular purpose. The frosting of bulbs or the use of tinted shades to prevent the bare filament from injuring the retina absorbs a substantial proportion of the light—whilst reflectors and glass ware for bringing down to the work beams projected upwards by the bulb can be highly wasteful, unless they are scientifically designed.

Although, therefore, the absorption loss from a daylight lamp may appear to be seriously high, it does not follow that the net light from them which is available for work is substantially less, per unit of energy consumed, than that available from ordinary lamps adequately shaded; especially when the latter are of a type less intrinsically economical than the high-power gas-filled lamp, which is far too powerful a unit for ordinary situations.

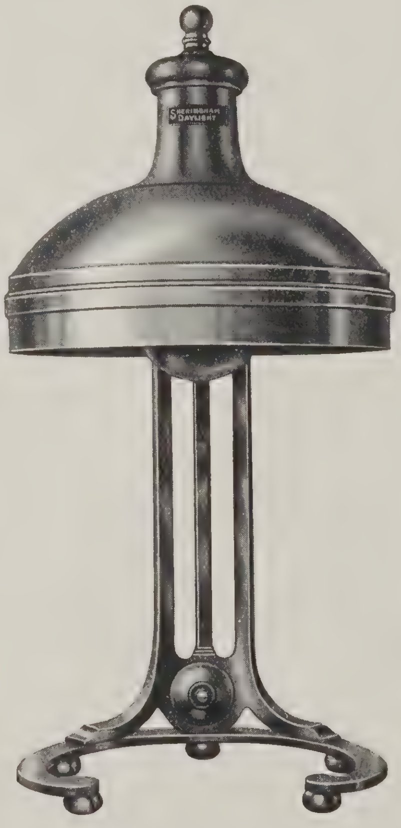


Fig. 6. SHERINGHAM DAYLIGHT TABLE LAMP.

Fig. 7. COLOUR ARTIST AT WORK UNDER SHERINGHAM LAMP.

The two most important steps in the recent rapid development of daylight lamps were the production of Chance's Daylight Glass and the invention of Sheringham lamp.

The former was the result of m patient research in the laboratorie Messrs. Chance Bros., of Birmingh directed not only to securing the e tint to give good correction with minimum of loss, but also to keeping tint uniform through successive m and cooling.

This glass, which was first placed the market in 1921, possesses the rem able property of correcting to the appr mate spectrum and energy curve sunlight when used in thin sheets, w greater thicknesses approximate r closely to the average spectra of diff light from clouds and that of light blue sky. Elasticity of correction therefore, be obtained simply by va tions in thickness, not only for diffe kinds of daylight, but also for the diffe spectra of light from lamps of diffe power.

This glass is the essential featur several well-known daylight lamps– Holophane, Thomson-Houston, and ity's. The customary method of usi is to place the bulb inside a spec designed circular conical reflecto metal or metal and glass ware mounted by a ventilating canopy enamelled white inside. The botto the hollow cone is closed by a she Chance's glass. Additional int reflectors, coated with heat-resisting mel of a special bluish tint, are somet added to assist by selective refle the main correction by the glass ba

In the Holophane lamp of this (Fig. 2) the correcting glass ba specially curved to give more uni illumination over the working plane.

In Osram Daylight Lamps, mad the General Electric Co., the bulb is of a special blue glass produced a company's glassworks, and is inside with metal reflectors with lating tops. This lends itself readi the production of twin lamps in either daylight or ordinary uncorr artificial light can be switched on a (Figs. 3 and 4).

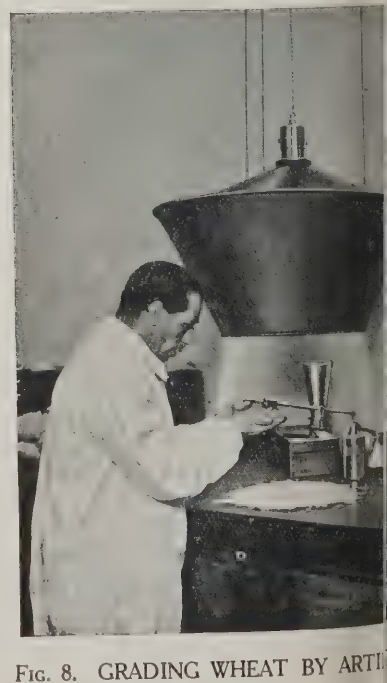


Fig. 8. GRADING WHEAT BY ARTI DAYLIGHT (SHERINGHAM).

'he Sheringham lamp was originally ıded on the invention of Mr. G. ringham, the artist, who found that the of certain colours in lamp shades could ıensely improve the quality of arti- .l light for painting. It is one of the iest if not the first daylight lamp, ing achieved reasonably perfect cor- ion since 1919.

:consists essentially of a high-power gas- l bulb, hung in a conical shade (Fig. 5). lower half of the bulb is enclosed in emispherical silvered bowl reflector, ıat all light from the lamp is directed the interior of the conical shade, the only light which leaves the lamp ıat which the shade will reflect, after as duly absorbed those constituents :h are in undesirable excess. The e is coloured in definite patterns, a number of special pigments, ted for durability of colour, the pro- ions of which can be varied to give desired degree of correction. nples of Sheringham lamps are vn in Figs. 6, 7, 8, and 9.

ıe Sheringham system of correction selective reflection is very flexible, obviously lends itself readily to t modifications. Realising this ntage, the makers have, since its successful introduction in 1919, ased rather than diminished their ts to perfect by careful research a ty of combinations of durable pig- :s to give refinements in correction pecial purposes.

ıe production of a standard tint in and its control during melting and ng is a difficult and highly specialized ıtion, and the makers of glass ption screens can scarcely be ex- d to produce and stock a number of unless and until a demand for them risen.

art from the obvious advantage of ring colour work possible at night and in bad weather, daylight lamps have another claim on the attention of the architect.

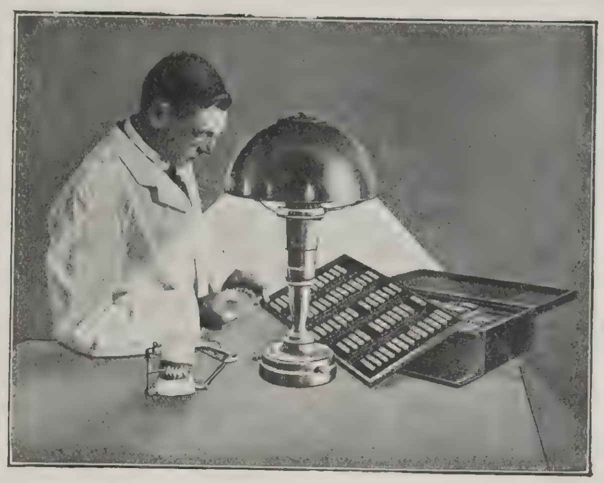


Fig. 9. MATCHING ARTIFICIAL TEETH UNDER SHERINGHAM DAYLIGHT LAMP.

No mere description can convey any idea of the arresting beauty of the light emitted by a good daylight lamp, especially when seen in contrast with the light from any ordinary artificial illuminant. Possibly by its steadiness, volume, and purity it may unconsciously suggest perfect weather and the clearest of atmospheres; but whatever the cause, there is no doubt that it can excite a keen sensation of fitness and beauty, and that objects seen by it, especially fabrics, gain decidedly in attractiveness. For the matching of fabrics they are preferable to daylight itself, being free from the distracting changes in colour and intensity which can prejudice a judgment without apparent reason; and as there is no doubt that the full beauty of materials becomes easily apparent under their light, probably it is only a matter of time before their general use in picture galleries will reveal beauties which can seldom be appreciated on dull days or in the atmosphere of manufacturing towns. It is also rather more than probable that they will in time afford a source of artificial illumination for clerical and fine work which will reduce eye-strain and mitigate one of the chief evils of working after dark. Their possibilities are enormous.

Much still remains to be done, but the progress which has been made in this country within the last two or three years has been very great indeed. Although it is chiefly due to the intricate work of scientists, architects can note with satisfaction that the first lamp to become a practical proposition, when other forms were still hampered with conflicting difficulties, was evolved by an observant artist.

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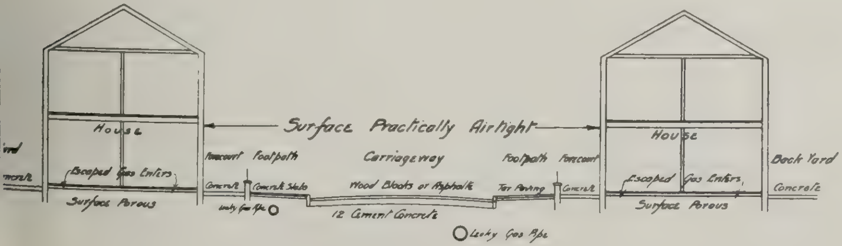
# he Danger of Gas Poisoning and the Remedy

## By HARVEY R. SAYER, A.M.I.C.E., A.R.I.B.A., F.S.I.

VERAL cases have occurred lately n the older residential parts of the netropolis of people being poisoned ıs escaping into their houses. It is sted that these cases are due to the ving causes :—

districts in which the cases of gas ning occurred were laid out about a ry ago, and the houses were built ut surface concrete being placed the site. The carriage-way of the was made of water-bound gravel; footpaths were usually only of l; the forecourts of the houses, and ack gardens, had a surface of vege- earth, and the gas-mains were later l under the carriage-way or footpaths.

At the present time several roads are being taken up and repaired with modern road materials, and it is surprising how much evidence is found of underground escape of gas from the gas-mains, an escape which has gone on undiscovered for years. In one short length of 200 ft. of roadway in one road in Battersea three bad escapes of gas were discovered when the kerb was taken up for resetting. From the appearance and condition of the subsoil these escapes had been going on for years, but the porous nature of the road surfacing allowed the gas to slowly escape into the outside air and be so diluted as to remain undetected by the ordinary passer-by.



The highway authorities are now replacing these old porous roads with either wood blocks or asphalt on a bed of about a foot of good cement concrete, or tar-macadam for the carriage-ways and concrete slabs or tar-paving for the footpaths, thus forming a much more airtight surface.

The sanitary authorities are at the same time requiring the owners of the houses to pave with cement concrete both the forecourts and portions of the back-yards of the houses. The result of this combined action on the part of the local authorities is that they have made the surface of the outside ground more impervious to the escaped gas than the actual site of the houses themselves, with the result that instead of coming out into the open air and being diluted to such an extent as to cause no harm, the escaping gas is finding its way into the houses of the people.

The remedy for this is naturally to put a surface layer of good concrete over the site of the house, but the cost of this for old houses is prohibitive, and cannot be carried out on a large scale.

# The Attitude of the Press towards Architectur

AN address designed primarily to give journalists some conception of the ideals by which the architect was inspired, and the varied influences and traditions which affected his work, was recently delivered by Professor A. Beresford Pite, F.R.I.B.A., to the circle of scientific, technical, and trade journalists. Professor Pite explained that architecture was essentially a means of expression, by which the personality of the architect was revealed, but which also bore the impression of the spirit of the age and the traditions of the past. The actual purpose for which a building was erected had naturally to be studied, but beyond this there was the creative work of the artist in stone. In passing, Professor Pite defined an artist as one whose work was a joy to him. Only in these circumstances were great achievements possible. Architects were paid for the work embodied in their final plans and their supervision of the building in course of erection ; but they were not paid for much unseen work—the amount they "rubbed out."

Strictly speaking, it was not correct to speak of an architect as "designing" a building, for its exterior was determined by many deep-seated influences which the architect must obey. Professor Pite illustrated this by many instances of different styles of architecture, pointing out that some forms essentially embodied the idea of a domineering aristocracy and were unsuited to a free community. It was futile to pine for "the grandeur that was Rome," exemplified in the masses that characterized Roman architecture. One must conform to the spirit of the present age. Reference was also made to the marked effect of the "black death" on subsequent architecture, and to the curious absence of distinctive architectural effort during the Elizabethan age, when literature flourished. This was attributed to the period of isolation of this country, arising from its adoption of the Protestant religion and the ensuing separation from the influences of the Catholic countries of Europe. Architecture needed free intercourse and susceptibility to the ideas of other nations for its full development.

Another interesting period occurred after the Napoleonic wars, when large sums were voted by the nation for the building of churches. These were conceived in a lofty spirit, and their erection gave a great impetus to architecture throughout the country. Fine buildings had a great influence on the mind. It was impossible for anyone in a distant country to recall London without thinking of the dome of St. Paul's. There was something mysterious and exceedingly difficult to define in the elevating effect on the mind of fine buildings. It was impossible for a journalist, however great his literary gifts, to convey all the impressions that such buildings produced. But if they understood something of the dominating influences exemplified in architecture, and the ideals by which the architect was inspired, they could do great service for the advancement of the art.

Mr. A. W. S. Cross, Mr. Herbert Wills, and Mr. W. Woodward, speaking as architects, expressed their great appreciation of Professor Pite's delightful address, though Mr. Woodward was inclined to disagree with a remark he had made to the effect that the actual designer of Westminster Abbey was unknown.

Mr. Frederick Peaker, president of t Institute of Journalists, congratulat the circle on the interesting discussi they had initiated. It would be pr sumption for a layman to criticize Pr Pite's address, but he felt sure all t journalists present had found it entran ing. Mr. Peaker added that the defi tion of an artist might also be appli to the work of the journalist, much which reached a far higher standard th was generally understood.

Mr. P. J. Waldram said that the Pre could do a great deal to aid the archite by emphasizing the national importan of fine buildings and promoting an i terest in architecture, and Mr. Per Marks remarked that the daily Press, referring to new buildings, were apt concentrate their attention on the ope ing ceremony and say little of the bui ing itself. It would be advantage if daily papers would utilize the servi of some expert on architecture to d with these matters.

Professor Beresford Pite, in his rep fully endorsed the great power of t Press, which could almost make or m the reputation of a new building by th comments. It was therefore essent that they should be as well informed possible on architectural subjects. T power of the architectural Press was great that it had had one rather regr able result—the elimination of the hig specialized and expensively illustra books on which the architect was f merly wont to rely. The reproducti of designs was not always attended w good results, for it led others to co without inspiration, and no really f work could be done in this way.

# Lovelier Houses: Mr. Wells's Utopia

## By J. M. HOGGE, M.P.

IN his latest peep into the future Mr. H. G. Wells gives us a fleeting glimpse of the homes of the Utopians. "Singly or in groups and clusters," he writes, "were buildings of purple and blue and white as light and delicate as the Alpine flowers about them."

As I pass through the garden suburb representing our present-day effort to materialize Utopia, I am struck by the curious timidity of the British architect to employ colour in the external embellishment of his buildings.

In other directions his work shows a praiseworthy effort to rise above the dead level of convention. In most of the houses composing these garden cities grace and diversity characterize the plan. Each dwelling is given an individuality that charms the eye without destroying the general harmony by over-emphasis of line or form. But in the matter of colour-contrasts monotony prevails where diversity should reign.

Colour enters to a certain degree, of course, into the architect's plan. Pleasing contrasts are achieved by the combination of warm red brick or tiles with cream or grey roughcast. Here and there a more adventurous builder has crowned his house with blue-green tiles. But why should the legitimate employment of colour effects be limited to red and white ? Other colours blend harmoniously with the background of Nature. Why should not Mr. Wells's intriguing vision of the "purple and blue and white" houses of three thousand years hence become a reality in the garden city of to-day ? There is no æsthetic canon which permits red and brown but proscribes blue and buff and green.

It may be objected that whilst, theoretically, no bar exists to the freer use of colour in external architecture, in practice the architect is limited to the natural tint of brick, which is red. No such objection can be held in these days of advance in the production of terra cotta and glazed brick. You may have your choice in glazed brick of blue, green, buff, brown, and ivory tints, whilst in majolica an even larger colour-diversity is possible. So far as material goes, Mr. Wells could dwell to-day in a home as daintily hued as any of those his hero espied in Utopia.

Why, then, do we not see in the garden suburbs that are springing up in England's green and pleasant land dwellings as brightly and variously tinted as a herbaceous flower border ? It is not that human nature is opposed to the free use of colour—quite the contrary. The only obstacle to a larger liberty in the adornment of our houses is the innate c servatism of architects and build With one or two notable exceptions th have not the courage to scrap their p judices and boldly experiment in possibilities of external colour-schemes domestic buildings.

The garden city provides a peculia favourable ground for such experimen In an area of this type each house i separate entity, sufficiently removed fr its neighbours to strike an individ note without overpowering its surrou ings. The designer need not confine scheme to a single colour. Combinati of green and white, blue and grey, green and blue would achieve eminen artistic effects. One can imagine particularly pleasing impression produ by a matt ivory brick elevation ador with a string-course in majolica of ol green, peacock blue, or old rose.

As Dean Inge has reminded us, life in Tudor times was more animated beca of the presence of bright hues in the dr and dwellings of our ancestors.

It is not feasible to revive the arc tectural features of that period ; but i open to those who build the homes of people to make freer use of the artis colouring offered by the ceramic mater now widely and cheaply produced.

# Law Reports

## ghts as to Telephone Cables in Flats

*. Postmaster-General* v. *Pearce and Others.*

Feb. 28. Court of Appeal.
ore the Master of the Rolls and Lords Justices Warrington and Atkin.

iese were appeals by His Majesty's master-General from a judgment of Railway and Canal Commissioners, refused his application under Sec- 1 of the Telegraph Construction 1916, for an order allowing telephone which ran through the store rooms ats known as Norsland Mansions, a Vale, to be retained and which andlords, the Messrs. Pearces, had the Postmaster-General notice to ve. The cable passed through ty-five store rooms, the majority hich were occupied by non-sub- ers, and junction boxes were in some ose store rooms. It was said that een of 104 tenants had used the tele- e, but others objected to the visits orkpeople to their store rooms to r the wires.

. Justice Lush held that the de- nts had the right to give the Post- er-General three months' notice to ve the wires, and that he was satis- that there was a serious nuisance ed with regard to those particular ts of the flats, who had a perfectly cause of complaint. He held that rivate owner had the right to be pro- l, and that the continuance of these ances of the tenants must tend to against the interests of the owner e property. He accordingly dis- d the application with costs, and ther Commissioner concurred, and this result the Postmaster-General ppealed.

the appellant the Attorney-General, ouglas Hogg, K.C., M.P., said the l raised two points. The first was the construction of the Act and the nstances in which and the prin- on which a consent ought to be by the Commission to the Post- r-General to the erection of wires osts on private land, and the second question as to the jurisdiction of ommission to award costs in a case at kind. His submission was that was no jurisdiction to give costs t where the application had been nature of frivolous and vexatious. espondents to these appeals were individuals, a Mr. Pearce and two gentlemen who were interested nim in the flats in question. There three appeals, because the title of hree respondents was not always ame, but the point raised was the in all cases. It appeared that the of flats was erected some years ago . Pearce, and these flats had been t to a number of different tenants, of whom required the advantage ving the telephone in their flats. dingly in the year 1905 the Post- r-General, having application made n for the erection of telephones in ats, approached Mr. Pearce for the ging of the introduction of the tele- cable into the flats, and Mr. gave his consent to the cable being uced, and to the cables being brought he basement of the flats and taken into the store rooms at the bottom of the flats.

The effect of the decision would be that unless the appellant could get the consent it would be impossible for him to supply the telephone in such a case. He submitted that the Commissioners had misdirected themselves. No person, said the Attorney-General, had any legal right to be furnished with a telephone, but the Postmaster-General having a monopoly, he supplied it if it was possible and unless on the ground of expense he felt it was not in the public interest to do so. He contended that in the circumstances the Commissioners had no power to award respondents costs. If the proceedings had been frivolous and vexatious the Commissioners would have had a discretion in the matter.

After hearing Mr. Owen Thompson, K.C., for respondents, on the question of costs,

The Master of the Rolls said in his opinion the appeal on the first point as to the merits must be dismissed. He could not see that the Commissioners had gone wrong in law or misdirected themselves. They had taken the proper matters into consideration and decided them. His Lordship laid down no general principle but merely dealt with the facts of the present case. On the second point, as to the costs, he thought the Commissioners had gone wrong as he did not think the Commissioners had power to award costs against the Postmaster-General. On the first point the appeal would be dismissed and on the second allowed.

Lords Justices Warrington and Atkin agreed.

The court allowed no costs in the appeal as each party had succeeded on one point.

# Parliamentary Notes

[BY OUR SPECIAL REPRESENTATIVE.]

### *Government Housing Proposals.*

Mr. Neville Chamberlain, Minister of Health, replying to a question put by Mr. A. Bennett, said that the housing proposals of the Government would be embodied in the Bill to be introduced as soon as possible after the Easter recess. The chief points in the scheme, and particularly the amount of the subsidy to be provided by the Government, had already been fully discussed with representatives of the Association of Municipal Corporations and of the larger boroughs, and general agreement had been reached that the subsidy was one which would enable building to be pressed forward with the utmost vigour and that building by private enterprise would have a prominent place in the programme of the local authorities. He could not, of course, give any estimate of the houses expected to be built under the scheme.

### *Building Prices.*

Mr. Chamberlain informed Mr. R. Morrison that, after consultation with the president of the Board of Trade, he had decided to set up a small committee, which would include representatives of the department and of the Health Ministry, of the building trade, and of the local authorities, in order to watch the course of prices and to keep the Government accurately informed of their movements. Answering other questions on the same subject, the Minister said what the Government desired was to see that prices were not raised unduly. He had not yet decided exactly how the representatives on the committee would be appointed, but he was quite prepared to consider putting on representatives of the trade unions. He did not propose that statutory powers should be given to the committee at the outset. The question of legislation would be considered if the experience of the work of the committee showed that special powers were required.

### *Housing Progress.*

Mr. Chamberlain, replying to Mr. Bennett, said that of the 176,000 houses to which the local authorities' and public utility societies' scheme was limited, 157,235 had been completed on March 1, and 10,810 were in course of building. Tenders had been approved for 3,864 houses, but work had not commenced, and in the case of 4,091 houses tenders were either under consideration or had not been submitted for approval. The 39,164 houses built under the private builders' subsidy scheme were completed before August, 1922. The total cost to the Exchequer to date was £9,500,000 in capital subsidies to private builders, and £10,700,000 in annual subsidies to local authorities and public utility societies. It was estimated that the annual charge on the Exchequer under the Assisted Housing Scheme would amount to nearly £9,000,000 in the early years. It was hoped that a reduction would be secured on this charge in later years as loans were reborrowed at lower rates of interest.

Other points of interest announced by the Minister of Health last week were :—

The number of structurally separate dwellings increased by 357,000 in England and Wales between 1911 and 1921.

Advances under the Small Dwellings Acquisition Act have been made by three county councils, nineteen borough councils, thirty-four urban district councils, and five rural district councils. Up to August, 1914, local authorities obtained sanction to the borrowing of sums amounting to £349,500 for the purposes of advances under the Act. Since January 1919, loans amounting to £338,000 have been sanctioned.

Any suggestions made by representatives of building guilds in connection with the new housing Bill will be considered by the Minister.

The London County Council are contemplating the erection of further tenement buildings.

# Housing Progress in Scotland.

The following figures show the progress that has been made in State-aided housing schemes in Scotland to February 28, 1923: Permanent houses completed, 15,351; temporary houses completed, 665; reconstructed houses completed, 101; houses completed under the private subsidy scheme, 2,236. Total, 18,353. There are 5,276 houses at present under construction in connection with housing schemes carried out by local authorities and public utility societies. The total amount paid by the Scottish Board of Health in respect of the 2,236 houses completed under the private subsidy schemes is £540,600.

# The Week's News

### *Hull and Municipal Washhouses.*

Plans have been prepared for municipal washhouses for Hull.

### *House Shortage at Merthyr.*

It is estimated that 2,000 dwellings are required at Merthyr.

### *Marylebone Town Hall.*

Part of old Marylebone Town Hall is to be demolished, so that Marylebone Lane may be widened to 40 ft.

### *An Architect's Estate.*

The late Mr. James Philip Moore, F.R.I.B.A., of Eltham, Kent, left £17,000.

### *A.A. New Members.*

At the last meeting of the Architectural Association the following were elected new members: Messrs. A. F. Hobbs, H. Osborne, and M. Martin.

### £17,000 *for Three Memorials.*

The proposed memorial to the late Mr. Joseph Chamberlain is to cost £5,000, that to Earl Kitchener £7,000, and that to Earl Roberts £5,040.

### *Housing at Welwyn.*

Welwyn Rural District Council have accepted a tender by a Birmingham firm to erect 93 houses, at a cost of £26,433, or £284 per house.

### *An Old Suffolk Cottage.*

An appeal is being made in Suffolk for the preservation of the cottage at Flatford Bridge, which was frequently painted by Constable.

### *The Architecture Club.*

Her Majesty the Queen, attended by Lady Mary Trefusis and Mr. Harry Verney, paid a visit to the Architecture Club Exhibition at Grosvenor House and spent over an hour inspecting the various exhibits.

### *Architectural Partnership.*

Mr. E. T. Watkin, L.R.I.B.A., M.S.A., has been joined in practice by Mr. F. Morrall Maddox, A.R.I.B.A., M.S.A. The title of the firm is Watkin and Maddox, architects, surveyors, and valuers, and their address is Swan Chambers, Burslem.

### *Improvements at Harrow.*

Important improvements have been decided upon by the Harrow Council. They have agreed to widen the main road—Station Road—and this in some cases will necessitate the pulling down of old property.

### *Synthetic Marble.*

A new industry is being established in Melbourne by a company which has taken in hand the production of "synthetic marble." Experiments have been conducted for two years, and these have met with such success that a plant is to be installed.

### *Finchale Priory—Fabric Preservation.*

Finchale Priory, one of the most ancient ecclesiastical ruins in the County of Durham, picturesquely situated on the River Wear about five miles from Durham City, is now receiving attention from H.M. Office of Works with a view to the preservation of the fabric.

### *Devonshire House.*

"The New York Times" says that Mr. Thomas Hastings, the American architect, has been engaged to remodel Devonshire House, London, into flats. Mr. Hastings refuses to admit it, but the newspaper states that the report is authoritatively confirmed. Mr. Hastings is a partner in the New York firm of Carrère and Hastings. They designed the New York Public Library and many other notable buildings.

### *Garden Village for Lincoln.*

It is proposed to establish a garden village at Cross Cliff Hill, on the outskirts of Lincoln. A tennis court, village hall, and a children's playground will be provided. When the bungalows are ready they will be offered for sale at £350 each.

### *Hartlepool Improvement Scheme.*

Hartlepool Corporation propose to carry out improvement schemes in the Croft, Fisher Row, and Silver Street areas. Under the schemes 430 people will be displaced, and accommodation will be provided by the reconstruction for 468 persons. It is proposed to adapt the Croft area as an open space.

### *Lincoln Cathedral.*

Although nearly £9,000 has been spent in renovating the north-west tower of Lincoln Cathedral, only two-thirds of the work has been completed. For similar work to be done to the central tower approximately £11,000 will be required, and repairs to other parts of the building will bring the total cost up to £50,000.

### *Building Guild's Fate.*

A meeting of creditors in Manchester have passed a practically unanimous resolution in favour of immediate steps being taken to bring about the compulsory liquidation of the National Building Guild, Ltd. Creditors not present or unrepresented at the meeting, which was held in private, are to be communicated with to ascertain if they are in favour of the recommendation.

### *Royal Society of British Sculpture.*

At the general assembly of the Royal Society of British Sculptors Mr. W. Reynolds-Stephens was re-elected president and Mr. F. W. Pomeroy, R.A., vice-president and treasurer. Her Grace the Duchess of Rutland, the Earl of Crawford and Balcarres, Viscount Leverhulme, Sir Aston Webb, P.R.A., and Sir David Murray, P.R.I., have honoured the society by becoming vice-patrons.

### *University of Liverpool.*

The following candidates have qualified for the certificate in Civic Design of the Faculty of Arts :—

Class I.—Baxter, R. G., Chisholm, A. McL., Darby, N. H. N., Halfyard, R., Haswell, P. B., Knight, C. R., Mahon, S. E., Mansergh, B. G. L., Townsend, A. C., Williams, E.

Class II.—Burstall, A. R., Simms, H. G.

### *Architectural Practice.*

Mr. J. D. Kendall, lately housing architect to the Taunton Corporation, and formerly of the superintending architect's department of the London County Council, has commenced practice in partnership with Mr. H. D. North, consulting engineer, at 5B Hammet Street, Taunton, under the style of Kendall and North, architects, surveyors, and consulting engineers.

Mr. C. Donald Allderidge, D.S.O., A.R.I.B.A., architect and surveyor, has commenced practice at 15 Bowlalley Lane, Hull, and is prepared to rece
catalogues, &c.

### *London Government.*

The majority report of the Royal Co
mission on London Government, j
issued, rejects the proposals of the L
don County Council—to which all
local councils objected—for the establi
ment of a new central governing author
for Greater London. The Commission
consider it might add to the expenses
local government and that no advanta
would be derived.

### *R.S.B.A. Centenary.*

The centenary of the Royal Soci
of British Artists has been celebrated
a dinner in London under the presider
of Mr. Solomon J. Solomon, R.A. T
guests included Sir Aston Webb, P.R.
Lord Aberconway, Lord Swaythli
Lord Justice Younger, Dean Inge,
Geo. Frampton, R.A., Sir John Lave
R.A., Sir Arthur Pinero, Sir Chas. Holm
Sir Anthony Bowlby, Sir Landon Rona
Sir Robt. Witt, Sir H. Hughes Stant
Sir Squire Bancroft, Sir A. Temple,
David Murray, R.A., Sir James Stev
son, Lieutenant-General Sir Wm. Fu
Major-General E. D. Swinton, Mr. Al
ander MacLean, and Mr. F. Dicksee, R

### *Changes of Address.*

Messrs. Ernest G. Allen and Partn
architects, surveyors, consulting l
agents, regional and town planners, h
moved to 11 Arundel Street, Stra
W.C.2. Telephone : Central 637.

Mr. Hurley Robinson, F.R.I.B
A.I.S.E., has moved to Newspaper Ho
174 Corporation Street, Birmingh
Telephone : Central 7050.

Mr. G. Alan Fortescue, A.R.I.B.A.,
moved to 13 George Street, Hanc
Square, London.

Mr. Cecil Eprile, A.R.I.B.A.,
moved to 74 Eccleston Square, W
minster, S.W.1. Telephone : Vict
9589.

Mr. Basil Oliver, F.R.I.B.A.,
moved to 148 Kensington High Str
W.8. Telephone : Park 5943.

Mr. Delissa Joseph, F.R.I.B.A.,
removed his offices from 38 Cole
Street, E.C.2, to 2 Basinghall Ave
E.C.2. Telephone : 1138 London W
Telegrams : "Rebuilding, London."

### £96,500 *for London Hospitals.*

£96,500 has within the last few mo
been distributed among a number
London hospitals under the will of
late Mr. William Shepherd, a builder a
large property owner in the City of
don. The following are among the s
already allotted : £35,000 to Guy's
pital to finance the erection and com
tion of the new massage department
extension of the Nurses' Home; £25
to the Bolingbroke Hospital for the
tion and completion of a wing; £20,0
St. Thomas's Hospital for the erectio
dining and recreation rooms for the
of the nurses, the new building havi
flat roof to provide a playground
child patients in the wards; £6,000 t
Belgrave Hospital for Children, Clap
Road, for the purpose of continuing
erection and completion of the south
which will provide two large additi
wards, together with extra accomm
tion for nurses.

# Societies and Institutions

### *The Education of the Architect.*

Mr. Fernand Billerey in reading a paper "The Education of the Architect" ore the Cambridge University Architural Society made an interesting comison between the manner in which architect is educated in France and this country. He said that it was bably too early to judge whether the lacement of the pupilage system by schools of architecture in this country s a change for the good.

### *Tour of the Lower Rhone Valley.*

tour to the Lower Rhone Valley is ng arranged by the Garden Cities and wn Planning Association in May. It proposed to visit Avignon, Arles, nes, Aigues-Mortes, and Aix. The ty will leave London on May 17, and l return during the week-end May 26 28. Applications for inclusion in the ty should be sent to the secretary, rden Cities and Town Planning Association, 3 Gray's Inn Place, W.C.1.

### *American Architecture.*

Mr. Robert Atkinson, F.R.I.B.A., leced to the Glasgow Institute of Archits on "American Architecture." He l there had been a tremendous revival architecture in America in the last nty or thirty years. That revival s not due to any Anglo-Saxon influence; lerived its inspiration largely from the nch école des Beaux-Arts. One of the tures of that revival was that archits enjoyed an extraordinary prestige in ierica.

### *irmingham Architectural Association.*

he sketching excursion of the Birigham Architectural Association to iges last Whitsuntide was the subject paper read by Mr. Benjamin Walker, .I.B.A., before the association retly. Mr. Walker gave some useful ts on the manner in which the city uld be studied to be properly appreted, and described in an interesting its chief architectural features. He strated his remarks with a large num- of delightful lantern slides. Several rming sketches and water-colour draws made by members during the excur- were also exhibited.

### *The Drawings of William Walcot.*

n exhibition of drawings by Mr. lliam Walcot will be held in the gales of the R.I.B.A. from April 7 to ril 28. The exhibition will include me Great Temples of Antiquity." se drawings were executed at the tish School at Rome. Dr. Thomas by, the director, and Mrs. Arthur ong, the assistant-director, kindly isted Mr. Walcot in his researches in library of the school. The "Roman npositions" and other etchings will be shown. The exhibition will be n to the general public (free) from a.m. to 6 p.m. (Saturdays 10 a.m. to .m.).

### *Town Planning Institute: Midland Branch.*

branch of the Town Planning Insti- has been formed in Northern coun- . Following are the first officers: irman, Mr. Carby Hall, C.B.E., .I.B.A., Leeds; vice-chairman, Mr. Sydney A. Kelly, F.S.I., Liverpool; honorary secretary, Mr. J. Hembrow, A.R.I.B.A., Manchester; honorary treasurer, Mr. F. W. Platt, F.S.I., Manchester. The first Executive Committee elected are as under: Messrs. W. T. Lancashire, M.Inst.C.E., Leeds, member, and Fred Marsden, M. Inst. M. & C. E., Bradford, member, Professor P. Abercrombie, M.A., A.R.I.B.A., Liverpool, member, Messrs. J. Crossland, L.R.I.B.A., Bolton, member, W. B. Pindar, Hunslet, legal assoc. member, Percy Morris, A.M.Inst.M. & C.E., Wakefield, assoc. member, and H. Jenkinson, Bradford, assoc. member. Mr. Carby Hall has been elected as representative of the division on the Institute Council.

### *Cambridge Architectural Society.*

Mr. Leslie Mansfield, F.R.I.B.A., read a paper on "Architecture from the Design and Industries Association Point of View," before the Cambridge Architectural Society. He said that the Association was founded by a group of men who were conscious of a feeling of dissatisfaction with things generally, not only architecture, but every form of creative work, and were desirous of reconstruction. The immediate pre-war years had produced a sense of complication in all forms of manufacture. This complication was resulting in a very serious backward movement, and the founders realized that unless a position was clearly defined, and some remodelling of ideals took place, not only the commerce, but the art of this country would suffer very seriously.

### *South Wales Architects.*

The annual dinner of the South Wales Institute of Architects was held at Cardiff, under the presidency of Mr. Percy Thomas, O.B.E., F.R.I.B.A. (president). Among those present were the Lord Mayor of Cardiff (Ald. Dr. J. J. E. Biggs, J.P.), Coun. W. A. Linton (deputy-mayor of Newport), Messrs. C. F. Wood (vice-president South Wales Institute of Architects), H. C. Portsmouth (past-president), Paul Waterhouse, M.A., F.S.A. (president Royal Institute of British Architects), Principal C. Coles (Cardiff Technical College), W. Johnson (president South Wales Engineers' Institute), and others.

Toasts of the "Royal Institute of British Architects," "The Society of Architects," and "Allied Societies," were given by the president and replied to by Mr. Paul Waterhouse, P.R.I.B.A.

The Lord Mayor, responding to a toast, said that Mr. Thomas had approached him with the object of providing an advisory committee for the city of Cardiff. He intended to consider it.

### *The Polishing of Metals.*

The first fruits of the investigations now being carried out by The British Non-Ferrous Metals Research Association at Sheffield University, under the superintendence of Professor Desch (Dean of the Faculty of Metallurgy), on the metals used in metal polishing were described by Mr. Dartrey Lewis in a lecture at the Chamber of Commerce, Birmingham. Mr. Lewis said that he had devoted his attention to investigating the fundamental properties of the materials used in metal polishing, sand, pumice, emery, etc. Methods had been devised for measuring the abrading or cutting power of these materials on brass and other metals in the loose powdered form in which they are generally used. The relative durability of the materials, or the useful life of their grains before they broke down into too fine a state of division to effect any more useful grinding, had also been measured. Mr. Lewis also briefly described his experiments in comparing chromic oxide and rouge for polishing steel and silver.

### *Northamptonshire Association of Architects.*

At the annual general meeting of the Northamptonshire Association of Architects the following officers were elected for the session 1923: President, Mr. S. F. Harris, F.R.I.B.A. (Northampton); Vice-president, Mr. J. W. Fisher, F.R.I.B.A. (Wellingborough); Council, Messrs. John Brown, D.S.O., A.R.I.B.A. (Northampton), J. A. Gotch, F.R.I.B.A, F.S.A. (Kettering), H. Norman (Northampton), W. Shaw (Northampton), R. J. Williams, F.R.I.B.A. (Kettering); Hon. Sec., Mr. C. Croft, F.S.I. (Northampton); Hon. Auditor, Mr. F. H. Allen, A.R.I.B.A. (Northampton). According to the last annual report of the council the association has during the past session been in constant communication with the R.I.B.A., and is being more and more consulted on all sorts of subjects. The council recommend that members do not invite competitive tenders for work exceeding £500 unless bills of quantities are supplied. The council propose to prepare a list of measured drawings, etc., of interesting old buildings in the province, and they ask members to help by sending to the hon. sec. particulars of any drawings they may have. The association consists of thirty-four members and three associates.

### *The Preservation of Plasterwork.*

"I consider that some of the work carried out by the plasterers in the past is in comparison quite as beautiful and valuable as some of the fine old furniture which is now so much sought after and valued." Thus Mr. E. F. Jackson, of Messrs. G. Jackson and Sons, Ltd., in reading a paper at the Northern Polytechnic Institute appealed to the owners of houses and other buildings to make every effort to preserve good examples of old plasterwork. He said that if the plasterwork showed signs of decay, bulging, or of coming away from the ceiling laths, it should be strengthened at the back with canvas and plaster, or small flat brass plates should be buried in the surface and bolted through to the back timber. In the case of work on walls, it should be carefully bound together with old lime and plaster, and some of the numerous coats of whitewash or distemper should be washed off before more was put on. Many of the good details on some of the old low relief work were now hardly distinguishable. He was glad to notice that the authorities at South Kensington Museum and also the L.C.C. were preserving or moulding for reproduction some of the plasterwork existing in old buildings which were being pulled down. Unfortunately, a fine old plaster ceiling, panel or frieze could not stand in a room like an old chair, cabinet or chimneypiece, but if a building containing a good example had to come down, every effort should be made by architects to find a home for it in some new building, or else a portion of it should be preserved in a local museum. It was quite easy if the joists or timbers at the back could be reached and then cut through, to lower the ceiling in sections, cut away the joists and laths and reinforce the old plasterwork at the back with canvas and plaster in place of the laths. The face of the ceiling should first of all be covered with strong paper pasted on. This would hold all the modelled details together and was easily soaked off afterwards.

### *The B.E.D.A.*

The annual luncheon of the British Electrical Development Association was held at the Hotel Cecil on the 16th of last month, the president, Mr. W. B. Woodhouse, being in the chair. Among the guests were Lord Haldane, Sir Kenneth Goadby, Dr. S. Z. de Ferranti, and Senatore G. Marconi.

Lord Haldane, proposing the toast of "The Electrical Industry," emphasized the dependence of the industry on research. He referred to the invention of the gas-filled electric lamp and the Einstein theory.

Mr. Woodhouse, replying, said that the use of electricity was a means of economy. Its immediate need was for increased capital, but it was an undertaking essential to the good of the country and must be protected. In spite of the depression prevalent in so many industries, electrical supply was prospering. Co-operation between the manufacturing supply and contracting branches of the industry was essential. The present supply was likely to be overwhelmed by enormous demands if the present rate of progress continued.

### *Architectural Prizes.*

The R.I.B.A. has just published its annual announcement of the prizes. These include a Travelling Studentship of a total value of £500, and others of £150, £100, £75, and lesser amounts. The total value of the prizes and studentships offered this year by the R.I.B.A. for the encouragement of architectural students is nearly £2,000. Full particulars of these prizes can be obtained on application to the secretary of the R.I.B.A.

## Competition News

*The International Labour Office, Geneva.*

The conditions of the competition, promoted by the International Labour Office of the League of Nations, for designs for new headquarters at Geneva have been issued. The assessors consist of the chairman and deputy director of the International Labour Office, and representatives of the principal architectural and engineering societies of Great Britain, France, Italy, and Switzerland. Premiums to the total value of £800 are offered. The competition is open to all Swiss architects and to foreigners who have been in practice for at least ten years in Switzerland.

[For List of Competitions Open see last issue.]

## National Housing Policy

The Council of the R.I.B.A. recently submitted to the Ministry of Health the following recommendations as to the principles which, in their opinion, should govern future housing policy in Great Britain :—

1. The principle of the Small Dwellings Acquisition Act should be extended by means of an Act with some such title as "The Small Dwellings Erection Act," whereby local authorities should be empowered, with the aid of the Public Works Loan Commissioners, to advance money on mortgage to any approved person proposing to erect a small dwelling for personal occupation to approved plans and estimated cost, such advance being made in periodic amounts as the erection of the building proceeds, up to a maximum of 85 per cent. of the market value of the property, or the cost, whichever is the lower, and to be paid off with interest by instalments spread over a period of thirty years, special arrangements being made for the easy transference of the legal interest in the property.

2. Where the local authority or approved public utility society owns the land the local authority should be authorized to advance 85 per cent. of the market value of the property, or the cost, whichever is the lower, to any approved person, firm, or public utility society undertaking the erection of one or more suitable dwelling-houses, on similar terms to those outlined in paragraph 1 above, except that repayment with interest should be spread over a period of forty years, the local authority to have power to acquire land for this purpose.

3. Local authorities or public utility societies erecting houses should receive from the State, as a temporary expedient only during the continuation of the Rent Restriction Act, annual block grants of an agreed sum per house, differentiated in respect of rural and urban schemes and exceptional circumstances and applied to houses of approved accommodation built on estates laid out on town-planning lines.

4. With a view to assisting the revival of house building by private enterprise, the local authorities should be empowered to use the annual block grant for the purpose of reducing or remitting the ground rent of land leased to private builders, instead of or in addition to employing the grant itself for building purposes.

5. As an alternative to the annual block grant system outlined in paragraph 3, the Ministry of Health should consider the grant of cheap loans to local authorities.

6. In cases where grants of public money are made it is of vital importance that a high standard of lay-out and accommodation be maintained.

On March 27 a deputation, consisting of Professor S. D. Adshead, Professor of Town Planning in London University, Mr. H. V. Lanchester, president of the Town Planning Institute, and four other members of the R.I.B.A., was received by the Permanent Secretary of the Ministry of Health on behalf of the Minister, and the recommendations detailed above were fully discussed.

## Northern Polytechnic Institute

Appended is a list of the prize-winner in the Department of Architecture, Surveying, and Building of the Norther Polytechnic Institute :—

SENIOR DAY SCHOOL.

ARCHITECTS.

| Prize for : | Books Value. | Awarded to : |
|---|---|---|
| Working Drawings .. .. | 15/– | A. H. Neave |
| Measured Drawings .. .. | 10/– | A. H. Neave |
| Best Set—Esquisse-Esquisse | 10/– | B. Lock |
| Best Set of Order Compositions | 15/– | D. E. Harringto |
| Best Set of Studio Drawings | 10/– | V. A. Brown |

BUILDERS AND SURVEYORS.

| | | |
|---|---|---|
| Best Set of Construction Drawings .. .. .. | 10/– | D. E. Harringto |
| Best-chosen Section of Work | 15/– | W. Bowles |
| Best Progress in all Departments .. .. .. | 15/– | I. Schultz |

JUNIOR DAY SCHOOL.

| | Books Value. | Awarded to : |
|---|---|---|
| First Year, 1st Prize .. .. | 15/– | S. Cusdin |
| ,, 2nd Prize .. .. | 10/– | A. Writer |
| Second Year, 1st Prize .. .. | 15/– | E. C. Marriot |
| ,, 2nd Prize .. .. | 10/– | C. Day |
| Third Year, 1st Prize .. .. | 15/– | W. Dickerson |
| ,, 2nd Prize .. .. | 10/– | A. T. Warner |
| Prize for Decorators .. .. | 10/– | H. Hunt |
| Prize for Plumbers .. .. | 10/– | W. E. Keys |
| Prize for Carpenters .. .. | 10/– | W. Dickerson |

EVENING SCHOOL.

| Prize for : | Books Value. £ | s. | Awarded to : |
|---|---|---|---|
| Best Order Composition .. | 0 | 15 | F. Fisher |
| Set of Construction Drawings .. | 0 | 10 | A. W. Shaw |
| Set of Working Drawings .. | 0 | 10 | H. Broadwate |
| Set of Surveying Papers .. | 0 | 10 | R. Freshwate |
| Set of Steelwork Drawings and Calculations .. .. | 0 | 10 | W. G. Winco |
| Best Piece of Carpentry .. | 0 | 10 | L. Lay |
| Best Piece of Plumbing .. | 0 | 10 | G. Nash |
| Best Piece of Painting and Decorating .. .. .. | 0 | 10 | E. Yates |
| Plastering Students over 21, 1st Prize .. .. .. | 2 | 5 | J. Ward<br>J. Lincoln |
| Plastering Students over 21, 2nd Prize .. .. .. | 1 | 10 | P. Mountford |
| Plastering Students under 21 .. | 1 | 5 | W. Collier |
| Masonry .. .. .. | 2 | 2 | G. Rainbird |
| Letter Cutting .. .. .. | 2 | 2 | G. Moore |
| Stone Carving .. .. .. | 1 | 1 | G. Adams |
| The Richard Roberts' Prize for best piece of Craftwork—open to the School .. .. .. .. | | | W. E. Keys |

## Coming Events

*Thursday, April 5.*

A. & S.A.P.U.—Dance at Social Hal West Croydon.

*Friday, April 6.*

Art Workers' Guild.—"Present Pos tion of Symbolism and Allegory." B Mr. J. Paul Cooper, Mr. John Leighto and Mr. A. J. Mavrogordato. 8 p.m.

*Saturday, April 7.*

R.I.B.A.—Visit to Selfridges.

*Monday, April 9.*

R.I.B.A.—"The Architecture of Pr vincial France." By Mr. H. M. Fletche M.A.(Cantab). 8 p.m.

*Tuesday, April 10.*

A. & S.A.P.U.—Lecture by Mr. E. Etchells on "Simple Tests for Concrete 17 Fleet Street. 6.30 p.m.

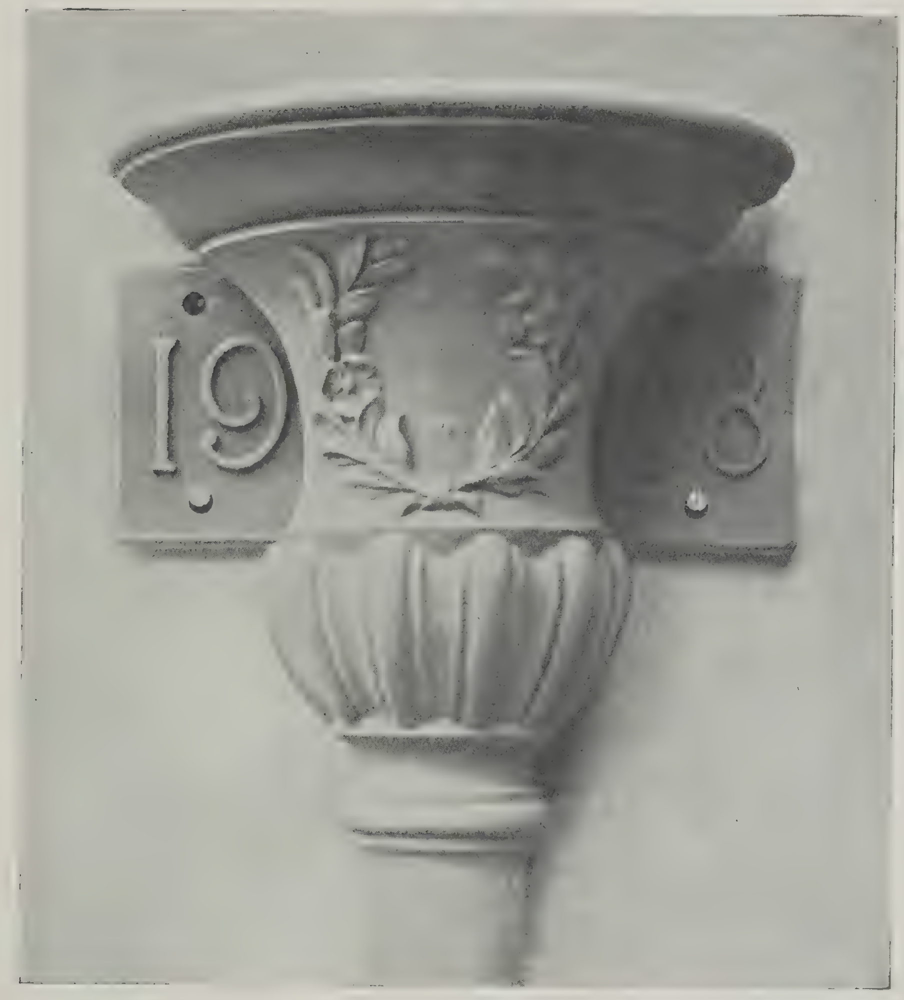
## A Correction

In our last issue we stated th Messrs. Green and Abbott, Ltd., ha moved to 23 Lower Seymour Stree Wigmore Street, W. Owing to the r naming of this street the correct addre is now 123 Wigmore Street, W.

nesday, April 11, 1923 Vol. LVII. No. 1475

# THE ARCHITECTS' JOURNAL & Architectural Engineer

*With which is incorporated "The Builders' Journal."*

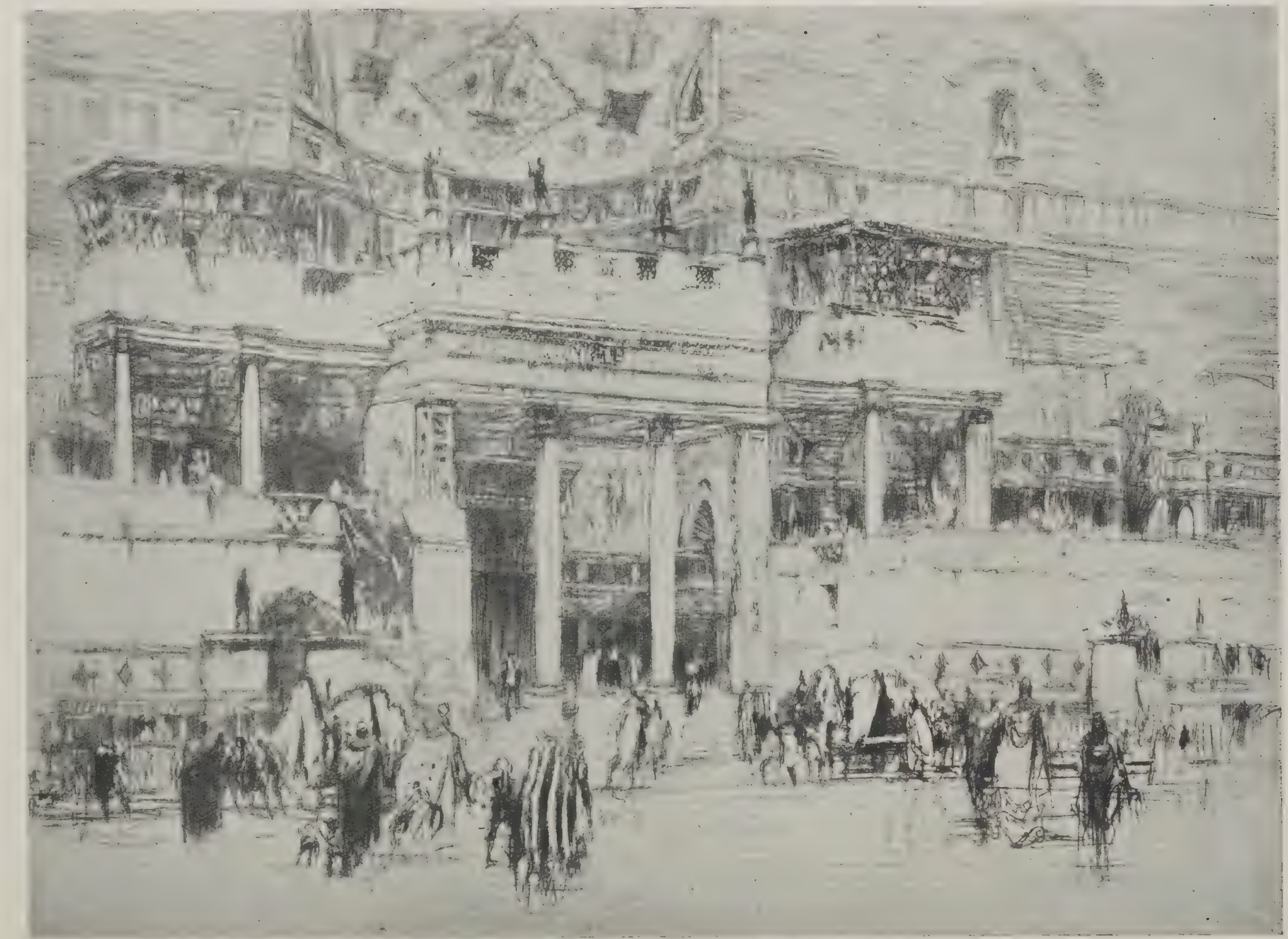


RAIN-WATER HEAD.

*Designed by Basil Oliver, F.R.I.B.A.*

27-29 Tothill Street, Westminster, S.W.1.

# The House of Sallust: From an Etching by William Walcot



Sir Frederic Kenyon, K.C.B., Director of the British Museum, opened an exhibition of drawings by Mr. William Walcot, in the Galleries of the R.I.B.A., on Friday. In declaring the exhibition open, Sir Frederic pointed out that, apart from their artistic merits as pictures, Mr. Walcot's drawings were of great interest and value, not only to the archæologist, but to the practising architect. The "House of Sallust" is one of Mr. Walcot's more recent etchings.

THE
ARCHITECTS' JOURNAL
27-29 Tothill Street, Westminster, S.W.1.

nesday, April 11, 1923

Volume LVII. No. 1475

# The Ugly Backs of London

ONDON has a fair front but a very ugly back. That fact must strike every visitor and must surely be a matter for regret to all who love this city of many memories and great traditions. To tects it is a perpetual problem. To all who have an or the beauty of our capital it is a constant reproach. here you will you will find stately buildings showing ud front to the world, which at the rear have a pinch- air. It is too often the case that a highly promising le belies at the back the promise it presents at the .

ere is something Pecksniffian about some of these s, with their marble and granite suggesting on the road an impressive prosperity, giving to the office, , or shop an idea of architectural aristocracy, while a to the street behind reveals plebeian London brick or tile. ather like the vulgarity of the people who for appear- ’ sake parade a wealth they do not possess. And it ds one of the "solid gold" frames which beneath a -thin layer of the metal find in cheap wood the most part of their pretensions; or like the "real mahogany" ure that hides, below the veneer, more honest deal.

ere is a chapel in one of the suburbs that boasts an ing stone front. But behind this front of stone there alls of brick. It is not an imitation—the stone is e, and so are the bricks; but there is here the t intention to deceive. The façade is living beyond eans. And it is only one of thousands of cases in n of a false standard in buildings, the trick of the who gains a footing in society above him by becoming terfeit of the real article.

t is the truth about some of our London buildings, is only half the truth. There are many splendid cts of modern architecture that are not spoilt by f cash nor by any need to play the confidence trick. have been built without regard to cost. They house of the most famous businesses of the twentieth y, which need neither advertisement nor testimonial ding. Yet here, too, there seems no relation between ck and the front. The money, the material, the ity, and sometimes the genius of the architect lavished on that part which is most in the public No one who counts goes into the by-ways which lead other side of the commercial palace. And in London, ule, great business headquarters do not front on to ain streets. So the backs are neglected. They are y practical. There are no airs and graces to intrigue ker after architectural beauty. A walk up a back and there are legions of by-ways—is not, as a result, ng. It is a pity, for surely one of the charms of a g should be unexpected glimpses, at unlooked-for of new beauties of design. We do not, of course, at London has no buildings that completely satisfy thetic sense. Nor would we be bold enough to claim here are not fine examples of modern architecture e good on all sides. There are. But they are far for the world's biggest city.

it is recognized that there are numerous cases where hitect has not been able to carry out a complete design owing to the crippling limitations of ancient lights. We believe Africa House in the Kingsway, a notable piece of work, is the latest instance of this handicap of long-established rights, which in an old city must be expected. The Central Hall, Westminster, is yet another, as its unfinished side, facing the Westminster Hospital, bears witness. Such a cause is one with which no architect can cope. His site is determined for him, and in most cases determined for his clients by the nature of their business. At the same time, while we realize that here is an obstacle which cannot be removed, we none the less deplore the consequence.

There is another phase of London's ugly backs for which the railways must be held responsible. Any visitor coming to the metropolis, whether from north, south, east, or west, gets a most depressing first impression. He passes through some of the ugliest backs that even London can show. The remedy here is not easy but is not beyond reach. It means the removal of the termini to the outskirts and the electrification of all lines into the centre, which could be well run underground as the long-distance tubes are now. This reform will surely come, and years hence, with the substitution of electric power for steam and coal in all forms of industry, transport, and domestic work, including the heating of houses, London may be once again the fair city it once was.

But that is a far cry and it does not remove the problem of the veneered, falsely proud products of the "keep up appearances" school. Nor does it get over the difficulty of ancient lights. The first trouble is a disease of the times, and it can only be met by a new outlook. There is no need to be ashamed of sound materials. There is every need to return to a simpler standard. The pace that is being set is too fast. Some of our latest public offices are unduly luxurious. Art is not just a matter of cash, and the highest forms of it are the simplest. We badly want a new era of simplicity. Architecture would benefit from it as much as the nation. As long as the standard is set on a luxury basis we shall get false fronts, poverty masquerading as wealth, and an unhealthy competition in a riot of ornament and costly materials or their imitations.

We are irresistibly reminded in this connection of the story of Phidias, who carved the backs of his statues as carefully as their fronts, although when placed in position on the temples or palaces they were designed to decorate the backs would not be seen. Someone asked him one day why he took the trouble to do so much work that no one would see. "Ah," the great sculptor is reported to have replied, "the gods see."

Here in London we should be all the better for an outlook like this. Though many do not take the trouble to look at the backs of our buildings, they are there for all to see. And they are not pleasing. It is not the fault of the architect who has to work to instructions. The unhappy fact is that clients will not spend the money to make their premises attractive where they are seldom viewed. They prefer to lavish what money they will spend on that part of the place that, in their opinion, best repays them. The result is that we get two Londons: the London of the main highways, and the London of the side streets. The one flaunts its far-famed wealth; the other tells the story of poverty or of threadbare thrift. It does not imply the decent pride that once was characteristic of England, the tradition of the good broadcloth, the sacredness of the Englishman's bond, the thorough-going honesty that never stooped to pretence. We are afraid that the ugly backs of London are a symptom of a period which does not reflect our best qualities and marks a departure from the solid virtues of our ancestors.

It is, perhaps, too much to hope that this protest will do any good. The disease is too deep-seated, too well entrenched by now. But whatever the outcome, and we have no illusions about it, it is well that something be said even though it be only a cry in the wilderness.

## The Building Dispute

At the time of going to press the crisis in the building trade continues, and unless some agreement is reached before April 14 a national stoppage is inevitable. With the internal politics of either side architects are not concerned; their one desire is to see a settlement of the present dispute on lines satisfactory to both sides. In a letter to "The Times" last week Mr. Paul Waterhouse set forth very clearly the position as it presents itself to the architectural profession, and urged with much eloquence and force the necessity for reaching a settlement without resort to the primitive methods of either lock-out or strike. We feel with Mr. Waterhouse that there must be a sufficient number of men of goodwill on both sides to find a way out of the present *impasse* without precipitating a stoppage, calamitous to the building industry and to the nation alike. We hope that the contending parties may see their way to take advantage of Mr. Waterhouse's offer of mediation. Hot blood often cools and difficulties disappear before the calm and dispassionate judgment of a third party.

## The Lure of the Antique

Mr. W. W. Scott-Moncrieff, in a letter to "The Times," draws attention to the present-day worship of the antique at the expense of contemporary craftsmanship—a worship that has led to the production, on a large scale, of "spurious imitations of genuine antiques and works of art." The extraordinary thing is that veneration of the antique usually arises from a wrong motive; that is to say, a chair, a piece of pottery—what you will—is not necessarily desired because it is beautiful, but because it is old. Generally speaking, the public is not yet educated up to a perception of the beautiful; it is too easily influenced by expert opinion—by dealers in the antique and others whose business it is to create entirely artificial values in their wares. Antiquity and rareness must always make a certain appeal, especially to those who have the means to indulge their fancies; but the ultimate test of a work of art is beauty. That modern craftsmanship is capable of producing things as fine in their way as anything that has ever been done in the past is perfectly well known, but still our craftsmen do not prosper as they should do. And the principal thing that stops them from coming into their own is this veneration of the antique. Here is more work for the propagandist. Perhaps it might help to tell the public that by buying the fine things of to-day they are acquiring the antiques of to-morrow!

## The Report on Lead Paints

A report of considerable importance to white lead manufacturers, to the paint industry, and to all users of paint, was issued last week by the Committee on Industrial Paints, appointed in 1921 to re-examine the conclusions of the Committees which investigated the subject in 1911. These Committees, it may be recalled, reported, in 1915 and 1920, that it was not practicable adequately to safeguard the health of painters by regulations, and, further, that substitutes existed which could satisfactorily repla white lead for all purposes; recommending, finally, th the use of white lead for paint materials be entirely pr hibited. The effect of the report just issued is to rever these earlier findings. The conclusions arrived at the new Committee are, briefly: (1) That the chi danger of lead poisoning, which lies in the inhalation dust produced by the dry rubbing-down process, may eliminated by the adoption of the damp process, whi involves the use of waterproof sandpaper (now successful manufactured in this country), and (2) that for outsi painting, and for certain kinds of internal painting, the is at present no efficient substitute for lead paint. T evidence as to the failure of substitutes, especially th brought forward by the Office of Works, relating Buckingham Palace, the Admiralty, and other pub buildings, is conclusive. "The cumulative effect of the new evidence" (observes the Committee) "was th there was a marked increase of cost involved in t maintenance of external surfaces painted with non-le paint." It would appear that at last this long-drawn-c controversy has been satisfactorily settled from eve point of view.

## Unsightly Aerials

We note that certain occupiers of houses have ju been warned that they have no right to fix aerial wires any part of a house. An official of a house-owning compa said last week, "We have to protect our buildings fr damage, and prevent tenants interested in wireless fr annoying those who are not." These wireless aerials threatening to become a first-class nuisance. One h and there was not objectionable; in fact, it formed rather interesting adjunct to the scenery, and stirred pleas thoughts about the romance of modern science. But wh every other back garden has its scaffold-pole and wi the thing begins to become monotonous. It reminds of Mark Twain's experience of jodelling in the Alps. first exponent of that musical art he gave a franc to jo some more; the second, he gave half a franc to keep up; the third and fourth received smaller sums; Nos 6 and 7 got nothing, and during the remainder of the the rest of the jodellers were hired at a franc apiece no jodel any more. Perhaps the time is coming when a spe Government grant will be made to all who refrain fr erecting aerials; or, alternatively, wireless will be c munized and laid on, with the water and the gas, fro central station. Whatever is done, we hope that s means may be found of dispensing with the individ outside aerial. It threatens to monopolize the landscap

## The Carlton Club

The Carlton Club (which, we note, has become so ba decayed externally that the fabric is to be extensi restored, under the direction of Sir Reginald Blomfiel one of those buildings that, while being imposing enou miss the greatness of true architecture. It was erecte 1854 by Sydney Smirke, who based his external eleva very largely upon Sansovino's Libreria Vecchia, at Ve Unlike Barry, who, in the Reform Club, completely real the idea of the Farnese Palace, Smirke, through var modifications, both of design and material, failed to ach the distinction of his model. As Mr. Stanley Ramsey said: "It was a lazy adaptation rather than an assin tion." The Libreria Vecchia owes much of its effect to unbroken rhythm of its arched colonnade. Smirke in rupts his façade (which, of course, is of far less width) pairs of coupled Doric and Ionic columns on the gro and first floors respectively. His use of highly polis columns and pilasters of red Aberdeen granite is also pleasing. The moral is (again in the words of the cr that "it is impossible to borrow casually a design, th good in itself, and to apply it as a whole to a building w presents quite a different problem."

# The Resurrection of Reims

### By HUNTLY CARTER

THE rebuilding of the devastated regions of France recalls the Parable of the Sower. It is as though four sowers went forth to sow. Three of them were bad ones, but the fourth was a good sower o knew his business. The first three were sowers of productive seeds, and the regions in which they sowed st be gone over again in the future. It is true some of seeds have taken root and a multitude of structures ve sprung forth, but the latter are so unsatisfactory that y have no lasting value. The fourth sower was more tunate. His seed was received into good ground and mises to bear fruit, and to bring forth abundant archi- tural and civic wealth, to mix the metaphor.

The fourth sower is our old friend the town planner. The sent-day planner in France may be said to have been n in that country over ten years ago at the Musée Social. e Committee on Social Economy of this institution rted a town-planning movement from which sprang in 3 another movement called Urbanism. An Urbanist iety was formed, which had the result of bringing to- her the leading French town-planners. The Musée ial also initiated or gave impetus to the formation of er town-planning societies and schools, some of which ame active during the war. In addition, in 1917, the nch Government passed a compulsory town-planning which has operated increasingly ever since.

erhaps the two most important and active bodies are Renaissance des Cités and the Association Central des giénistes et Techniciens Municipaux. The latter asso- ion has been very active in promoting better sanitary ditions in town-planning, especially in the devastated ions. In 1916 a highly important Reconstruction of es Exhibition was held in the Tuileries Gardens, Paris, which I remember seeing a great number of town plans models exhibited by this association, and also hearing e excellent lectures delivered by its members. At that e the great problem for architects and hygienists was construction of a light portable building fulfilling the ntial conditions of sanitation, safety from fire, tempera- , etc. As a result the exhibition contained a number of king-models, and proposals for portable wooden and ent buildings to be erected in the war zone, and capable eing transported at a moment's notice from one district nother. Many of these structures have since passed use, and, as a consequence, to-day all sorts of light able dwellings are scattered over the late battlefield.

a Renaissance des Cités, as the second association is d, was founded in 1917, largely owing to the initiative Iademoiselle Tarrard-Page, its present *délégué-générale.* subsidized by the French Government and the Rocke- r Foundation. Its committee, commissions, and mem- include the most distinguished architects, town- ners, regionalists, hygienists, technicians, æsthetes, l economists, legislators, lawyers, and other public , to be found in France to-day. It acts largely as an sory body in harmony with its constitution as a re- ch and educational association. Thus it helps with dis- rested council and propaganda in the reconstruction of devastated regions, and pays particular attention to -planning or urbanism, as the new term is. Of course, enabled to do this partly owing to the extent and variety xperience represented by the members of the associa- , and partly to its method of collecting all the informa- , past, present, and possible, printed and illustrative, lable on each region, town or village to be reconstructed, thereafter making a plan with the aid of such informa- and the application of the principles of urbanism.

ese principles are, no doubt, well known to architects ow. They are provision, economy, practicability, and acter. The first is of great importance in foreseeing the future extension in view of the possible growth and development of a town or city. The neglect of this principle was one of the greatest errors in the building of certain cities, like London, in the past. Economy and practicability are bound up with the avoidance of unnecessary expense and the proper regard of the problem of local conditions. Character embraces a multitude of things. It has regard to place, people, and occupation, history and geography, heredity, function and environment, and so on. In short it has to take into account the law which the new civicists regard as a natural one, that people, their occupations and cities are the outcome of a natural set of circumstances imposed by their geographical surroundings. This law was upheld by Le Play. Thus the cotton industry and industrialists of Manchester are largely the outcome of natural conditions found in a humid atmosphere, and geographical features which are favourable to the erection and working of mills.

La Renaissance des Cités has been much occupied with the application of these principles to the problems of reconstruction. The association recognized at the outset that many of the French cities and towns had not been planned and built on reasonable principles of urbanism. Indeed, they reveal all sorts of plans, Roman, mediæval, monarchical, classic, industrial, financial, civic, and the rest, and occasionally a mixture of all these. So it is not surprising to find famous town after town having no intelligent plan to speak of, but simply a maze of streets without a common centre, beginning and ending nowhere, like a Chinese play which goes on for ever, and the taste in architecture determined by ephemeral circumstances, by the whim of architects who are not architects but orators, by everything in fact but the right one. It may be urged that the result of this higgledy-piggledyness is often an enviable picturesqueness such as is to be noticed in one or two old Welsh towns, the houses of which appear to have been dropped from heaven in a hurry and piled in a heap like the kitchen stuff in Tutankhamen's tomb. This sort of thing pleases poets, but it is not healthy for the inhabitants.

Thus the work which occupied the attention of the association was not that of reviving old characters and renewing old structures. It was that of calling forth from the far spreading ruins towns and villages expressing the psychology of their inhabitants while embodying the rare gifts of modern scientific research, discovery, and invention, together with the results of the experience of many and varied fruitful minds. In other words, it was the close application to the vast problem of the reconstruction of towns of the most up-to-date scientific and humanist principles.

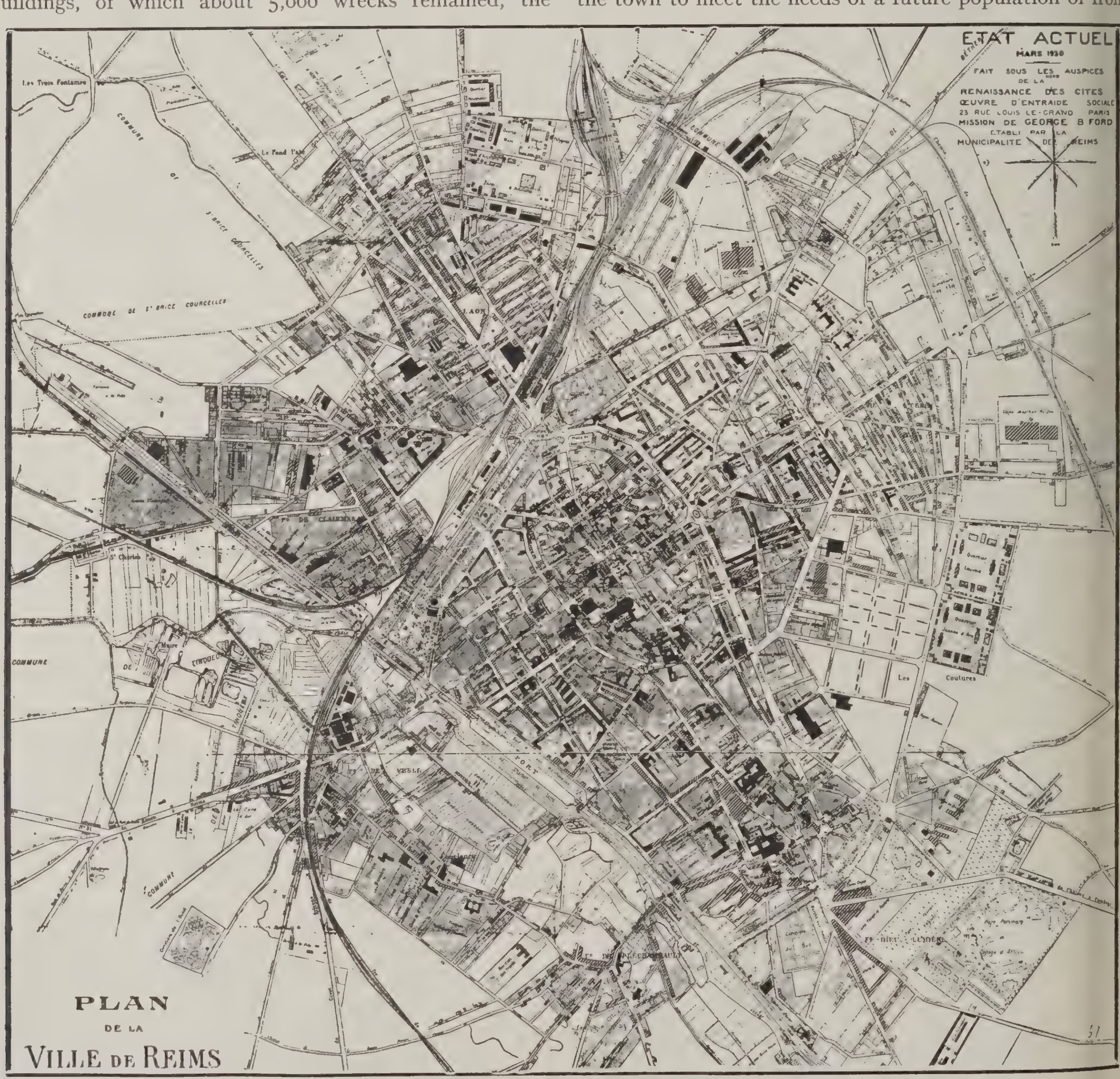
The association has applied these principles systematically to the proposed reconstruction of several towns and villages, notably Albert, Chaunay, Pinon, and Reims. After centralizing all the available documents on these places—plans, surveys, laws, decrees, etc., bearing on the work to be undertaken, it proceeded to study these in relation to actual local conditions, and then drew up plans of reconstruction and extension. In the case of Pinon a working-model of a new village was constructed by M. Charles Abella, architect, of Pinon.

Perhaps the replanning of Reims was the most ambitious undertaking of the association. Before the war Reims was the Champagne capital. It had over 100,000 inhabitants, and was, on the whole, one of the most prosperous and important of French towns. Almost from the beginning of the war Reims was in the fire zone. The beautiful thirteenth-century cathedral was destroyed by fire as early as 1914. After the advance of the German army in 1917, when it crossed the Aisne, and again in June–July, 1918, when it reached the Marne at Chateau-Thierry, the town presented a sorry sight. It was, in fact, in a similar plight to Ypres and Arras—or, in my opinion, far worse than Arras, in which, if I remember rightly, there were only three sound buildings when I visited the town in 1918. In Reims public and domestic buildings were levelled, and all thoroughfares alike were riddled with holes and heaped with débris. It was to the difficult problem of reconstructing a large and busy town of destroyed bridges, churches, houses, streets, etc., in a modern manner while preserving certain essential established features that the association had to address itself. The actual state of Reims is indicated in the accompanying plans.

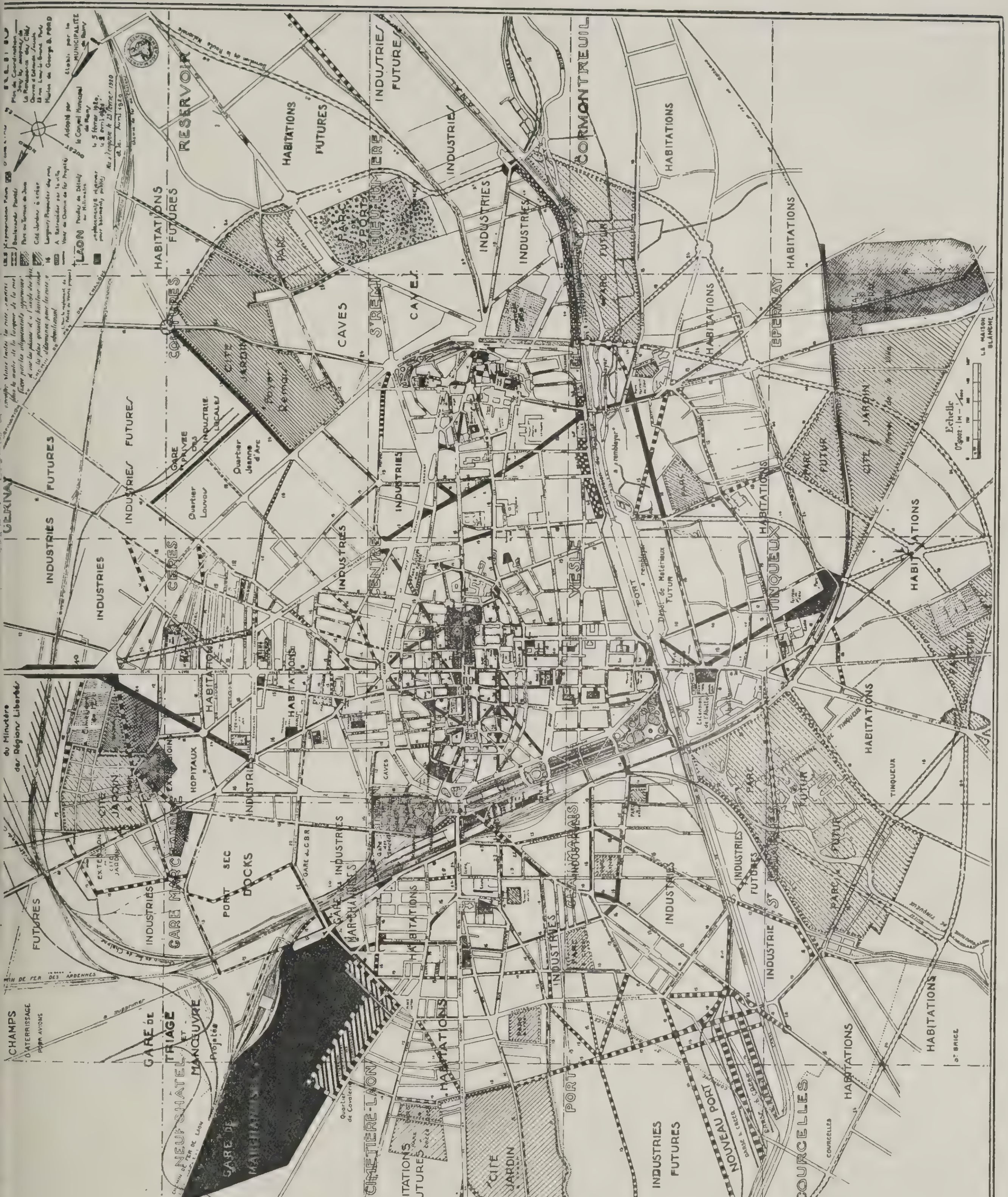
But it should be said that proposals for the reconstruction of Reims occupied the attention of the authorities of that place long before La Renaissance des Cités was invited to collaborate. Owing to the activity of French town-planners surveys were made even during the German occupation of parts of France, a great deal of survey data was collected, and plans for more than one occupied town, including Lille, its improvement and extension, were made. During the war no fewer than nineteen plans for the rebuilding of Reims were made. Subsequently these plans were gathered together, and the town architect and engineer extracted the most practical ideas from them, and then made a combined plan of a reconstructed city which was officially adopted by Reims in May, 1919. The plan had to provide for the rebuilding of the former 14,000 buildings, of which about 5,000 wrecks remained, the preservation of whatever was good, and the promotion o hygiene, amenity, embellishment, and circulations withi the limit of strict and reasonable economy. The cost of carrying out this accepted plan was given at 100,000,000 francs.

A few months later, in January, 1920, it became apparen to the new mayor, M. Charles Roche, and the new municipa council, that it would be extremely difficult to utilize thi composite plan made up of different projects elaborate during the war by no fewer than twenty-two French architects and engineers. Accordingly, acting under the advice o the President of the General Co-operative Society for th Reconstruction of Reims, they approached La Renaissanc des Cités with a request for a new plan. The associatio agreed to prepare one, and considering it best to confid such important work to an independent urbanist who wa not likely to be hampered by the ideas surrounding th former plan, it invited the collaboration of Mr. Georg Ford, adviser on urbanism to the city of New York, an the holder of the French Government diploma. The ne plan was made, and a few months later, in April, 1920, i was with a few modifications by M. Abella successivel adopted by the municipal council, the departmental commission, and, finally, unanimously by the head commissio of rebuilding, extension, and embellishment of towns.

This plan, which will be realized as soon as sufficien money is forthcoming, provides for a great extension o the town to meet the needs of a future population of fro



PLAN OF REIMS AS EXISTING.



PLAN FOR THE RECONSTRUCTION OF REIMS.

200,000 to 300,000, in place of the former 100,000. It should be said that most of the former inhabitants have returned. Early in 1919, that is, four years ago, over 30,000 had returned. Reims, as we know, is the metropolis of the Champagne region—it is an important tourist centre of the devastated regions, and in more ways than one has the promise of a significant future. It is so situated that it is the junction of five railways and of several canals. The plan is designed to co-ordinate all the best existing proposals for rebuilding the town, while embodying new ones that have been tested and demand to be realized.

An analysis of the method of solving the problem of making the plan shows that a commencement was made by an analysis of everything which concerned the structure and functions of the town. First came the questions raised by certain topographical factors, such as the canals and railways which, of course, could not, without extreme difficulty, be displaced. Then came successively the functions of the town—industrial, commercial, housing, recreation, etc., and, finally, the question of embellishment. Each function was carefully studied in view of possible extension, and in relation to all others.

With regard to garden suburbs, it may be said that before the war Reims contained practically no working-class quarters combining comfort and agreeableness. The workers have earned the right to have fairly spacious and agreeable dwellings in inspiriting surroundings. Such are comprised in garden suburbs found in other countries. So four garden suburbs are indicated on the plan, one for each suburb of the town. Each garden suburb is to be regarded as a complete thing, containing everything necessary to make existence tolerable in a crowded city. Pleasant streets, detached houses, spacious surroundings, playgrounds open to all, in short, everything that adds to health, comfort, and enjoyment.

The plan for the reconstruction of Reims, then, may be said to be one for the resurrection of a town. As such it is full of valuable suggestions, not only extremely up-to-date, but easy to follow, and for this reason full of instruction for all who care to study it.

# Architects and Housing

## By T. LAWRENCE DALE, F.R.I.B.A.

THE urgency and national importance of the matter impels me to re-open the question of the future of housing so ably discussed by Mr. Maurice Webb in the issue of the JOURNAL for November 15, and continued by Mr. Stanley Hamp in the issue for November 29 last year. The country at large, the man in the street, is not particularly interested in the interior arrangement of houses so long as they are sanitary and stable, and we are already sufficiently well protected in this respect, but he is vitally concerned in the appearance of these houses and the gain or loss of public amenity occasioned by their erection.

A man building the walls of his own house is at one and the same time building the walls of the city, and the citizens have a prima facie right to demand that he shall show them every possible consideration when so doing. If he is assisted by them in his enterprise this right is uncontestable, and this right, in my view, should be enforced upon him. We have in England numerous regulations, and persons to administer them, to protect us against bad smells, but we have no safeguard against bad sights.

We may assume that practical builders catering for tenants would arrange their houses in some more or less convenient fashion, and though I should be the last to under-estimate the value of proper professional advice in this respect, to enforce it would infringe the liberty of the subject, but the lay-out and external design of the houses is of the gravest public importance. We all know the astonishingly interesting results that can be obtained with the simplest possible houses by their grouping and arrangement on the land. While the amenities in both prospect and aspect that can be secured to the houses themselves without any additional cost whatsoever by a little consideration in the lay-out are quite out of all proportion to the trouble and cost involved.

And as to the design of the houses I think I may safely say that the experience of the last four years gained by the profession, working on the Government housing schemes, has been that the simplest effects are best, and that the most satisfying results are produced by the considered arrangement of masses and the proportions existing between the purely necessary parts. It is quite certain that it does not cost any more to build a beautiful house than to build an ugly one; in fact, there is more risk of failure in the use of non-essential and supposedly artistic features than in their omission.

If I am right in this we should not be asking the State-assisted builder, whom we assume, to spend more on his scheme, but only that it should be given more consideration, especially from the point of view of the public who will in perpetuity have to suffer the prospect of his works while the owners live inside them and he himself has departed. This, I think, is a truly reasonable requirement, and given good will on all sides could easily be satisfied, and I would suggest that State aid should be conditional on the work being either designed by such persons as shall be deemed for the purpose of the Act competent, or that the proposed work shall be approved or amended by the advice of such persons. These persons should be required to prove their qualifications before a commission appointed for that purpose, should be registered, and should be obliged to act for nominal fees for their duties as consultants, proper arrangements being made for appeal. Their title, perhaps, could be Commissioner Consultant.

This is not as formidable as it sounds. It would mean probably that all architects holding recognized diplomas would be held eligible, and the qualifications of others who wished to apply would be scrutinized. They would then be given a commission similar to that held by a Commissioner of Oaths.

Such, in brief, is the suggestion I have to offer. It is idle to argue that qualified architects are not always expert designers: it is probable that qualified doctors are not always expert physicians—and as they bury their mistakes the point will never be cleared up—but nobody is allowed to die without their attendance. We can but use the tools that come to our hand.

I cannot quite follow what form the collaboration between architect and builder that Mr. Hamp suggested would take. I should like to hear it further discussed, and it would be helpful if a meeting between the master builders and ourselves could be arranged.

With regard to the American system brought forward by Mr. Maurice Webb, the publication of books of plans, at first glance, does not appear attractive. Variety and individuality is the life blood of art, and there is nothing more depressing than the frequent recurrence of standard types of houses in different places. Beyond all, the problem is one of lay-out, each site having to be considered individually. But let us as a profession determine to leave no stone unturned to discover a means and to decline no sacrifice to save the country from the recrudescence in enormous quantities of those dreadful erections granted State subsidies on the approval and recommendation of the local sanitary inspectors by the late Government. In a way more real than is usually expressed by the words, the future of the country, the countryside, is at stake.

# The Business of an Architect

By C. MURRAY HENNELL, F.S.I.

## CHAPTER II.

### *Management or Partnership.*

THE complexity of modern buildings and the vast field which architectural work has to cover nowadays render it practically impossible for one man to have an intimate knowledge of all branches of a practice. A single head will carry on y well when there are only a few small houses to be ted, or possibly some straightforward building, such a small warehouse or factory. But when the work ands and extends its range over new buildings in town country—alterations and additions to existing works, ng as expert witness at law, arbitrations, dilapidations, a host of other duties that fall to the lot of the archi- —it is too much to expect any individual to be a master ll these branches.

The profession embraces art, technique, and business, it would require a veritable genius to be highly pro- nt in each of the units of this triple alliance, although client rightly expects the architect to give as much ntion to all sides of the commission entrusted to him o any one of them.

he life in an architect's office may be tabulated under following headings and sub-headings :—

) *Interviews*—
    (a) With clients and prospective clients.
    (b) With builders, merchants, and others.

) *Correspondence*—
    (a) With clients.
    (b) With builders, merchants, and others.

) *Surveys* of sites and existing buildings, including uiries as to local conditions and provisions, and visits ocal authorities and supply companies.

) *Design*—
    (a) Sketches.
    (b) Small scale working drawings.
    (c) Details, including full sizing.

) *Specifications.*

) *Arrangements with quantity surveyors.*

) *Tenders and contract*—
    (a) Invitations to tender.
    (b) Reception and opening of tenders.
    (c) Acceptance of selected tender.
    (d) Drawing up and signature of contract.

) *Works in progress*—
    (a) Appointment of clerk-of-works.
    (b) Periodical visits to works.
    (c) Issue of requisite drawings, specifications, variation orders and other particulars.

) *Contractors' accounts and certificates for payment.*

0) (a) Dilapidations.
    (b) Arbitrations.
    (c) Litigation.

1) *Engagement and payment of staff*—
    (a) Technical.
    (b) Clerical.

2) *Office organization and system*—
    (a) Generally.
    (b) Drawing office.
    (c) Clerks' office.

3) *Accountancy*—
    (a) Collection of fees.
    (b) Payment of office accounts.
    (c) Book-keeping.
    (d) Income tax returns, etc.
    (e) Insurances.

(14) *Photographs, models, and other work for exhibition purposes.*

All these duties have to be done by some one in every architect's office, although many of them may be quite small matters in a limited practice. However, it is perfectly obvious that an architect who is by nature and training a designer cannot do justice to the inventive, artistic, and technical sides of his work if he has also to think about all the other items. Headings 1 (a), 4, and possibly 8 (b) will primarily appeal to him, and are those to which he will give first and foremost attention. They are all that should be attempted by one man in any fair-sized practice, for the study, care, accuracy, and energy required in "design" alone, if the best result is to be attained, is sufficiently exhaustive and exhausting for any individual's working life.

Now, what happens with regard to the other items on the programme? Frequently the architect finds that he cannot deal with all of them, and he engages an assistant whom he calls his "manager." To this manager he entrusts most, if not all, of those matters, many of which are as vitally important to a successful practice as good design.

Looking at it from a purely business point of view, apart from other considerations, this appears to be fundamentally wrong. The manager of a bank, railway company, insurance office, or other commercial concern, where highly trained brains and technical knowledge are employed, is the head administrator, the chief which every business requires. This chief is no less a necessity in architecture than it is in any other pursuit, adventure, or enterprise. Yet, here we have a salaried official, often none too well salaried, acting as the main-spring to a piece of machinery, of which he is not really a part, but only a fitment on hire. One may say that in the bank or insurance office the manager is also only on hire, but the analogy fails at this point, for all the administrative and executive members of such bodies are salaried, the owners, the directors, and shareholders being but rarely the experts who personally attend to the technical part of their undertakings.

The architect's "manager," who is not merely a secretary, but has had a technical training and, as many of them also have, some artistic ability, knowledge and appreciation of architecture in its academic sense, very soon knows a great deal more about the practice and all its workings than the principal himself, who could in consequence often be more easily dispensed with than his salaried servant.

Now take the converse of that arrangement, and consider the man who, with considerable business acumen and some technical knowledge, sets up as an architect—there being as yet no law in this country to stop him—and engages an assistant, or assistants, to carry out all the design and constructional work. Thanks to his commercial aptitude he will probably make a greater financial success of his practice than the artist with a "manager," but the creations of his office, which will have to last for decades and probably centuries, are dependent for their proportion, refinement, and other artistic merits, and even for their stability, on the assistants engaged for the time being, the "ghosts" that are here to-day and gone to-morrow. There are buildings all over the country, even in the centres of our principal cities, which have been created in this way. The less said about many of them the better, and as to the others all credit be to their unnamed originators.

Having offered condemnation to both these methods, what is there to take their place? The whole argument points to a "partnership" between two or more persons, according to the size and nature of the practice, each partner being a specialist in some branch or branches, and all working interdependently in the main, though independently in detail.

## CHAPTER III.

### *Partnerships and Partnership Agreements.*

The preceding chapter dealt with the desirability of partnerships in architectural practice. Now let us consider what type of men should unite, and how their union can best be made and arranged.

The first necessity is temperamental compatibility, which should be followed by personal regard, and even affection. Partners should, so far as possible, be of the same social status, educated to approximately the same plane, though not necessarily on the same lines, and of equal refinements. Partners spend the greater part of their lives, and much of their time in each other's company. The man who is a genius in design or brilliant in other branches of the profession is not one to have as a partner if his speech, personal habits or foibles are such as to jar on one's nerves. This is far more important than may seem at first thought, for the jarring note is always there and is likely to become louder and more frequent as time goes on, until it is, or seems, so deafening that all the other notes, most of them perhaps perfectly harmonious, are completely drowned. Life, for one of the partners at least, is then insupportable.

However, we are none of us—at any rate in the architectural profession—perfect, and some differences in habits, and certainly of opinion, will, of course, occur. Partners must, therefore, be prepared to act like the sensible married couples, who bear and forbear within wide limits. Complete confidence in one another is essential, and it is the duty of each partner to win that confidence and implicitly to trust the other.

Although compatibility of temperament is the first necessity, it is not advantageous for partners to be cast in the same mould with identical training, abilities, or tastes. For example, if both are primarily artists and draughtsmen, or if they are both constructional experts, or of pronounced business ability, they will inevitably duplicate the functions in some branch of the practice without very materially strengthening that side, and the other necessary duties of the office will be more or less neglected.

For the purpose of these notes let us assume that the partnership shall consist of two persons. It is quite a simple matter to extend the arrangement to three or more partners on similar lines, though it may be said at once that "three" does not often prove to be a happy number, for obvious reasons. The two men having decided that a partnership between them is in every way desirable, an agreement of partnership will be entered into. This, in the first place, should be simple and subject to short notice, say three or six months, on either side. It is inadvisable to enter into a long partnership, such as seven, fourteen, or twenty-one years, until the partners have been running together for a considerable time, and have ascertained from actual experience that their union is an entirely suitable and happy one. It should be remembered that a lawful contract once entered into cannot be broken during its term without the consent of both parties or without the risk of an action for damages apart from moral considerations, however distasteful and unhappy the combination may prove to be.

Although the preliminary deed should be simple, it is best prepared by a solicitor, for it is his affair to know how much should be included and what can be left out. In any case, whether there is an agreement or not, all partnerships are governed by the Partnership Act.

The following is a form of preliminary or short term partnership agreement which covers the principal points that are likely to arise, but it can, of course, be altered enlarged to meet the requirements of specific cases :—

ARTICLES OF AGREEMENT entered into between
of in the County of
Architect of the one part and of
the County of Architect of the oth
part WHEREBY IT IS MUTUALLY AGREED as follow
that is to say :—

1. The said and will becor and remain Partners until such time as the Partnersh is determined either by months notice either side or by the death of either Partner or in su other manner as is prescribed by the Partnership Act.

2. The business of the Partnership shall be that of Arcl tects (and Surveyors) and such other business as m arise therefrom or in connection therewith.

3. The name of the Partnership shall be " . . . . . . . . . . .

4. The business of the Partnership shall be carried at such offices as may be mutually agreed upon.

5. The capital of the Partnership shall be such a su of money contributed in equal proportions as the part hereto may agree is necessary or desirable for the pu poses of the Partnership.

6. The Bankers of the Partnership shall be " . . . . . . . . or such other Bankers as the Partners may from tir to time agree upon and all moneys belonging to or ceived for or on account of the Partnership shall fort with after receipt be paid into the Bank to the cre of the Partnership and all payments on account of t Partnership shall be by cheque drawn on the sa account.

7. Neither Partner shall draw or accept any Bill Exchange or Promissory Note on behalf of the Partn ship or go bail or enter into any bond with or for a person or become surety security or guarantee in resp of any person debt or claim without the prior writt consent of the other Partner. The Partnership shall n engage in any speculations or speculative purchases a neither Partner shall in any way pledge the credit the Partnership except in the ordinary course of t business of the Partnership.

8. The rent of the premises where the business of t Partnership shall be carried on and all taxes rates asse ments and insurance premiums and the salaries a wages of all clerks and servants employed about t business of the Partnership and all expenses which sh be incurred in or about the said business and the car ing on of the same and generally all outgoings in resp of the said business shall be paid out of the gross prof of the Partnership and in case the same shall be insu cient then by the Partners in equal shares and t Partners shall be entitled to the net profits of the bu ness in equal shares.

9. On the in every year a general accou in writing shall be taken of the assets and liabilities the Partnership and of all dealings and transactions the Partnership during the year then ending and of matters and things usually comprehended in accou of a like nature taken by persons engaged in a like p fession and business and in taking such accounts a j valuation shall be made of all items requiring valuati and every such general account shall be entered in private ledger and signed by each Partner within th months after the said and when so sign each Partner shall be bound by such account exce that if any manifest error shall be found therein a signified by either Partner to the other within th calendar months after such signature as aforesaid t same shall be rectified. A copy of every such accou shall be taken and kept by each Partner and the fi of such accounts shall be taken on the .

10. Either Partner shall be at liberty to terminate t Partnership hereby created by giving to the other at a

ime                months notice in writing of his desire o to do and at the expiration of such notice the said artnership shall determine accordingly and an account hall be taken to the date of such determination similar o the account referred to in the preceding paragraph.

Each Partner shall be entitled to draw out of the said usiness so far as funds shall permit and in anticipation f his share of the net profits such amount per month s may be mutually agreed upon and a proper adjustnent in respect of such drawing shall be made on the                in each year, any surplus beyond drawings eing then payable and any excess over profits being hen forthwith repayable.

Upon the determination of the Partnership each artner shall be at liberty to carry on business on his wn account in such manner as he may see fit and either Partner shall be entitled to use the Partnership ame nor shall there be deemed to be any goodwill in onnection with the said Partnership.

Each Partner shall devote the whole of his time bility and attention to the business of the Partnership nd shall not without the consent in writing of the other rst obtained be engaged either directly or indirectly 1 any other business or profession whatsoever.

Neither Partner shall take any apprentice or articled erk or hire or dismiss any clerk or servant in the employment of the Partnership without the consent of the other Partner.

15. If either Partner shall without the consent of the other Partner release or compound any debt or claim due or owing to the Partnership without receiving the full amount thereof he shall be liable to make good to the Partnership the full amount of such debt or claim or such part thereof as shall be released or compounded.

AS WITNESS the hands of the parties hereto the day and year first above written.

........................
........................

This, signed by both parties, only requires a sixpenny stamp.

Although such an agreement is sufficient for a year or two, a more comprehensive deed is necessary when the practice has accumulated goodwill, so that some provision is made for the dependents of either partner in the event of his death. There are many other details which have to be taken into account in a long partnership agreement, but these are matters for the solicitor to advise upon. The deed may perhaps not seem necessary, and probably will never even be referred to by conscientious partners, but it will prove of vital importance on the death or incapacity of one of them. Like all contracts it should be framed to obviate disputes.

(*The first article appeared in our issue for April* 4.)

# The Prospects of Town Planning

By G. L. PEPLER

### *Present Position.*

HERE are approximately 1,798 local authorities in England and Wales possessing town-planning powers; of these some 256 boroughs or urban district councils are required by section 46 of the -Planning Act of 1919 to prepare schemes by January 1, and about ninety-seven of them were, at the end of iary, known to have made a beginning, and in a few to have completed schemes. In addition to these, y-six other councils have schemes in hand, making a of about 183 authorities who are at present known to gaged individually in town planning, and there are nly others who have taken preliminary steps.

area covered by town-planning resolutions already nts to over 800,000 acres, and a great deal of development is taking place in these areas, on town-planning lines -operation between the owners and the local authori-

ce the Act of 1919, which facilitated joint action in iatter, considerable progress has been made with the tion of regional joint town-planning committees, en of which have been established, including alto- 189 councils and covering 1,398,653 acres. When joint outline schemes are embodied in the individual ies of the constituent councils the figure of 183, given , will be added to considerably, although, of course, iber of the joint-committee councils are already in- l in that figure.

### *Prospects.*

above statement indicates the large amount of work y in progress and the more that remains to be

s safe to say that local authorities are more and more ciating the importance of town planning and of the tunities it affords for economy and efficiency. It rages each of them to view their district as a whole, e stock, studying the past and the tendencies of the present, with a view to mapping out a scheme that will secure the best facilities for the progressive development of the district.

One of the most valuable results of town planning is that it engenders a spirit of civic consciousness. Prior to the day of town plans, things just seemed to happen, and however inconvenienced the ordinary citizen or business man might be, the affair seemed beyond his control, and things just drifted along, no one knew whither. Now a course can be set, there can be a definite aim, known to every citizen, so that he can appreciate that he has a part to play and can realize what can be achieved if everyone pulls together.

This spirit will not be bred in a day, but one hears most encouraging reports of what has been achieved by the engineers of some of our big cities, who have explained and discussed their proposals at public meetings, before Rotary Clubs and Chambers of Commerce, and at gatherings of business men and landowners. Also several of the regional joint town-planning committees have co-opted representatives of live local business and other organizations and are finding their co-operation invaluable.

To set out to shape the destiny of any place, however small, is no light matter, and is of such enormous importance to all the inhabitants that it is essential, from the beginning, to take every possible step to arouse their interest and obtain their co-operation and support, so that when the proper course has been agreed, there will be sufficient momentum to overcome the obstacles that are bound to be met with.

"Prevention is better than cure," gives the key to town planning and suggests the waste it may prevent both as regards health and business.

While this aspect is naturally emphasized in these days of financial stringency and business competition, happiness is another—and not unallied—aim that the town planner must have in view. The Act recognizes it in the word "amenity," and a plan would indeed fail altogether of its purpose if this aspect were disregarded. Considered from the lowest standpoint, in relation to the efficient progress of a community, it represents (risking a mixture of metaphor) the oil that alone makes smooth running possible.

The architect is especially qualified to be of service with respect to the amenity side of a town-planning scheme, and there is ample scope for local societies of architects to educate public opinion so that the importance of this aspect may be appreciated. When development or reconstruction takes place there will often be opportunity to bring into prominence some feature of beauty or interest, provided that such features have been noted and that someone is on the lookout for such an opportunity.

The quality of residential areas may be greatly enhanced, for example, by the preservation of belts of trees or open spaces dividing them from the works and business areas. Road junctions have more than a traffic interest; they will be surrounded by buildings, and how those buildings are placed is of considerable importance. If the junction and frontage lines are arranged symmetrically there is opp tunity for a composition that will be a joy for ever; if t aspect is overlooked there will be a meaningless mud of bricks and mortar. Where a town plan does offer opp tunity for a composition it is up to architects, by co-ope tion, to realize that opportunity.

The purpose of a town-planning scheme is to provide t best facilities for sound development and to make sure th it will co-ordinate. It is most important, therefore, that lo interest should be maintained in the scheme after it passed, and that all those responsible for buildings or wor should use their utmost endeavours to play their part fulfilling its purpose.

The model clauses have simplified the machinery, th freeing energy for creation, they also provide elastici leaving site planning and details to evolve as developme occurs. Such elasticity is essential, but it throws a respo sibility on architects and others to be on guard to preser the essential purpose of the scheme and to see that th own work helps to fulfil it.

# New Mining Offices at Tientsin

## ATKINSON and DALLAS, Architects

NEW head offices have been completed at Tientsin for the Kailan Mining Administration. Messrs. Atkinson and Dallas were the architects. The building, a fireproof structure of four stories, is finished externally in artificial stone blocks. It rises 65 ft. above the pavement, and covers 24,000 sq. ft.

The general plan comprises a series of offices placed round a central court, forming a large hall or waiting space, and containing the main staircase and other features. Weather conditions render it necessary for this space to be covered in, and the roof takes the form of a semi-circular glazed vault ribbed and panelled. It springs from the third floor level, and rises to a total height of 45 ft. above the main or first-floor level.

From the hall are corridors and galleries, connected by cross corridors, leading to all the surrounding offices, and the glazed roof provides light to all these corridors and the main staircase. A portion of the central well is also occupied by a strong-room tower which extends from the basement to the roof. A secondary staircase for service use is situated at the western end of the building. Lavatory stacks are confined to the two rear corners, the foreign lavatories being on the east side and Chinese on the west.

A portico occupies the three central bays of the main frontage. It is approached by a broad flight of steps recessed into a terrace with flanking steps, which also covers a ramped carriage drive leading to the three openings forming the entrances. A set of wrought-iron gates and grilles are placed just inside these openings.

The portico contains a further flight of stone steps to the level of the first floor, and leads through triple swing-doors to a vestibule, to which is attached a porter's lodge. This vestibule has mosaic tiled floors, and a vaulted and groined ceiling, and in turn leads through similar triple swing-doors to the large hall mentioned above. This hall occupies a space of, roughly, 50 ft. by 100 ft., and is surrounded by sixteen polished granite columns. These columns are 27 ft. high, with wrought copper capitals of Ionic design, and support an appropriate entablature, the glazed vault, and also the gallery at the second-floor level. The western portion of the hall has been grilled off by means of bronze grilles, and forms an office for the cashier.

The first floor contains accommodation for the managerial offices, board room, coal sales and shipping departments, and the general correspondence and statistical department. The managerial suite comprises a private corridor leadi to a reception room, general manager's office, assista general manager's office, and secretary's office. All the rooms have parquet floors and are panelled from floor ceiling in oak.

The board room is a large apartment, some 50 ft. 30 ft., and is treated with detached fluted Corinthi columns, parquet floor, panelled walls and coffered ceilin and a large fireplace modelled upon the lines of the "Por of the Caryatides" Erectheum. Overlooking the boa room is a gallery and beneath the gallery is a pantry co necting with a kitchen in the basement.

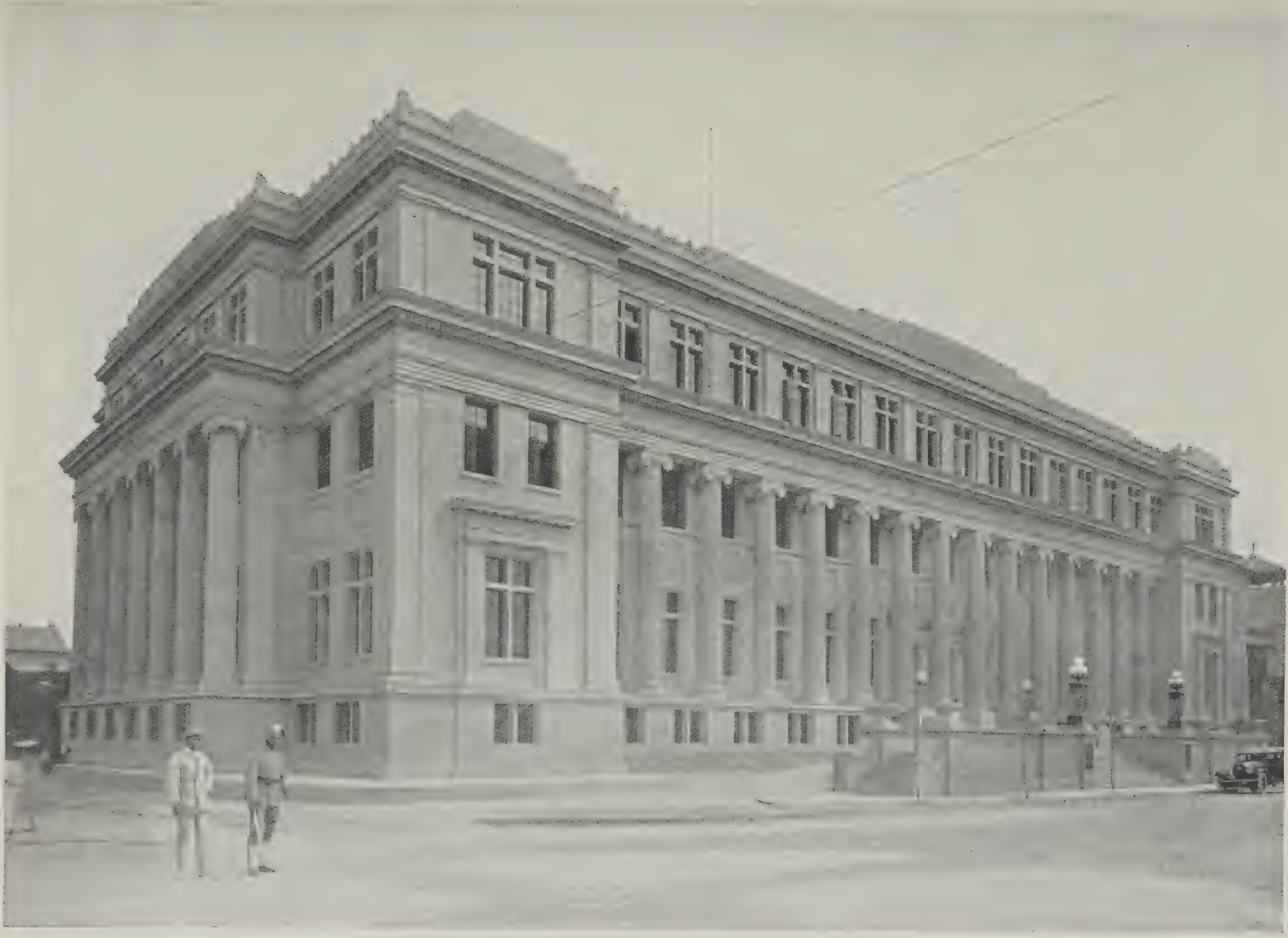
The second floor contains accommodation for the Chine director-general, assistant Chinese general manager, counts department, and Chinese translation departme The director-general and assistant-general manager offi and reception rooms are also panelled in oak and have pa quet floor and arched ceilings.

The third floor houses the purchase and property depa ment, clay products department, Chinwantao Glass C and the steel department.

The building is constructed entirely of fire-resisti material with the exception of the floor linings, the doo and the door and window trims. Steel windows are us throughout. Heating is by low-pressure hot water acc erated by meter pumps. The sanitary arrangements of the latest and most modern patterns, and all the lav tories are tile. Two electric lifts are installed. An intern telephone system provides communication througho the offices, and a dictophone installation provides for int departmental communication without holding up outsi calls. Lighting is by electricity from municipal main.

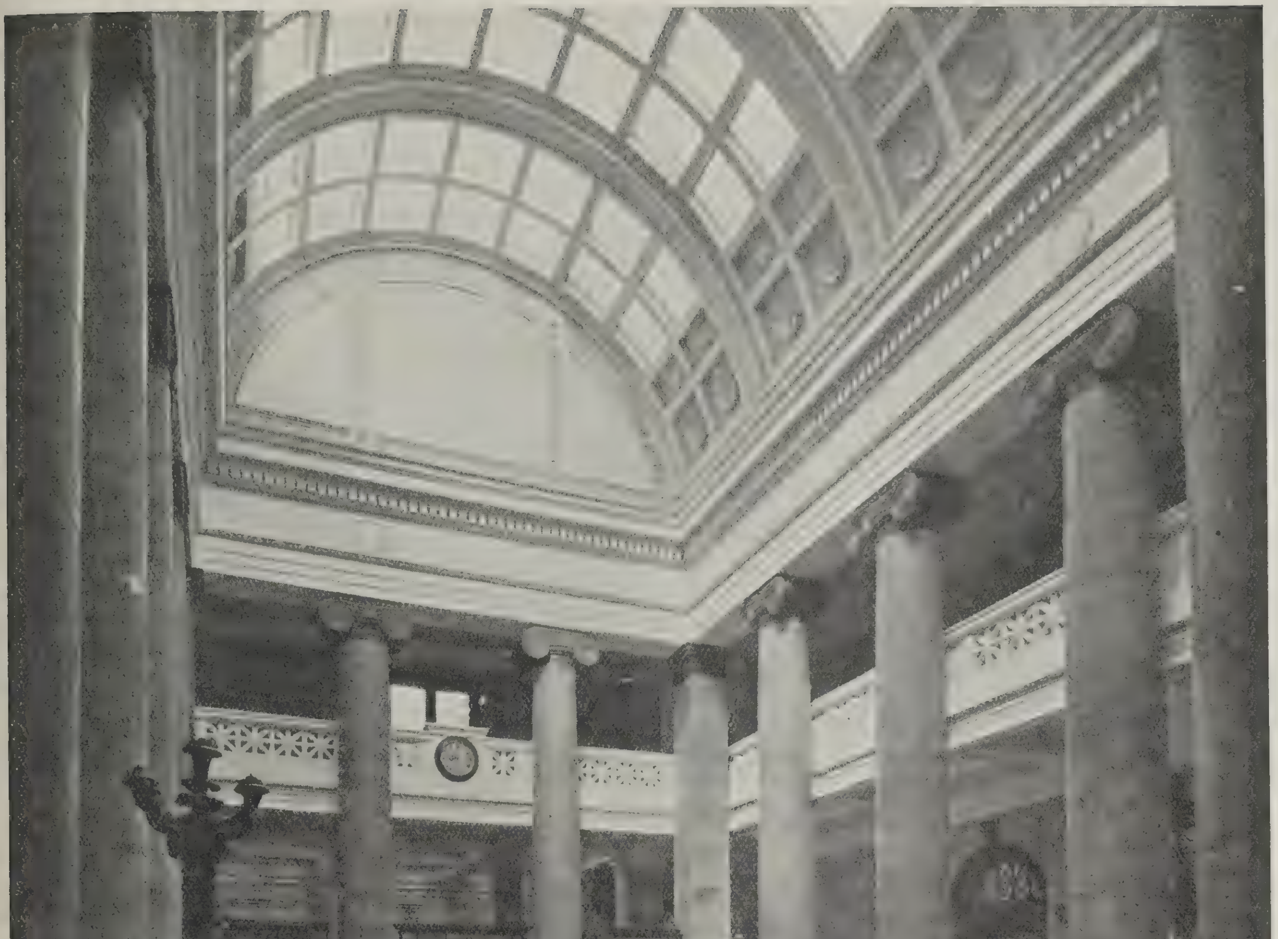
The structural engineers were the J. E. Hayes Engine ing Corporation; the general contractor was Hong M Kee; and the sub-contractors were as follows: Heating Norris & Co., London, suppliers, erected by Adair Grah & Co.; sanitary—Doulton & Co., London, suppliers, erect by Adair Graham & Co.; lighting—General Electric C London, suppliers, erected by Liddell Bros. & Co.; lifts Express Lifts Co., London, suppliers, erected by Lidd Bros. & Co.; hardware and electric light fixture—N. Ramsey & Co.; steel windows—Crittall & Co., Braintre grilles and gates—J. W. Singer & Co., Frome, Somers mosaic tiling—Art Pavement and Decorators, Ltd., Lo don; and glazed tiling—Kailan Mining Administration.

Atkinson and Dallas, Architects

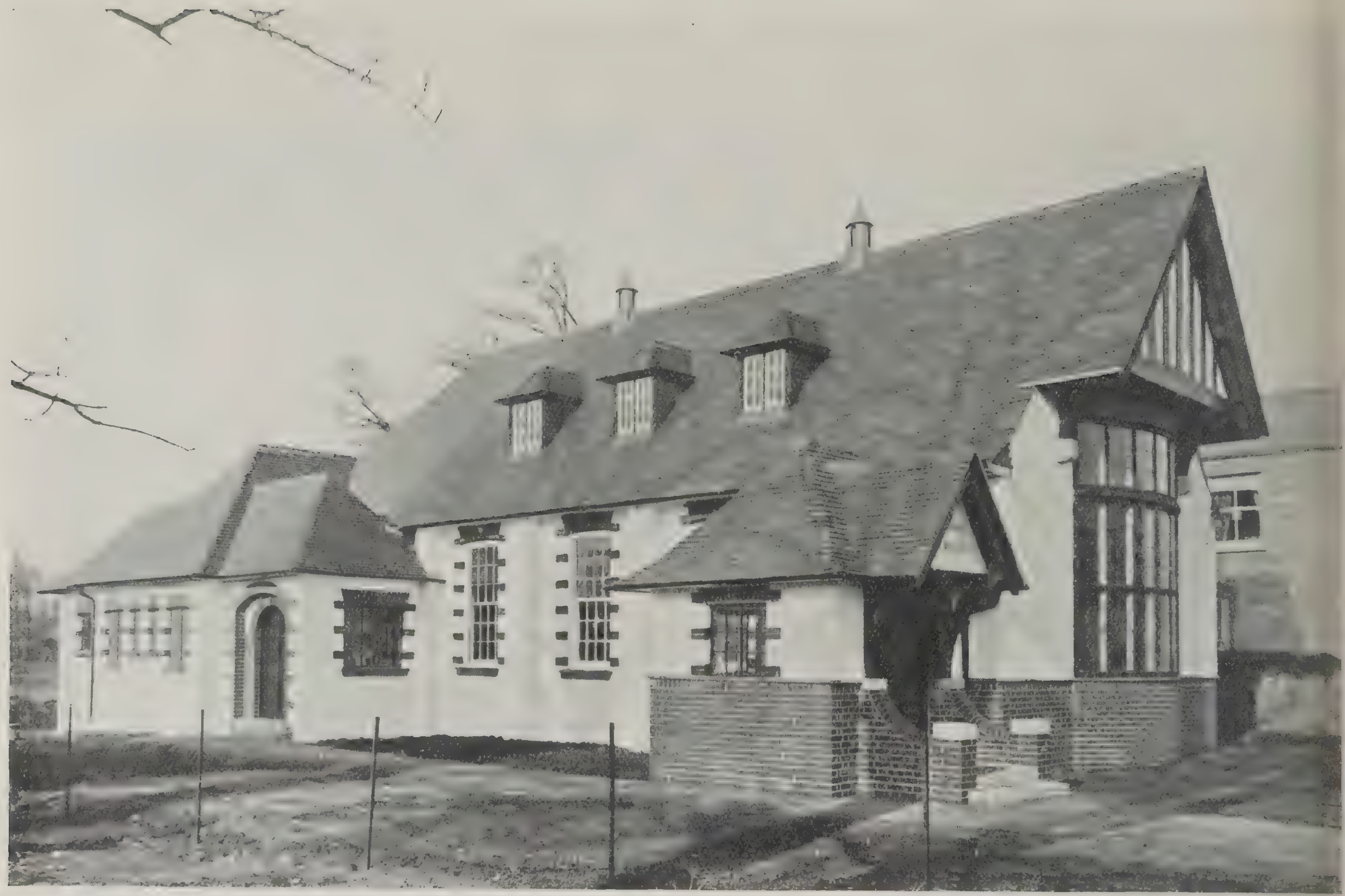


This large block of offices—covering an area of 24,000 feet—has been erected at Tientsin for the Kailan Mining Administration. The building, which is constructed of fire-resisting materials, is faced with artificial stone.

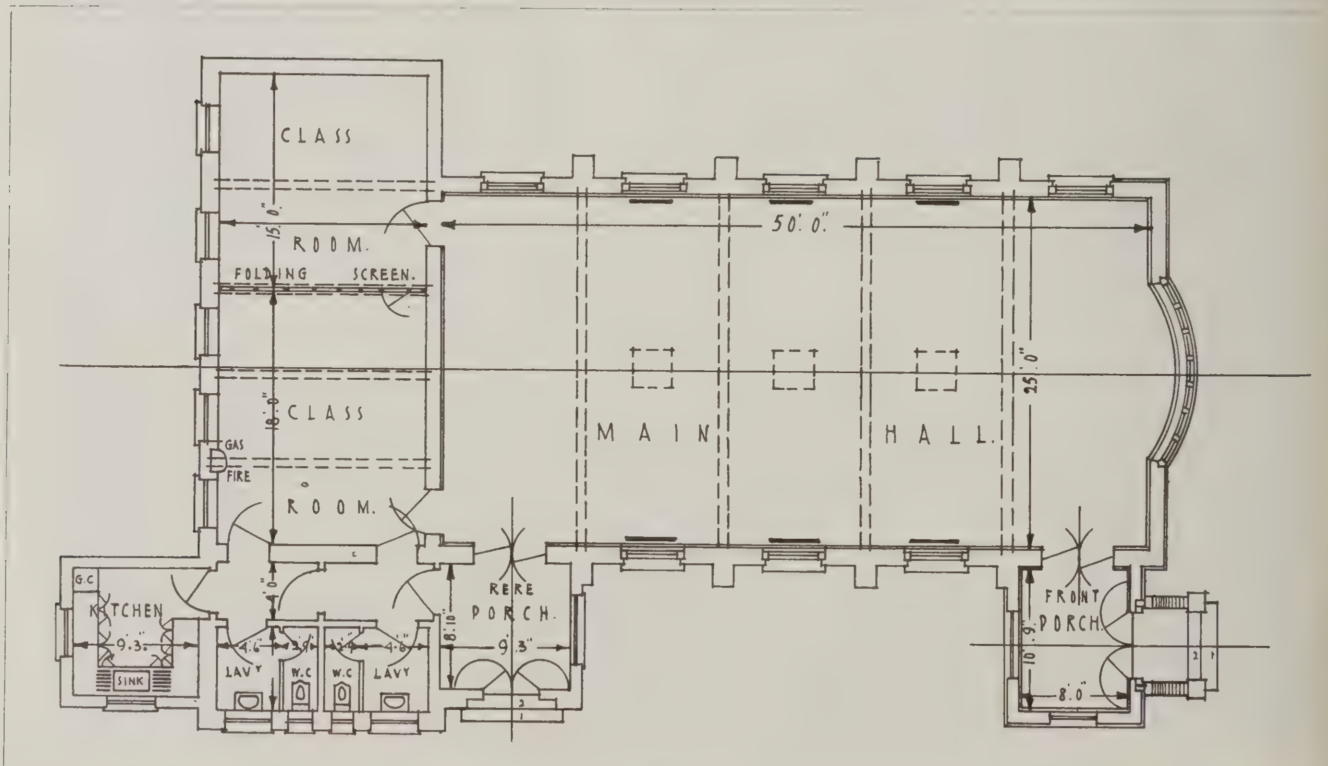
THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS



NEW MINING OFFICES AT TIENTSIN: THE CENTRAL COURT.
ATKINSON AND DALLAS, ARCHITECTS.



A GENERAL VIEW.



PLAN.

AN IRISH WAR MEMORIAL HALL.
W. SEDGWICK KEATINGE, M.S.A., M.R.I.A.I., ARCHITECT.

# An Irish War Memorial Hall

## W. SEDGWICK KEATINGE, M.S.A., M.R.I.A.I., Architect

THIS war memorial hall has been erected, from the designs of Mr. W. Sedgwick Keatinge, M.S.A., M.R.I.A.I., partner in the firm of Messrs. Donnelly, Moore, Keefe and Robinson, architects, e parish of Rathfarnham, a country suburb of Dublin. ıfarnham is four miles from the centre of the city. It at the foot of the Dublin hills, and still retains its old- oned simplicity. The memorial was erected, from s subscribed in the parish, to the memory of those served in the Great War, and it contains an oak tablet which are the names of those who volunteered.

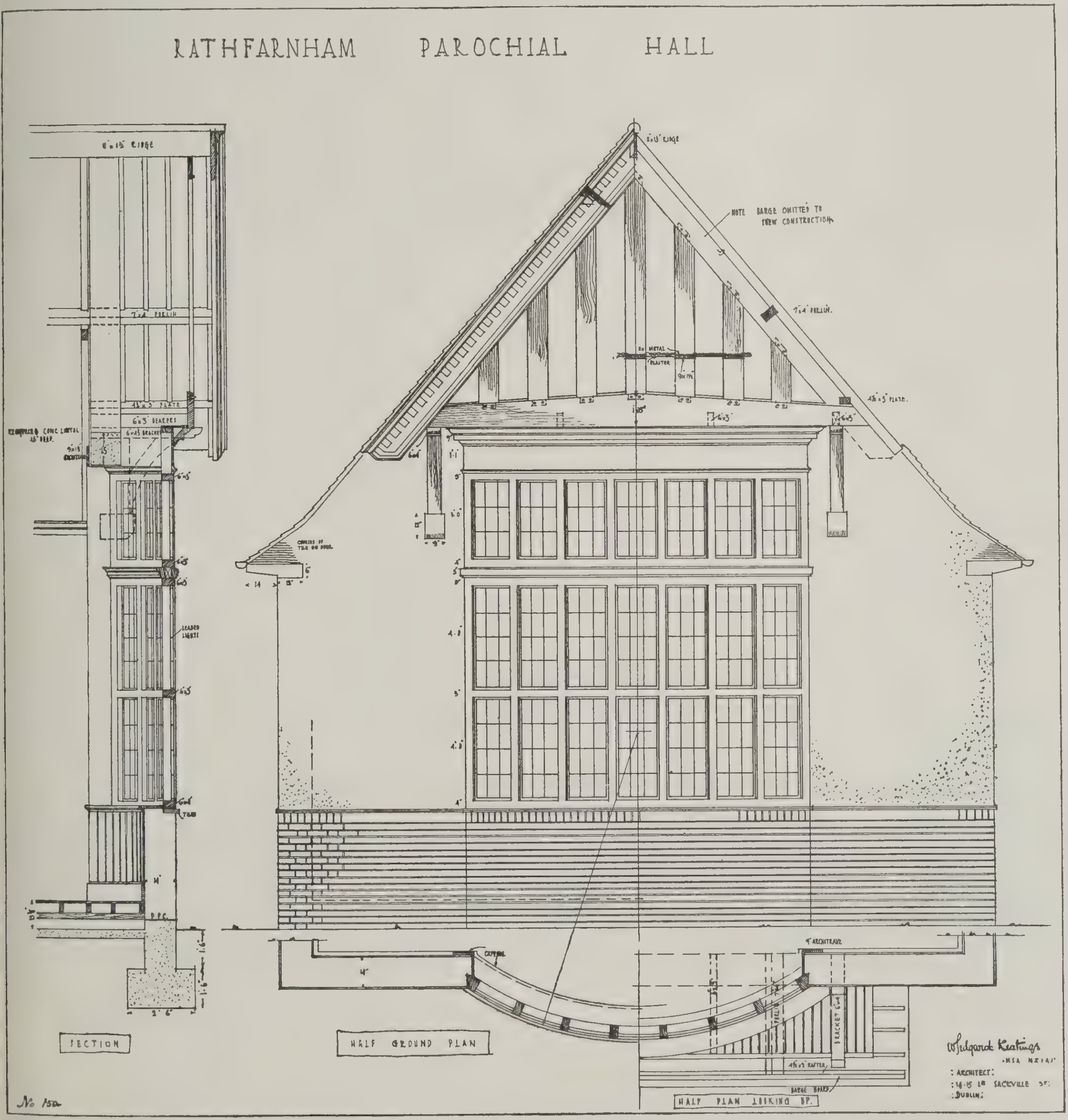
ie memorial consists of a main hall 50 ft. by 25 ft. by . 6 in. high. The interior has been kept free from is and tie rods, and the gas lights are hung at the sides not to interfere with the use of the hall for playing ninton. At the back is a small hall divided into class is, committee rooms, etc., by a collapsible glazed par- n. A small kitchen with gas cooker, sink, etc., has been l up for serving teas, and lavatory accommodation ovided for both sexes.

The usual conditions were laid down that the hall was to cost as little as possible consistent with good appearance. An endeavour, therefore, has been made to obtain a village hall effect by using the simplest of materials to the best advantage.

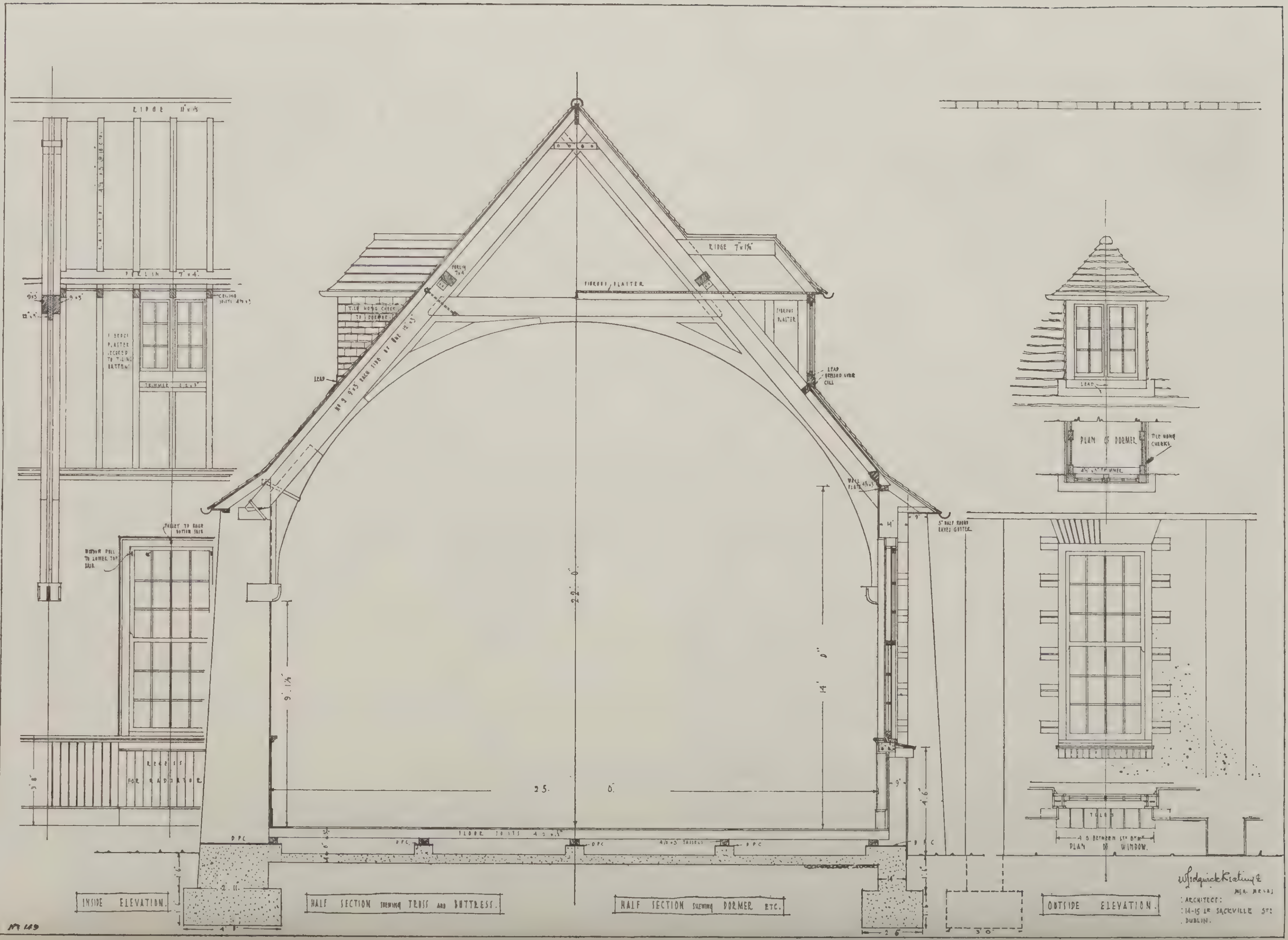
The walls are built of Dolphins Barn stock bricks rough-casted, the exposed brickwork being of Courtown red facings pointed with Atlas White cement, as also are the tile creasings. The entrance doors are of teak, and the roofs and tile-hung dormers are of Wooliscroft's brindled coloured tiles of various carefully selected colours, which has given a charming colour effect.

Internally the trusses are of pitch pine, and the other woodwork is of red and white deal. All the woodwork internally and externally is treated with dark brown Solignum. The total cost of the building was £4,100.

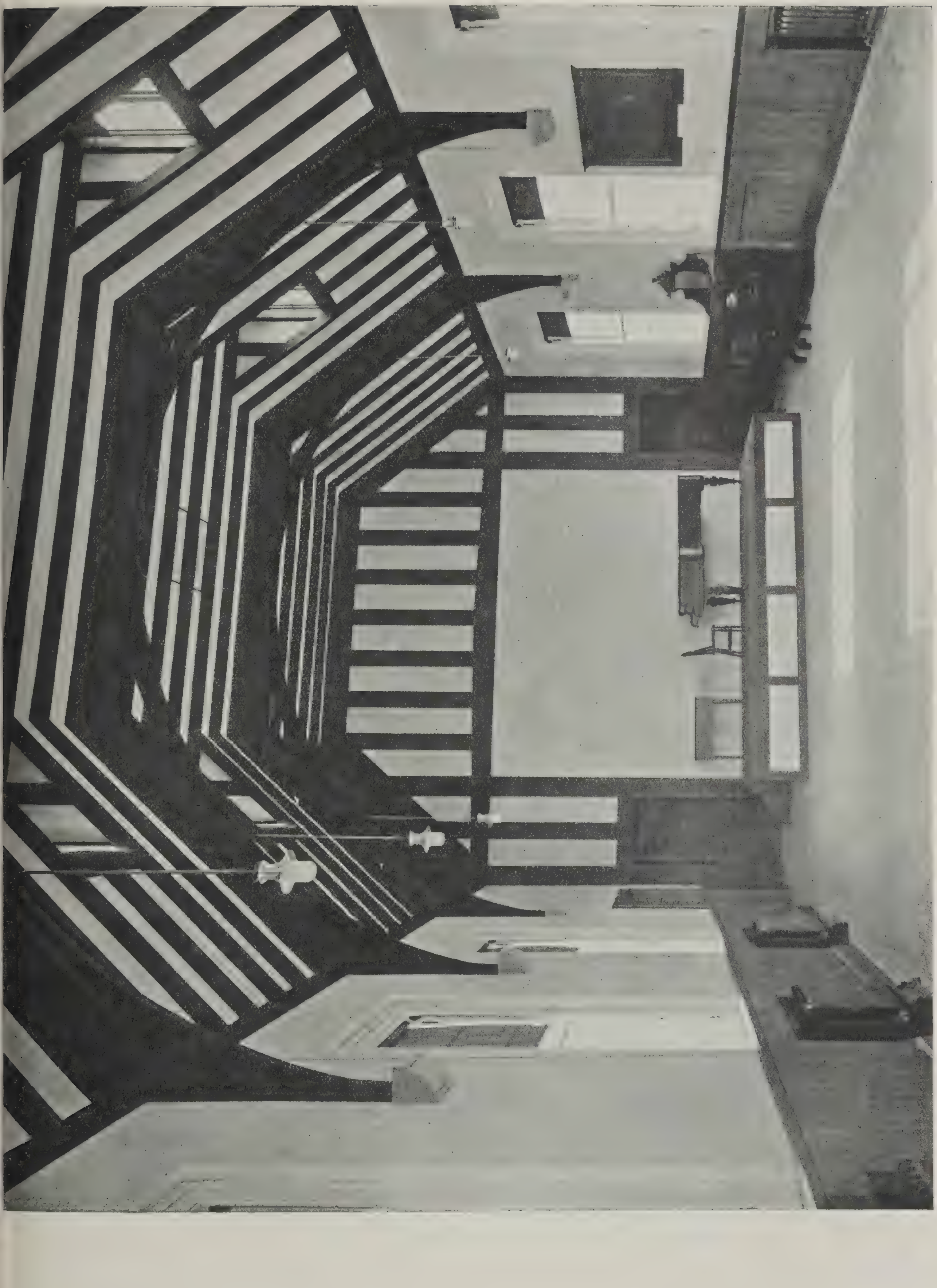
The builder was Mr. J. A. Stringer, of Dublin. The steel casements were supplied by Messrs. Williams and Williams, Ltd., of Chester ; the gas heating and lighting were by the Alliance Gas Company; and the folding partition was by Messrs. Henderson, Ltd., of Barking.



DETAIL OF GABLE FRONT.



RATHFARNHAM PAROCHIAL HALL: DETAILS OF CONSTRUCTION OF MAIN HALL.



RATHFARNHAM PAROCHIAL HALL: INTERIOR OF THE MAIN HALL. W. SEDGWICK KEATINGE, M.S.A., M.R.I.A.I., ARCHITECT.

# London's Post-War Housing

## By G. TOPHAM FORREST, F.R.I.B.A., Architect to the L.C.C.

MR. G. TOPHAM FORREST, architect to the London County Council, in delivering a Chadwick lecture in London on the above subject, said that for many months prior to the cessation of hostilities the London County Council examined in a most exhaustive manner the question of the extent to which new housing accommodation would be required in London after the war. The question was found to be one of extreme complexity, and in October 1918 (that is one month before the termination of the war) the Housing Committee reported that if they were asked what additional accommodation should be provided within the next five, or ten, or fifteen years, to meet housing demands, they would not be able to give any answer in figures which would be of real value.

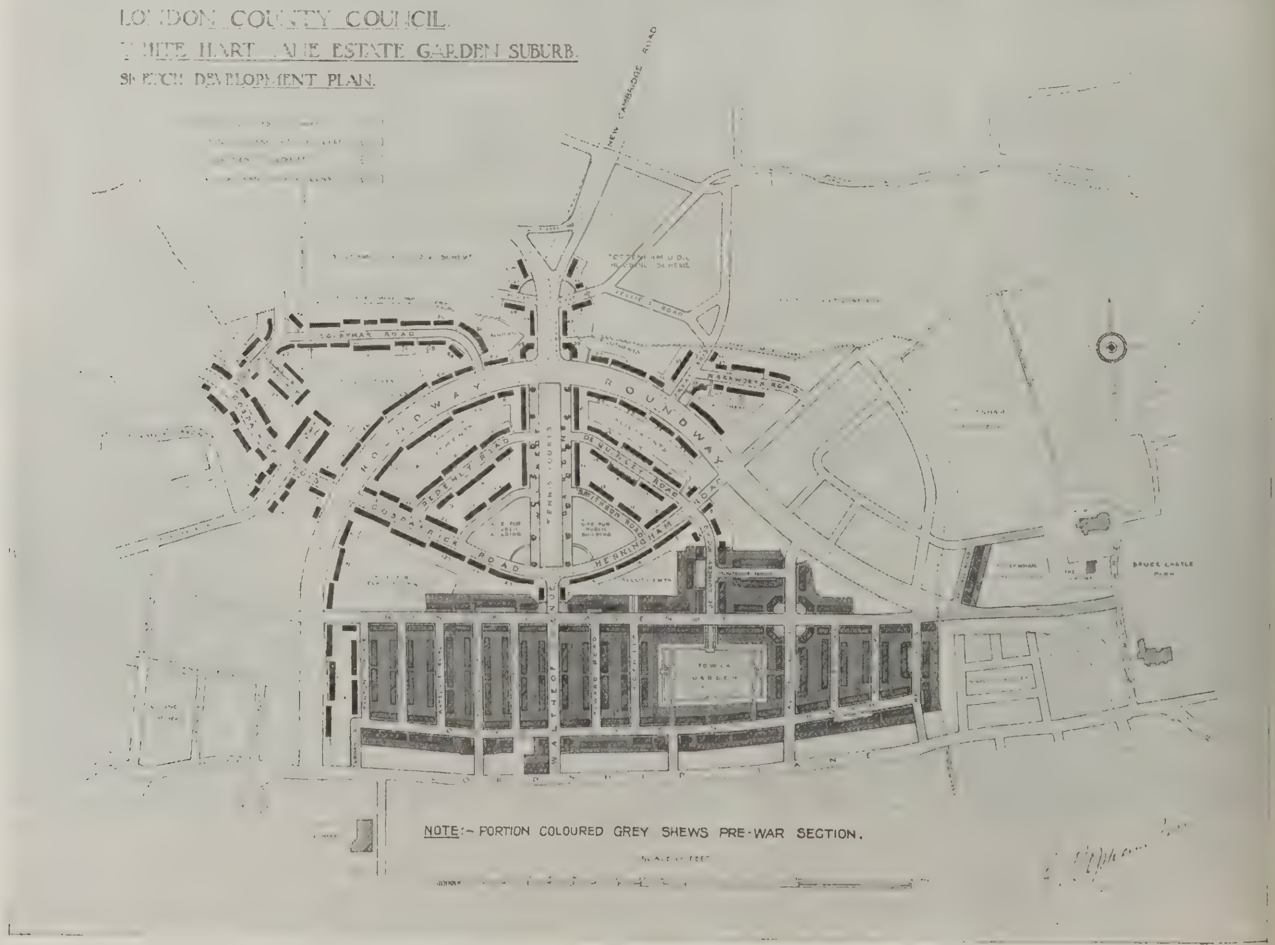
In 1919 a scheme for the whole of the county was drawn up. It was decided to provide within five years from the date of approval of the scheme a total of not fewer than 29,000 new dwellings exclusive of those to be erected upon the cleared sites of insanitary areas. In connection with this scheme it was proposed that about 2,000 of the new houses should be provided on the partially developed estates at Old Oak, Norbury, and White Hart Lane, which the Council already owned, and the remainder on new estates at Roehampton, Bellingham, and Becontree, the majority to be on the last-named, that is, Becontree, to meet the needs of the eastern part of the county.

The estimated total capital expenditure involved in the acquisition and laying-out of the estates and the erection of cottages was about £24,000,000. This scheme was submitted to the Ministry of Health, and the Government's approval was obtained in January 1920.

The carrying out of such a programme within a limited period of five years presented extraordinary difficulties, particularly in view of the abnormal conditions prevailing immediately after the war, but notwithstanding all these difficulties marked progress has been made, and the London County Council has actually provided in the past three years many more houses for the working classes than even the most sanguine amongst us dared hope; in fact, I think it may fairly be claimed that the apparently impossible has been achieved, seeing that to-day some of the estates have actually been completed, and others have been well advanced.

After referring to the exceptio
difficulties encountered by the Cou
with regard to materials, labour, and tra
port, he said: the difficulties experien
were of such a serious nature that it
only after the most exhaustive conside
tion that an answer was found to
simple question: "How is the work to
done, particularly on the Becont
estate?" At Becontree it was propo
to convert a tract of land 3,000 acres
extent, then covered chiefly with mar
gardens, into a township with a popu
tion of 120,000—that is, five times grea
than that of Salisbury, and nearly eq
to that of Coventry. Such a propo
was something altogether unparalle
in the history of housing.

Even in pre-war days when labour a
materials were plentiful, and it
possible to erect houses without incurr
financial loss, the proposal would ha
presented many difficulties. Post-
conditions had, however, intensified th
difficulties, and in addition, other di
culties no less serious presented the
selves. The work involved compri
the construction of roads and sew
(the main arterial roads alone would
twelve and a half miles), and also n
sewage works. The erection of at le



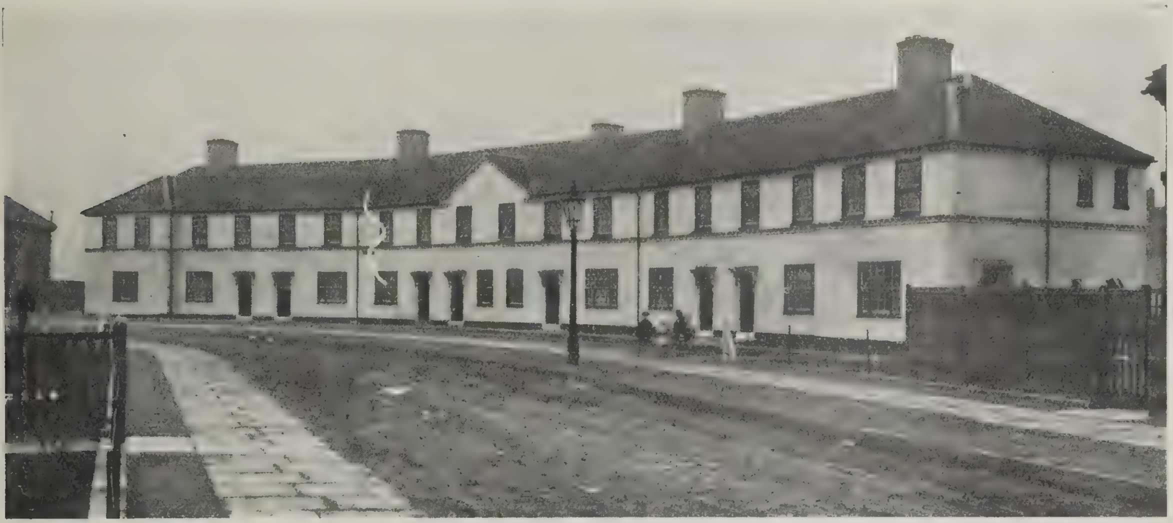
WHITE HART LANE ESTATE GARDEN SUBURB: SKETCH DEVELOPMENT PLAN.

houses ; twenty elementary schools ;
condary schools ; one trade school ;
continuation schools ; five fire-
ns ; four free libraries ; two or three
stations ; two hospitals ; an in-
y ; a town hall ; a coroner's court ;
ortuaries ; public baths ; 240 shops ;
ites ; places of amusement ; work-
; and so on. It will be appreciated
enormous quantities of materials
be required for such a huge under-
, the estimated total being about
000 tons.
v could such a work be carried out
the five years specified in the
l programme? Should it be divided amongst a number of sub-contractors ; should it be done by the direct employment of labour ; or should it be entrusted to one master contractor ? All these methods were carefully examined and it was finally decided that the last was the only practicable method.

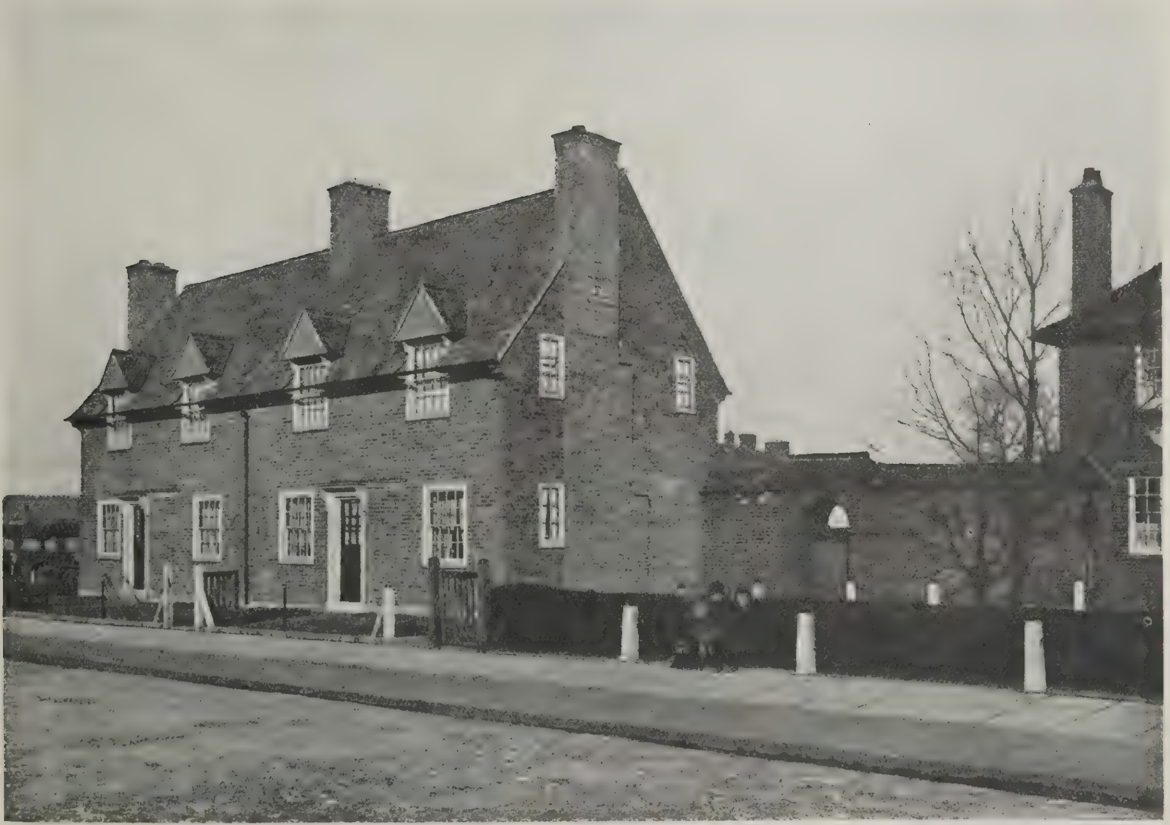
The advantages of having one master contractor were apparent when the importance of transportation and the equitable distribution of supplies for such a large undertaking were considered. Such a contractor, by centralizing the buying departments, could effect an enormous saving by eliminating competition. Systems could also be inaugurated which would obviate the chaotic conditions bound to ensue if the contract were entrusted to numerous contractors, each acting on his own responsibility.

After the closest examination of all the methods possible, it was decided to employ such a contractor not only at Becontree, but also at Bellingham, the second largest housing estate.

The problems connected with materials, labour, and transport which confronted the Council at the inception of its programme have now to a great extent been overcome, and considerable progress has been made in regard to providing new houses. I should make it clear, however,

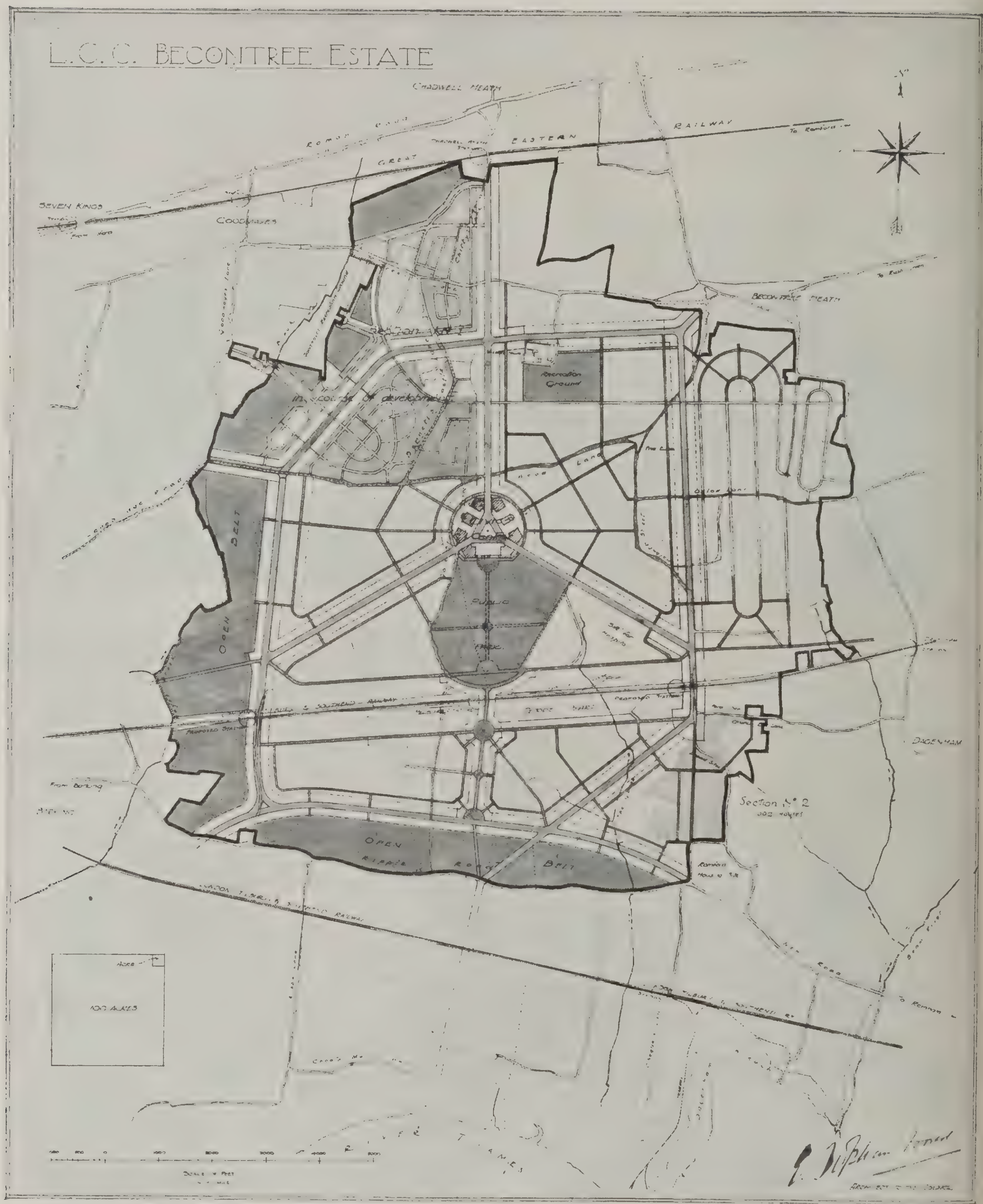


COURTMAN ROAD.



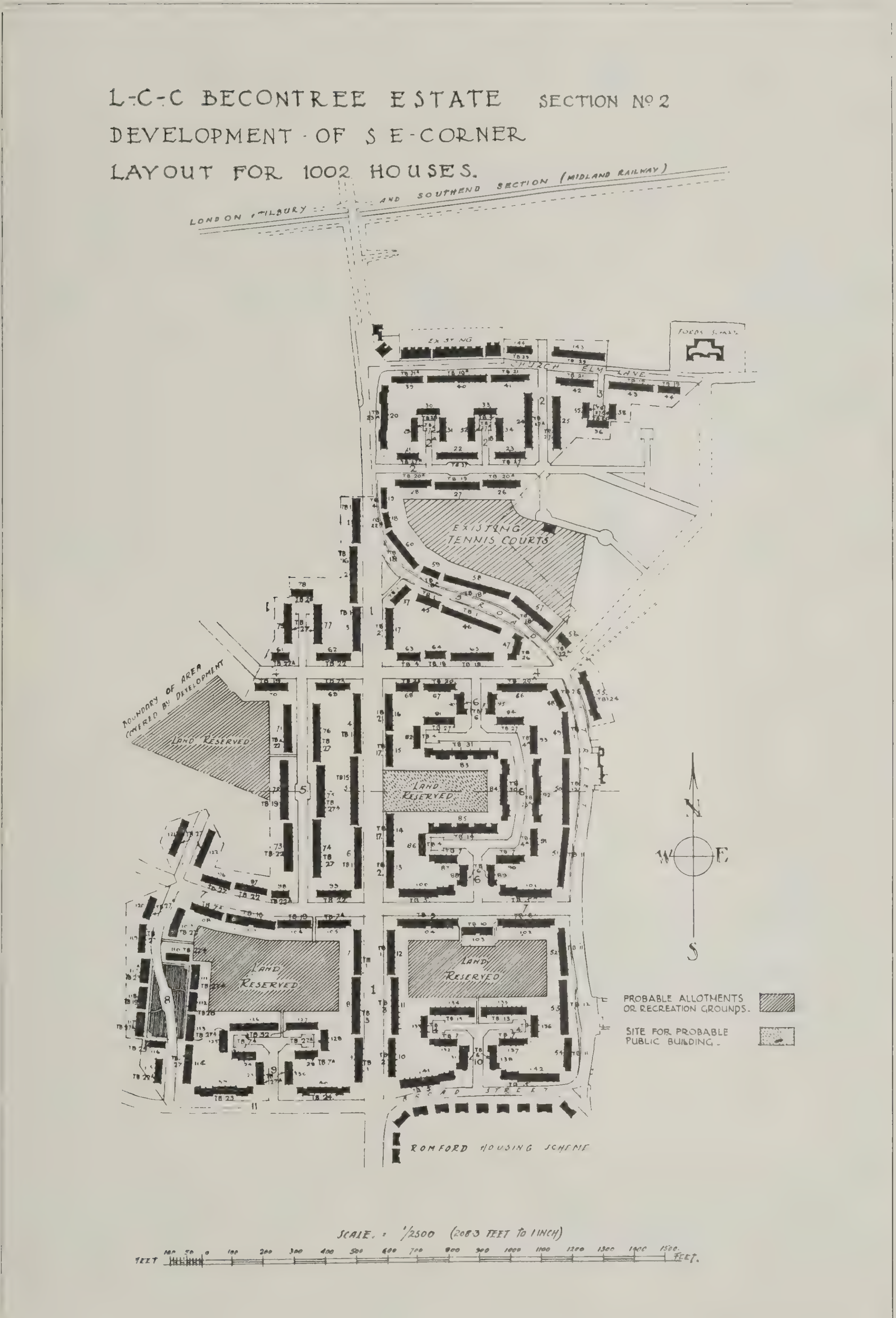
WALTHEOF AVENUE.

TYPICAL HOUSES ON THE WHITE HART LANE ESTATE, TOTTENHAM.
G. TOPHAM FORREST, F.R.I.B.A., ARCHITECT TO THE LONDON COUNTY COUNCIL.

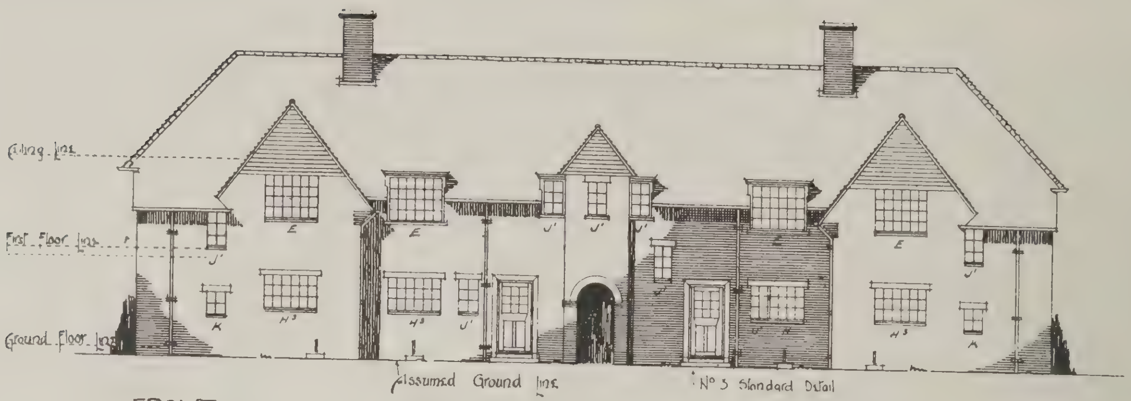


LAY-OUT PLAN OF THE BECONTREE ESTATE.

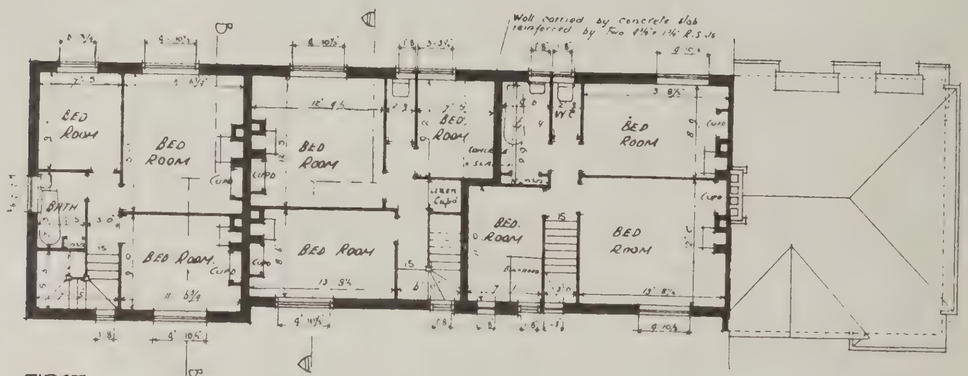
G. TOPHAM FORREST, F.R.I.B.A., ARCHITECT TO THE LONDON COUNTY COUNCIL.


L-C-C BECONTREE ESTATE SECTION Nº 2
DEVELOPMENT OF S E-CORNER
LAYOUT FOR 1002 HOUSES.
LONDON TILBURY AND SOUTHEND SECTION (MIDLAND RAILWAY)
EXISTING
CHURCH ELM LANE
FORDS SCHOOL
EXISTING TENNIS COURTS
ROAD
BOUNDARY OF AREA COVERED BY DEVELOPMENT
LAND RESERVED
LAND RESERVED
LAND RESERVED
LAND RESERVED
ROAD STREET
ROMFORD HOUSING SCHEME
N
W
E
S
PROBABLE ALLOTMENTS OR RECREATION GROUNDS.
SITE FOR PROBABLE PUBLIC BUILDING.
SCALE. = 1/2500 (208·3 FEET TO 1 INCH)
FEET 100 50 0 100 200 300 400 500 600 700 800 900 1000 1100 1200 1300 1400 1500. FEET.

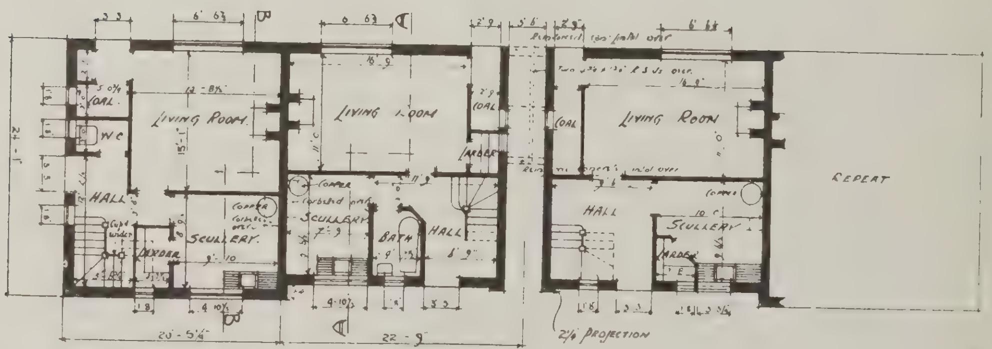
BECONTREE ESTATE: LAY-OUT OF SECTION No. 2.
G. TOPHAM FORREST, F.R.I.B.A., ARCHITECT TO THE LONDON COUNTY COUNCIL.



FRONT ELEVATION



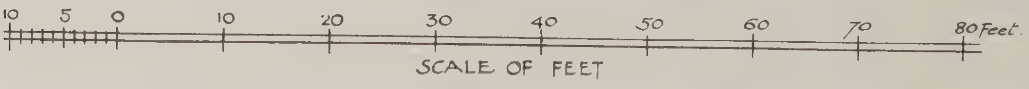
FIRST FLOOR PLAN



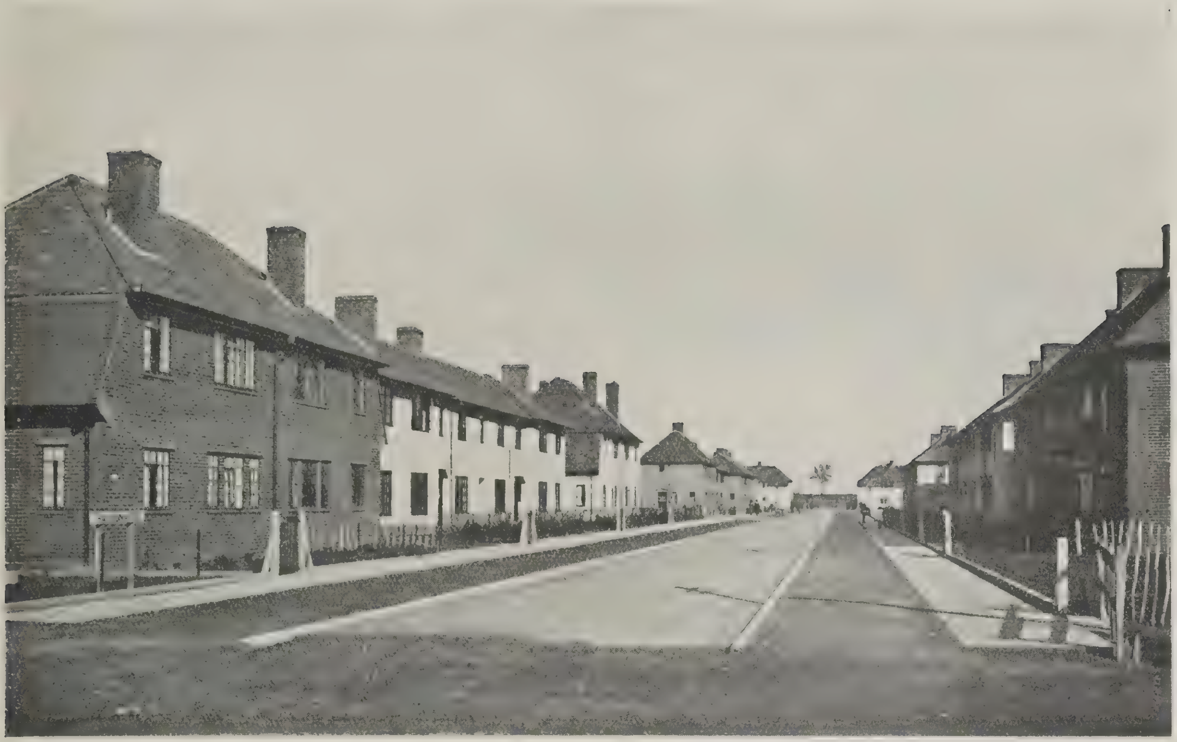
GROUND FLOOR PLAN

# L.C.C. BECONTREE ESTATE

## 4 ROOM COTTAGES. NORTH ASPECT

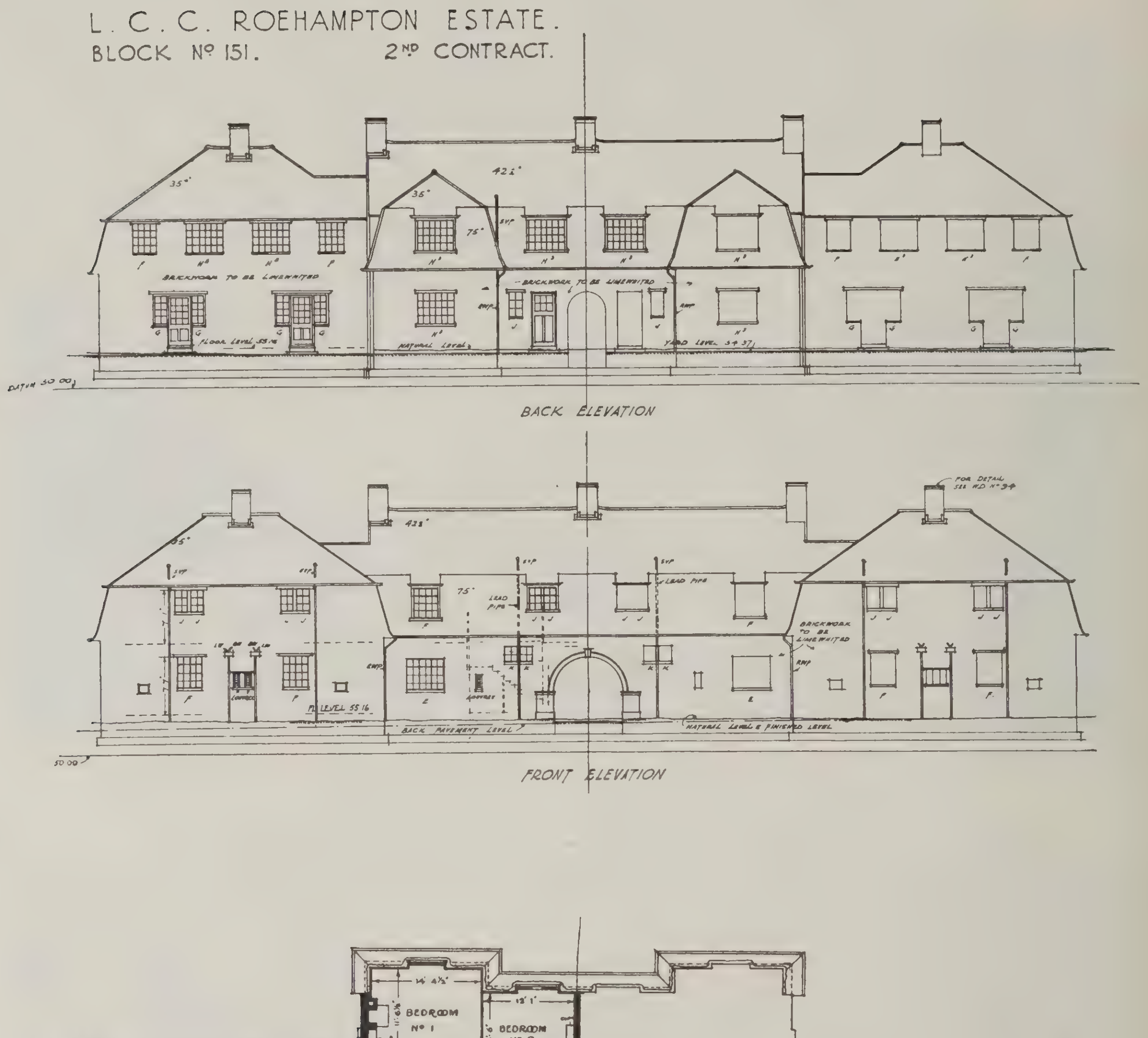


G. TOPHAM FORREST, F.R.I.B.A., ARCHITECT TO THE LONDON COUNTY COUNCIL.



HOUSES IN HAYDON ROAD, BECONTREE.

THE ENTRANCE FRONT OF HOUSES IN HUNTINGFIELD ROAD, ROEHAMPTON.
G. TOPHAM FORREST, F.R.I.B.A., ARCHITECT TO THE LONDON COUNTY COUNCIL.



HOUSES IN HUNTINGFIELD ROAD, ROEHAMPTON.

G. TOPHAM FORREST, F.R.I.B.A., ARCHITECT TO THE LONDON COUNTY COUNCIL.

the original programme has been iderably modified by the Ministry ealth, and it is not at present possible ay to what extent the full programme ultimately be carried out.

e dark portion shown on the lay- of the White Hart Lane estate, Totten- (page 650), was developed before the and the unshaded portion to the h is the post-war scheme. More 75 per cent. of the new cottages are ady occupied, and the remainder are n advanced stage of construction.

he number of houses to the acre in development is about twelve as pared with twenty-four in the portion eloped before the war, and, therefore, post-war lay-out is of a much more character. The semi-circular road 0 ft. in width, and is a portion of one e main arterial roads to the north of don.

has been suggested that possibly e of the persons displaced from the nitary area, known as the Ware et area, might be rehoused in three- y cottage flats to be erected on por- s of this estate now allocated for ments.

ne Becontree estate represents the test attempt ever made by any hous- authority to provide housing accom- ation to meet the requirements of a icular area, and is an endeavour on a e and comprehensive scale to meet immediate needs of the overcrowded lation in the east of London. There practically no vacant land available e eastern part of the county for the tion of new dwelling accommodation, no open land in an easterly direction l a point somewhere east of Barking reached. Moreover, the distances the congested parts of the East End ondon limited consideration of likely s to land along the lines of the exist- ailways.

is site of about 3,000 acres was tually selected. It lies east of Bark- and south of Ilford and Seven Kings. e site slopes very gradually from h to south and is slightly undulating east to west, being intersected by ral brooks and running streams. partly in the districts of three local orities, Barking, Romford, and Ilford, for simplification of development, the Council decided to support an application to the Essex County Council for the inclusion of the whole estate in the Barking Town Urban District.

From the design (page 652) it will be seen that an open belt, or "breathing space," has been provided on the boundaries of the estate, particularly on the western side. Wherever possible, existing roads, farmhouses, and cottages have been retained and incorporated in the general scheme. Advantage has been taken of the Parsloes Park, in the centre, to form a central park for the estate. Arterial roads, varying in width from 80 ft. to 120 ft. have been planned, some of which form part of the Ministry of Transport's road scheme for the eastern area, and others for connecting up with Chadwell Heath Station, on the Great Eastern Railway, and with the new jetty on the river. These roads have been designed to give through communication, and the "ring roads," which traverse the estate, are planned for double tramway tracks. Along the arterial roads a reservation, 150 ft. wide, has been made for the erection of shops and other commercial buildings. Sites have been allocated for public buildings, and also for markets and shopping centres.

The drainage of the area presented a complex problem. It was originally hoped to augment the existing drains and sewers, but an entirely new system was found to be necessary, together with a new outfall.

Certain areas of the estate, particularly on the north and east sides, and also a small portion between the railway and the River Thames, have been proposed for industrial purposes, and a corridor road, connecting the estate with the jetty on the river side, will facilitate transport in this connection.

A civic centre is planned in the centre of the estate, and is designed to form an important architectural feature to accommodate administrative and public buildings necessary for a township of the size contemplated. The radiation from it of three main roads, together with the importance of the buildings to be erected thereon, will impart to the centre a duly impressive and dignified character.

The first section of the estate (over 400 acres in extent and known as the Ilford section), upon which work was commenced in the autumn of 1920, is to the north-west. It comprises 2,880 houses at about fifteen to the acre, of which 2,300 are completed and occupied. and the remainder well advanced.

The second portion of the area to be developed is that indicated in the south-east corner where 1,000 houses are to be erected.

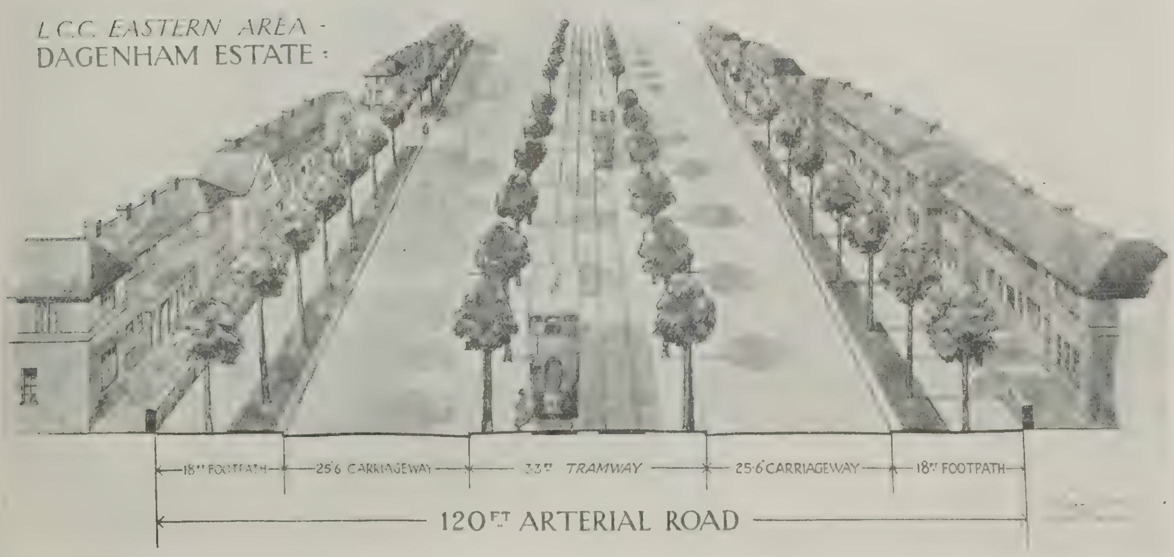
Roehampton estate is situated between the Upper Richmond Road and Putney Heath. The northern portion of the site, to the extent of about 90 acres, has been reserved for development by the Council for the housing of the working classes. Sites have been allocated for schools, shops, allotments, open spaces, etc.

The scheme for the whole estate provides for the erection of approximately 1,200 houses, comprising two and three roomed maisonettes, and three, four, and five roomed cottages combined in blocks of various sizes.

A first portion has been developed, and over 600 dwellings have been erected, all of which are occupied. The completed houses have separate bathrooms (with lavatory basin, except in the case of the three-roomed cottage), a hot-water system, supplying bathroom and scullery, and space for a perambulator or cycle.

On this estate, as, indeed, on all the Council's estates, particular attention has been directed to the grouping and aspects of the various blocks, in order to secure the maximum amount of sunlight in the principal rooms. A scheme of seclusion is created by the judicious use of feature blocks as closing vistas, and this will be enhanced as the shrubs and trees, included in the general scheme, mature. In framing the lay-out and designing the cottages, special regard has been paid to the preservation of the amenities of the neighbourhood, and natural features, including the finer trees, have been retained and absorbed into the scheme as far as possible. Among features of interest are turfed open spaces at the more important road crossings and open greens bounded by subsidiary roads.

A main road runs through the estate from north to south connecting Putney Heath with Upper Richmond Road. To the east is Putney Park Lane, a private road not open to vehicular traffic.



# Correspondence

## The Architecture Club Exhibition

*To the Editors of* THE ARCHITECTS' JOURNAL.

SIRS,—I must in justice to my reputation for ordinary courtesy point out that I was not so uncivil as to charge the architects with all the crimes of London building. My argument was just the contrary. I pointed to the beauty of the Grosvenor House exhibition as conclusive proof that architects *were not* responsible, but that the fault lay in the fact that architectural opinion had not been sufficiently organized to make itself felt, and I consequently welcomed the formation of an architects' club as likely to spread the influence of sound architectural ideas. I thought that I had made myself sufficiently plain, but apparently this was not so.

H. A. L. FISHER.

## Professional Publicity

*To the Editors of* THE ARCHITECTS' JOURNAL.

SIRS.—As a celebrated personage once said, "there is advertising *and* advertising." Surely Mr. Creswell must be broadminded enough to admit that it is possible to be dignified, even in advertisement?

I am no advocate of professional publicity, but is it not an undisputed fact that nearly all the men at the summit of the architectural profession do advertise? What else is the continued publication of designs and particulars of works carried out? What else many of the papers read before professional societies? What else many of the letters written to the press on "hot-air" subjects, continued participation in public discussions, press boosting and so on, so gladly indulged in by many leading architects?

Mr. Creswell should discover that whilst a multitude of sins often cover a hoarding, a press agent often covers a multitude of sins. The difference between a press agent and a hoarding may be said to be the difference between dignity and impudence, but then so many people assert that dignity is impudence. Where would the average professional man be without a sprinkling of both? Merit may rise, but seldom without the aid of the baking-powder of publicity.

M. G. K.

## Building Trade Crisis

The following letter from the President of the R.I.B.A. appeared in "The Times" last week:—

SIR,—Architects, together with a large section of the public, are awaiting with the keenest anxiety the upshot of the crisis in the building trade. The sense that our anxiety for peace would perhaps not be regarded as wholly disinterested, together with a feeling that interference was hardly called for, has kept the Royal Institute of British Architects from any public expression on the matter.

But I feel that the moment has come when we architects can hardly remain silent spectators of a situation which threatens so deeply the welfare of thousands with whom our daily life is so closely and personally connected. It is our most earnest hope that the honest desire for settlement which we believe to exist upon both sides may develop, before the closing of the door, into some such agreement by compromise or concession as will liberate one of England's greatest industries and spare its members untold misery.

I feel sure that friends of mine in the two federations engaged are aware, without being told, that if sympathetic mediation by a member of my profession were thought likely to be of service, such assistance would be immediately forthcoming; but apart from any such step, and, indeed, on grounds of personal fellow-feeling for those on both sides of this controversy, who stand to lose heavily by a hold-up of work, I feel that I am right in urging, with all the force of friendship, the supreme importance of coming to that understanding of which the latest information has given a most welcome hope. I know that I am speaking for many among my brother-architects if I venture to say to the disputants: "For your own sakes find some means of agreement, so that the industry may not be suspended; and if it cannot be done for your own sakes, let it be done for England's. Both sides may have money to spend on a fight; but the fight will cost more than money. It will mean a waste of labour and a waste of time—two things which England in her task of reconstruction cannot afford to lose."

The appeal, happily, is to men of sense; that is why it is made with ho and with some knowledge that in bo camps there are those to whom any su a call from outside is unnecessary. Th will be the first to forgive this intrusi of friendly bystanders.

PAUL WATERHOUSE.

## "Four Faces" Monumen Castle Howard, Yorks

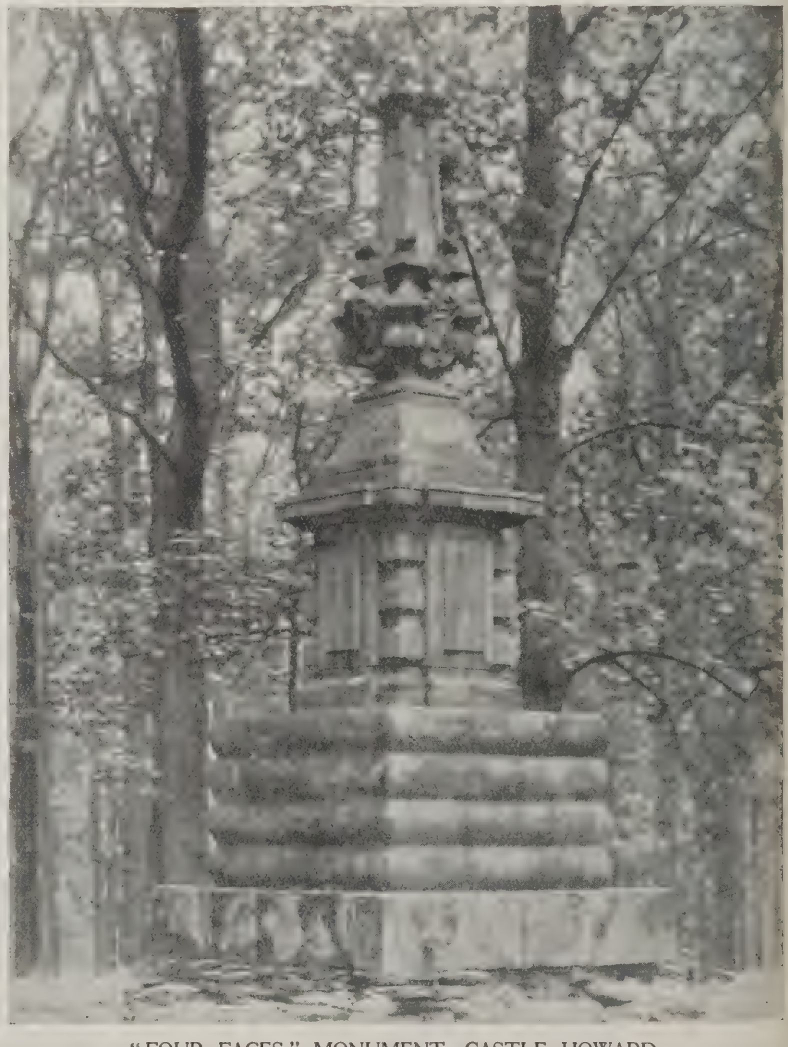
Castle Howard, the seat of the Ear of Carlisle, is one of the magnificent worl of Sir John Vanbrugh, and was con menced in 1702.

Horace Walpole thus described i "Nobody had informed me that I shoul at one view, see a palace, a town, a fort fied city, temples on high places, woo . . . vales . . . the noblest lawn in t world . . . and a mausoleum that woul tempt one to be buried alive."

Besides the mausoleum referred there are several garden temples, a fi bridge, the Obelisk, and the monumen the latter a Corinthian column whic forms a landmark for many miles aroun

The "Four Faces" illustrated is one the two small monuments situated on grass walk in the "Pretty Wood," some distance from the house. Unfo tunately owing to its position, it h suffered rather badly from the weathe and the trees have overgrown it.

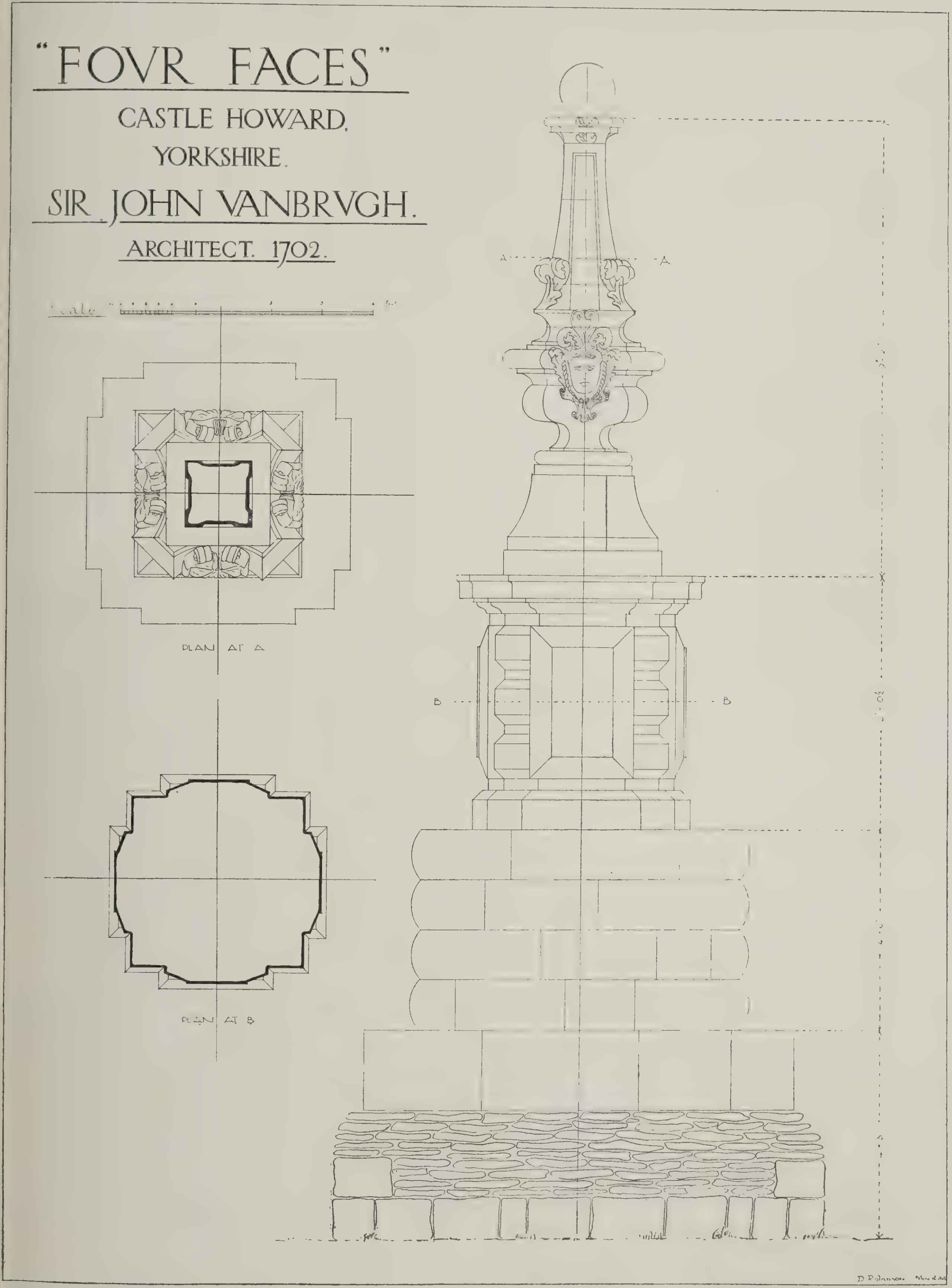
In view of the number of war mem rials in hand at the present time, t illustration of this monument should particularly interesting.



"FOUR FACES" MONUMENT, CASTLE HOWARD.

# Measured Drawings. 26.—" Four Faces " Monument, Castle Howard, Yorkshire

Measured and Drawn by D. Robinson



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# Economy in Roof Construction

## By A. EWART ASTON

N a previous article on "Economy in Roof Construction" (published in the JOURNAL for December 27 last) uggested the advantages of building sses "sandwich" fashion, using double single timbers for the members taking greater or lesser stresses, the ends of singles being sandwiched between the bles, nailed and clenched. Not only s this permit the use of light scantlings, the joints are relatively stronger than joints in solid trusses.

he accompanying illustrations show at can be done with skeleton timber ming put together in this way; not t I suppose anyone will wish to produce te such spider-web buildings in these er days; but their general lines, the thod adopted, and their undoubted apness to construct may suggest a ssembly of ideas on timber structures general. It will appear that they ow in some degree the characteristics steelwork design instead of the timber dition, and in this I think they are ht, as their lines seem to arise quite urally from this method of framing.

designed many buildings in 1917 and 8 when on military service. Heavy bers were required at the line, and the es had perforce to do their best with all scantlings and often very poor lity. Corrugated iron was plentiful l, therefore, generally used as a cover- material, but I am of the opinion that ilar types of truss relatively stronger be made to carry common rafters and ore permanent roofing. The evolution ideas roughly took the line indicated Fig. 1, the simple trusses (*a*) and (*d*) ng later adapted to get a continuous light as shown by the break in the ters of (*e*) and (*f*). Up to 35 ft. span built with 4 in. by 1 in. material, and ond that with 4 in. by 1½ in. The ble members are indicated by the ker lines in the diagrams.

he skylight buildings were particularly successful and surprisingly bright inside. Some few were glazed with a glass substitute but it would not lie flat in long lengths, so that eventually oiled linen was used with wire netting over to prevent tearing in a wind. Owing to the break in the roof line the skylights were perfectly watertight, and the usual difficulty of the side joints was avoided by their being continuous.

Figs. 2, 3, and 4 are drawings of some of the buildings erected. They were built by gangs of practically unskilled men with a tradesman in charge. Usually they were put together on the ground, posts included, dragged into

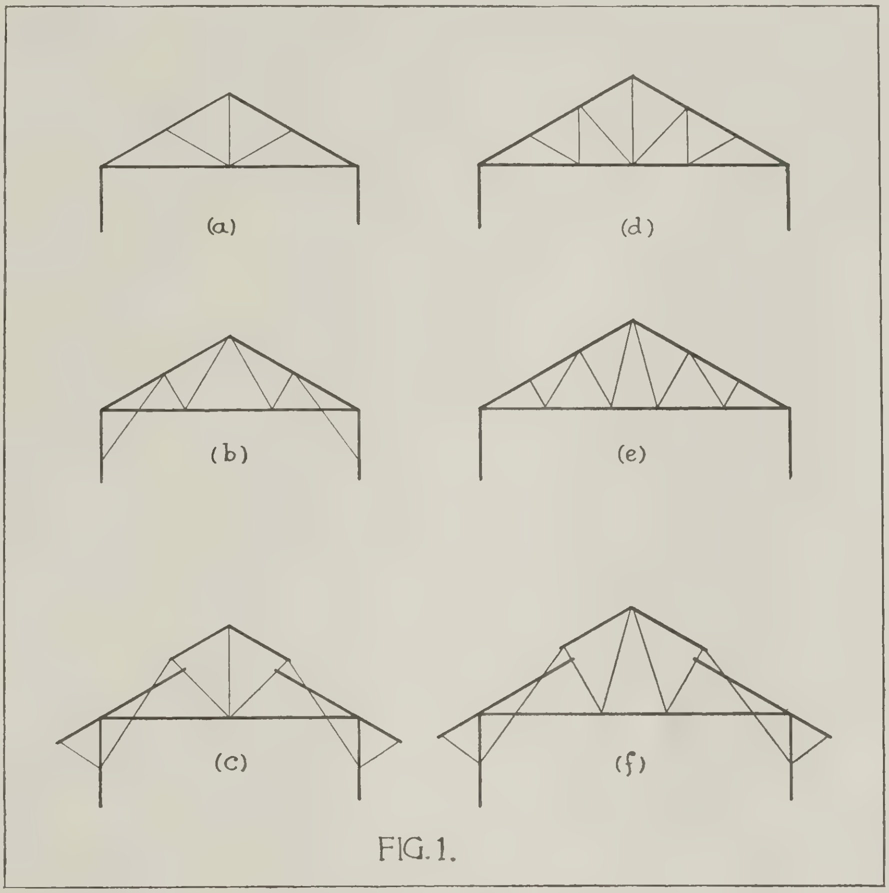


FIG. 1.

DIAGRAMS OF TRUSSES USED.

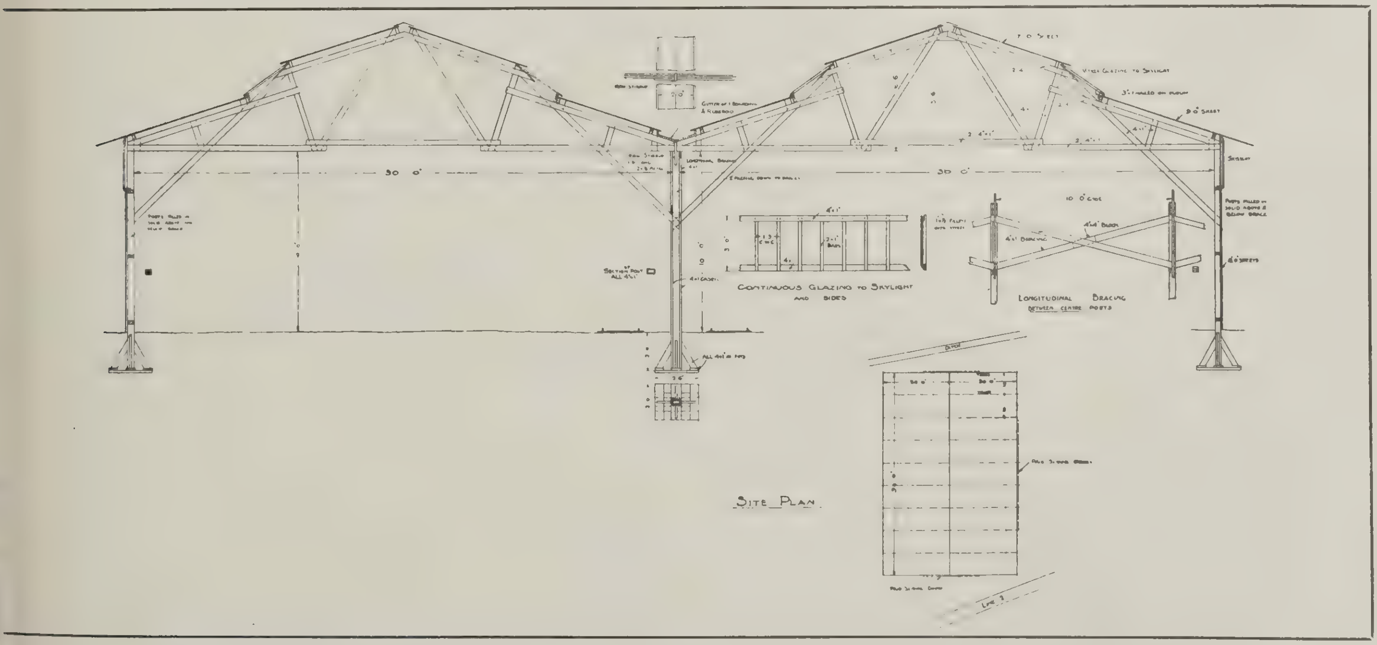

30 0'
30 0'
2 0'
Gutter of 1" Boarding & Ruberoid
7 0' Sheet
9 0' Sheet
Skylight
Posts filled in solid above & below brace
6 0' Sheets
10 0' c/cs
4"×4" Block
4"×1" Bracing
Section of Post All 4"×1"
3 6'
Continuous Glazing to Skylight and Sides
Longitudinal Bracing between centre posts
Site Plan

FIG. 2. THESE TRUSSES ARE BUILT ENTIRELY FROM 4 IN. BY 1 IN. SCANTLINGS. THE SPAN OF EACH TRUSS IS 30 FT. AND THEIR DISTANCE APART 10 FT.

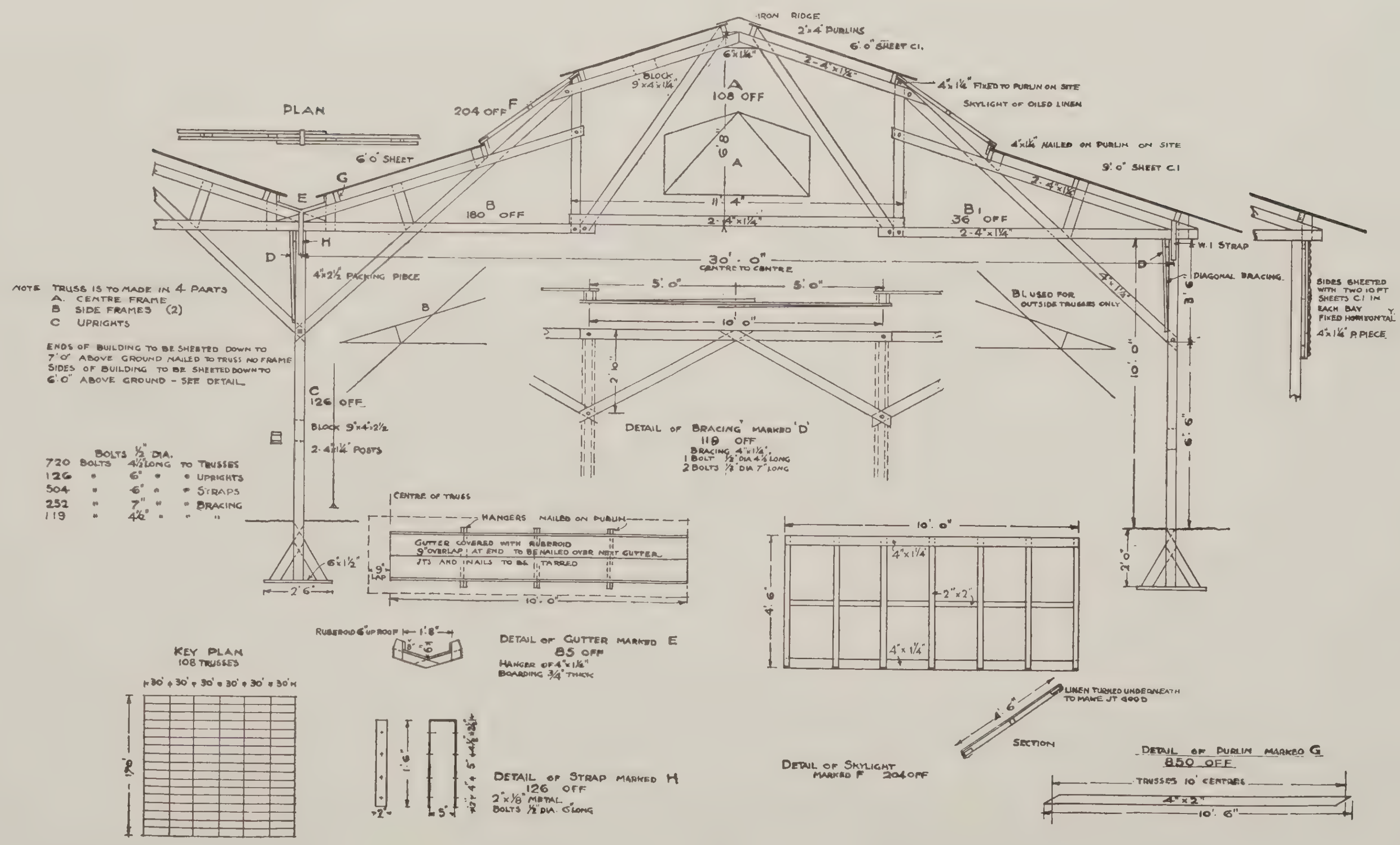
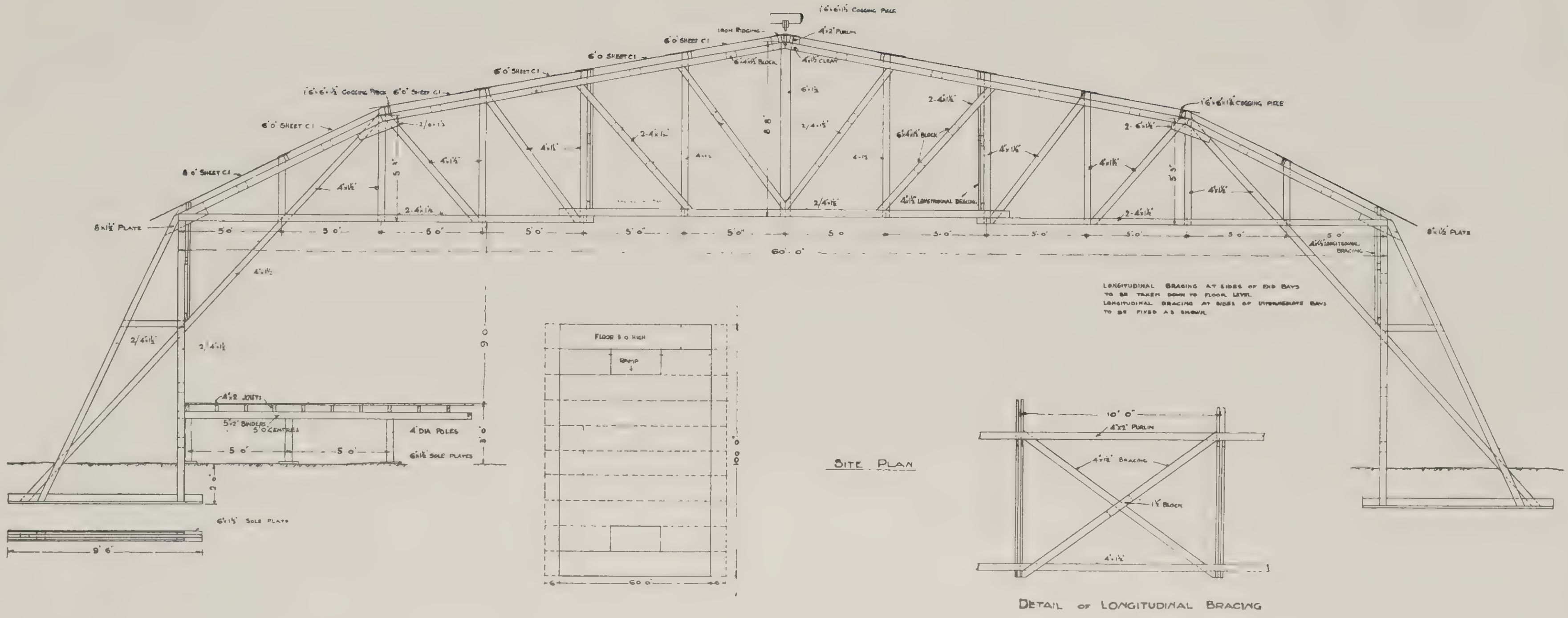


FIG. 3. TRUSS FROM A LARGE OPEN BUILDING, 180 FT. BY 170 FT., MADE IN SECTIONS AT ONE PLACE, AND CARRIED MANY MILES FOR ERECTION.



Longitudinal bracing at sides of end bays to be taken down to floor level. Longitudinal bracing at sides of intermediate bays to be fixed as shown.

FIG. 4. THIS TRUSS IS 60 FT. SPAN FROM POST TO POST. IT IS BUILT MAINLY OF 4 IN. BY 1½ IN. SCANTLINGS WITH TWO INTERMEDIATE SETS OF HERRING BRACING.

position horizontally, and then bodily lifted up into their places. I saw even a 60-ft. span building erected without the use of a derrick, but with, of course, unlimited men! I knew all these buildings for from twelve to eighteen months after erection, and there was no sign of failure. So far as I know they are standing yet

Fig. 2 is built entirely from 4 in. by 1 in. except for purlins and side framing—even the posts are built up. The span of each truss is 30 ft., and their distance apart 10 ft.

Fig. 3, a large open building 180 ft. by 170 ft., was from 1¼ in. material only, for the reason that it was all made in sections at one place (even the trusses were made in three parts) and carried many miles to be erected. Such a building would have been useless without the skylights.

Fig. 4 is 60 ft. span from post to post, but as it was afterwards covered in on the line of the inclined stays it had an effective floor span 12 ft. greater It is built mainly of 4 in. by 1½ in. with two intermediate sets of herring-bone bracing running the length of the shed.

# Contemporary Art

## The Augustus John Exhibition at the Alpine Club Gallery

In every succeeding exhibition of work by Augustus E. John, A.R.A., there is a challenge. In this there are two. The first is the *Symphonie Espagnole*, the second the "Madame Suggia." Both are large works, and both demand a lot of the beholder. In the beginning the symphony staggers, then it puzzles, and at last it resolves itself. It is a creation with abundant signs of the chaos from which it has been struck out. It is a symphony with all the signs of the void from which it sprung; with all the elements still nascent. It is modern in the sense that Scribine is modern; that the Spanish composers Albeniz and Granados are modern, but is elemental in the sense that El Greco, Velasquez, and Zuloaga are. Its movement is by no means orderly, but by no means indiscriminate; it has its tempos and forms, but is by no means governed by them. Times and tones are there in a profusion without confusion; the picture is a battlepiece of them. The spirit of it is to be found in No. 27, *L'Espiègle*. In that wonderful figure is summed up the devilry which prompted John to paint his *Symphonie Espagnole*. The two canvases are astonishing; they subdue you; the symphony deafens you.

You turn meekly to the other Spanish things—the little airs and tunes of gypsies. Augustus John has been to Spain; trust him to discover the gypsies and the places where they live and where no one else ever goes. The most villainous gypsy ever seen in or out of Spain is No. 7, and No. 29 is the most exquisite creature imaginable—all soft flesh and wonderful colour. John has had his Spanish baptism, and I like the result even better than the Welsh or the Irish. No one has ever made me like gypsies but John; I have never been stirred by them; not even by "The Tinkers," that old decorative piece, matchless except by its match in the present exhibition, the "Gypsy Coppersmiths," that extraordinary drawing which by its size and its vitality makes the rest of the drawings, usually so strong a feature in a John exhibition, pale in its vicinity.

The *Symphonie Espagnole* and the "Gypsy Coppersmiths" are decorative works of the first importance, and both should speedily find their place in the decorative schemes of two important public buildings.

No previous John exhibition at the Alpine Gallery can be compared with this, which contains twenty works of major importance, and is, as a whole, symptomatic of a new phase in its author's career. With the greatest satisfaction I noted that the practice of leaving pieces of exposed canvas has been reduced to a minimum. I sincerely hope John will never revive it. I noted, too, that in the newer works there is an access of quality in the paint, a thing I have been wishing for during the last four or five years. "The Lady with the Violin" is a masterpiece. It is being said that she could not play her violin because of all that mass of flowers, fur, and feather round her head and neck; not in those rich rare clothes; not with that superb conquering look! I do not mind; all I revelled in was the virtuosity of the whole performance, which is supreme. John has never produced a finer quality of paint, although he has failed to paint a convincing portrait of an artist with a violin; although his sitter obviously sits for her portrait, rather than exercises her own art.

All that matters not, especially in view of the fact that in No. 12 John has accomplished what he omitted from No. 3—Madame Suggia *is* the artist. The painter has worked with a bravura which the 'cellist excels in, obviously. Virtuosity of treatment he has abandoned for literal transcript. The splendidly ostentatious pose of the confident executant he has rendered with naked truth. He has done it with the woman, with the violoncello, and with the wonderful red robe; not with the fineness of their painting, but with the gestures of all three, and principally of the last. All three are mere adjuncts of a portrait of a performer; I do not say it is very beautiful, only that it is astonishingly true and illuminative. A performer performing, with the artist's gesture, the proud confident intentness; the vitality and the pride of power, all expressed in that thrown-back head; that strenuous grasp of the 'cello, the fingers really pressing the vibrating strings; that delicate holding of the bow and its caressing contact. John has painted these hands as they required to be painted, and the astonishing red gown emphasizes and intensifies the whole matter of the work.

There is No. 30, "The Lady with a Marigold," a contrast to "Madame Suggia"; a modest quiet work well-placed over the mantel of the gallery. A quiet rich sedate thing with dignity expressed in a simple pose, a nice portrait and a fine one, with neither virtuosity nor bravura; a beautiful work. And what can you say of No. 25 near by, "A Study of a Girl's Head," except that, in spite of the awkward and well-known, but never understood, slope of the neck, it is a face and head powerfully painted in?

Next to it is a little exquisitely simple and life-like "Head of a Boy," a clean drawing in paint; not far away—No. 19—is the "Profile of a Woman." I have never seen this before, although I believe it to have been painted when its author was twenty-three. It is a *tour de force* anyhow; a wonderfully sculpturesque head as to form, and as to quality a marvel of skilful, sound painting, strong, vibrant brush-work; and as to tone, mellow in the flesh, rich, ruddy, and brown as to the hair, with a richness that even the virtuosity of the "Lady with the Violin" does not surpass. Since the artist painted it he has simplified, and for a time neglected, the quality of subtlety in his paint, a quality he shares with some few of the great masters—of which he knows the secret so well. Now, after seeing No. 3, I am encouraged to think he will use the secret for further displays, and often, for faculty such as that can never tire or become stale; it is a faculty which makes for permanence.

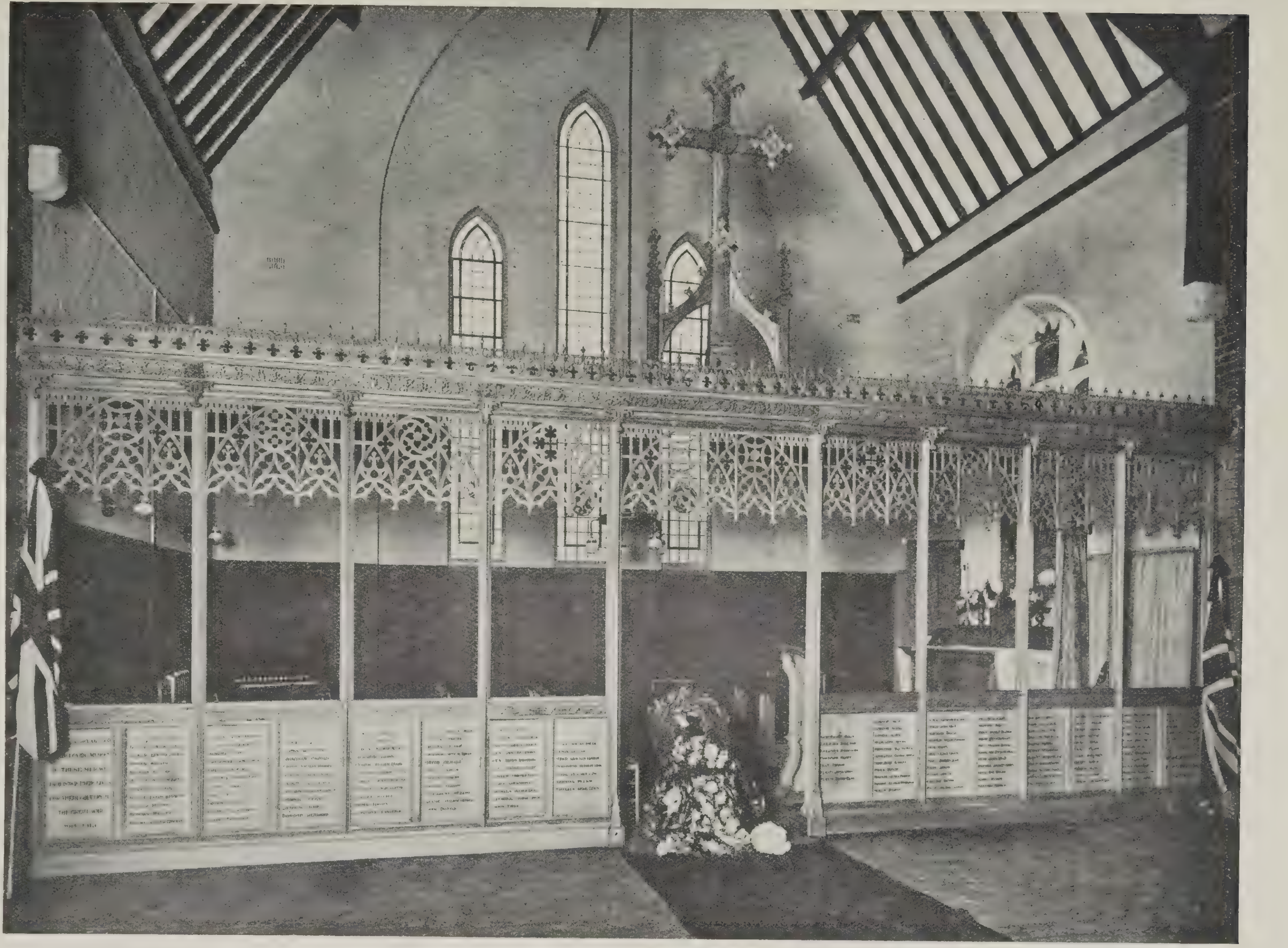
Some startling realism is revealed in a dual portrait, No. 9, known as "Miss Paula Gellibrand and Miss D'Erlanger," a contrast in style as in complexion: the fairish and the darkish; the former sophisticated to a degree, the latter more naïf. No. 15 would seem to be a previous study of the same subject and goes to prove that the later, presumably, effort makes a complete statement of the truth that was only hinted at in the former.

There are at least three portraits of men of first-rate importance. Foremost is that of R. A. Addyes Scott, Esq., a beautiful realization in black and white—note the painting of the large white neckcloth—forming a setting of unusual tone quality, for a head of unusual distinction, painted in in the most delicate fashion. The Rt. Hon. Frederick Leverton Harris, P.C., is rarely simple without accents, a straightforward statement of values, while Sir Hercules Read is realistically rendered, the head finely and firmly realized. The sketch in oils of Mr. Lloyd George is a very faint echo of the portrait of some years since, but among the drawings is a charming one of Robert Nichols, Esq., and Colonel Lawrence's pleasing countenance is depicted no fewer than four times.

KINETON PARKES.

## Forest Gate, London

Leonard C. Webb, L.R.I.B.A., Architect



This memorial at St. James's Church takes the form of a carved oak screen and a morning chapel. The screen divides the chapel from the nave, and is inscribed with the names of the one hundred and fifty-one men of the parish who fell in the war. The chapel has been formed from a portion of the north transept.

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# Parliamentary Notes

Y OUR SPECIAL REPRESENTATIVE.]

### *Building Rings.*

r. Neville Chamberlain, Minister of
lth, replying to allegations of profiteer-
n building materials, brought by Mr.
Murray, said that they were all ex-
ely anxious to prevent any repetition
ne great rise in prices which accom-
ed the Addison scheme of housing.
inevitable result of such a rise would
the wrecking of the housing pro-
ime. But he did not want the public
e unnecessarily alarmed. The price
ilding materials was, on the average,
per cent. above the pre-war level.
hese circumstances, he did not think
uld be said that there was anything
he nature of shameless profiteering
g on. The committee he proposed to
ip would have as its first function the
tant survey of prices, and would keep
Government and the public exactly
med as to what those prices were.
at did not have the proper effect he
d have to consider the introduction
gislation. The Government were not
ared to have the money which they
giving towards the erection of
es diverted from its proper purposes
rder to make profits for individuals.
he thought it would be well to wait
see the working of the committee
red to.

plying to Mr. R. Morrison, Mr.
nberlain said he was not yet in a
ion to announce the names of the
bers of the committee. The terms
ference would be as follows : "To be
nmittee to survey the price of build-
naterials and to receive and consider
plaints in respect thereof and to
t from time to time to the Minister
ealth and the President of the Board
rade as to the facts, and in particular
the extent to which in any case the
appeared to be unduly high by
n of the operation of any trade com-
ion, trust, or agreement." It would
or the Government to consider on
reports of the committee whether
n was necessary, and, if so, on what

### *The Housing Subsidy.*

answer to Mr. Houfton, who asked
her, in view of the fact that many
ns of the working-class preferred
arlour type of house, he could see his
to give the same amount of subsidy
had promised for houses of the non-
ur type, Mr. Chamberlain said, "No,
The proposed principle of the sub-
is that it should be given only
e small type of house which has not
built in any considerable numbers
e last few years, and which is the
attractive proposition to private
prise."

### *Miscellaneous Replies.*

e Minister of Health is considering
ntroduction of legislation to assist
ns who are desirous of building their
houses, and the matter will be dealt
n the Housing Bill.

e annual charge in respect of the
o houses built under the Govern-
housing scheme is estimated at
£8,750,000 to taxes, and £800,000
tes. The average amount of the
ly to the 36,164 houses built under
the private builders' subsidy scheme is £242.

The Government do not propose to establish a national factory for the supply of building materials.

# Law Report

### *The Albion Iron Company, Ltd.* v. *Edwin J. Sadgrove.*

March 23. City of London Court.

This was a claim for the balance of an account for goods sold and delivered to defendant, Mr. Edwin J. Sadgrove, architect, for his own house at Chertsey. The actual figures of the items in the claim were not in dispute, but defendant counterclaimed and set-off for damages for breach of contract, alleging negligence, faulty goods, and unreasonable delay, which caused him heavy loss.

Plaintiff's counsel successfully argued a point of law that the defendant had in law suffered no damage as the acceptance of the goods—in effect—forgave the plaintiff for any wrong he might have done in connection therewith; the defendant should have refused delivery of the goods, and the defendant's claim for damage for the delay was too remote since although he might have suffered damage, the measure of damages recoverable under the Sale of Goods Act is the difference in market price in the absence of special agreement, and it followed in consequence that defendant's counterclaim must also fail.

The evidence, therefore, was not called upon, and judgment was given for plaintiff both on the claim and counterclaim.

# Competition News

### *Bournemouth Pavilion Competition.*

The "competitors questions and answers" in connection with the Bournemouth pavilion competition have been issued. Copies may be obtained from the Town Clerk, Town Hall, Bournemouth.

### *"The Modern Hospital" Competition.*

The following awards have been made in the international competition promoted by "The Modern Hospital" for plans for a small general hospital. First place, Butler and Rodman, of New York City ; second and third places, John Roth, of Atascadero, Cal., and Ernst Hoedtke, of Cambridge, Mass. ; first hon. mention, Cervin and Horn, of Rock Island, Ill. ; honourable mention, Lemuel Cross Dillenbach, of the School of Architecture, University of Illinois. Selection was made from fifty-one sets of plans submitted by hospital architects of the United States, Canada, and England, judgment being on the bases of economy in construction and operation, integrity of designs, health values, and flexibility. The jury of award was composed of Dr. S. S. Goldwater, of New York, Asa S. Bacon, of Chicago, Clarence H. Johnston, of St. Paul, William Buck Stratton, of Detroit, and Miss Adelaide M. Lewis, of Kewanee, Ill.

### *Tunbridge Wells Pavilion.*

It is stated in the conditions of the Tunbridge Wells Pavilion Competition—particulars of which are given in our "List of Competitions Open"—that the design and treatment should be indicative of the purpose for which the building is intended. Whilst it should have a bright and handsome appearance, anything in the nature of over-elaboration or unnecessary ornament should be avoided, and it should be particularly borne in mind that, owing to the levels, it will be viewed from the rising ground around. It should be suitable both for summer and winter use, and constructed with a view to a low cost of maintenance. There should be an effective elevation viewed from the Mount Pleasant Road.

The designs are to be accompanied by a short report fully explaining the kinds of materials proposed to be used in different parts of the building, including walls, floors, internal wall surface decorations, enrichments, roofing materials, etc., together with particulars of the accommodation provided and the cubical contents of the main hall, and, separately, of accessory rooms connected therewith.

The report is to be accompanied by an estimate of the cost of the building, erected complete, including every expense other than furnishing.

The following drawings are required : Plans of ground and gallery floors, a longitudinal and a cross section, with three elevations, all to a scale of 8 ft. to 1 in., with a perspective view showing the front and side elevations taken from about the point "A" marked on the block plan. The drawings are to be in ink, on double elephant sheets of drawing paper, except the perspective drawing, which is to be on a half-double elephant sheet, mounted on strainers, in black line with sectional parts blocked in. All arrangements, figured sizes of rooms, heights, including seating accommodation and exits, etc., are to be clearly indicated on the plans. No identification mark, motto, or name is to be attached to any of the drawings.

The accommodation to be provided is as follows : A commodious entrance and entrance hall, with ticket office and two staircases affording easy access to the galleries and concert hall. Cloakrooms off the entrance hall, with w.c. and lavatory accommodation. A concert hall, with galleries, to accommodate not less than 2,000 persons, the floor to be suitable for dancing. A bandstand, mainly for summer use in connection with the concert hall on its northern exterior, arranged for either an inside or outside audience. A considerable portion of the northern and southern sides of the concert hall to be fitted with glazed sliding screens, so that the hall may be thrown open during suitable weather. Galleries on the first floor to be provided, and a stage at the eastern end of the hall for about sixty to eighty performers, but which need not be designed for accommodation for theatrical scenery. Dressing-rooms for artists on each side of, and communicating with, the stage, including w.c. and lavatory accommodation in each case. A green room, music store, office, and storage for chairs. A refreshment room to accommodate about 150, and kitchen with arrangements for providing teas and light refreshments. w.c. and lavatory accommodation for visitors to Calverley Grounds. The building to be heated with hot water circulation and radiators.

Designs are to reach the Town Clerk, Town Hall, Tunbridge Wells, by July 3.

## The Tunbridge Wells Pavilion

The Tunbridge Wells Corporation have decided not to alter the conditions respecting payments to successful competitors as requested. In the event of the Institute warning their members not to compete the competition will be confined to French architects.

## List of Competitions Open

| Date of Delivery. | COMPETITION. |
|---|---|
| April 15 | Buildings for the Polytechnic Institute, Reval. Premiums 200,000 marks, 150,000 marks, 100,000 marks. Apply Office National du Commerce Exterieur, 22 Avenue Victor Emmanuel III, Paris. (8e) The competition is an International one. |
| June 1 | New Municipal Buildings and Town Hall, Cork. Total cost not to exceed £120,000, Assessor Mr. Lucius O'Callaghan. F.R.I.A.I., A.R.H.A. The successful competitor will be appointed to carry out the work. Second and third premiums £200 and £100 respectively. Apply Mr. William Hegarty, Town Clerk, Cork. The competition is limited to architects living and practising in Ireland. |
| June 12 | Concert Pavilion, Bournemouth, to seat 2,000. Estimated cost £100,000. Assessor, Sir Edwin Cooper, F.R.I.B.A. Premiums: £300, £200, and £100. Apply Town Clerk, Municipal Offices, Bournemouth. Deposit £2 2s. (cheque). |
| June 30 | Bridge over Nygaardsstrommen in Bergen. Apply Department of Overseas Trade (Room 50), 35 Old Queen Street, Westminster, S.W. 1. |
| June 30 | National War Memorial at Melbourne to cost £250,000. Competition, in two stages, open to Australians, not necessarily residing in Australia, and British subjects resident in the Commonwealth. Preliminary designs to the Right Hon. the Lord Mayor of Melbourne, Chairman of the Executive Committee, Town Hall, Melbourne, Australia, by June 30. Apply Agent-General in London, Victoria House, Melbourne Place, Strand. Deposit £2 2s. |
| July 3 | Pavilion in Calverley Gardens, Tunbridge Wells. Assessor Mr. E. Guy Dawber, F.S.A., F.R.I.B.A Premiums £150, £100, and £50. Apply Town Clerk. |
| No date | The Crown Agents for the Colonies, acting on behalf of the Government of the Straits Settlements, invite competitive designs for the reinforced concrete work required in connection with the construction of a new general post office at Singapore. Tentative designs, for which no fees will be paid, are required in the first instance, from which it is proposed to select a design and specify its adoption in the contract for the construction of the building. The firm whose design is so adopted will be subsequently engaged to prepare full detail plans, specification, quantities, &c., for an approved fee. Drawings can be seen and further details of the competition obtained from the Crown Agents for the Colonies, 4 Millbank, Westminster, S.W. 1, quoting Z/Straits Settlements 5664. |
| No date | Five shops for the Prestwich Co-operative and Industrial Society. Premium 75 guineas. Apply General Manager of the Society, Warwick Street, Bury New Road. Prestwich, Lancs. |
| No date | The Crown Agents for the Colonies invite Architects in Britain and the British Dominions to submit designs for the new Raffles College, to be erected at Singapore as the Singapore Centenary Memorial. Premiums: £300, £200, and £100. Mr. John Begg, F.R.I.B.A., late Consulting Architect to the Government of India, has been appointed Assessor. Apply Crown Agents for the Colonies, 4 Millbank, London, S.W. 1. Deposit £2 2s. |

## A Correction

We regret that in the advertisement of Messrs. Thos. Faldo & Co., Ltd., which appeared in the issue of this JOURNAL dated March 28, the name of the architects of Aldwych House was inadvertently given as Messrs. Trehearne and Norman instead of Messrs. Gunton and Gunton, Finsbury House, Blomfield Street, E.C.2.

## Societies and Institutions

*Town Planning Institute.*

The address of the Town Planning Institute is now Maxwell House, 11 Arundel Street, Strand, London, W.C.2. A room has been secured at this address as the Institute headquarters and for the housing of the library, which it is hoped will be installed there in the course of a few weeks.

*Italian Architecture in England.*

In lecturing on "Italian Architecture in England" before the Sheffield, South Yorkshire and District Society of Architects and Surveyors, Major H. C. Corlette, O.B.E., said that it was possible to trace in history the growth of English tradition in architecture through nearly a thousand years. It was a continuous and living evolution of both structural forms and decorative character. The idea behind it was full of the same Gothic spirit, and it was an expression of the wild and thriving vigorous adventure of an enterprising Gothic mind. In archæology they could see and examine the evidence of this growth in many directions over all this long period of years.

*South Wales Institute of Architects.*

At the annual general meeting of the South Wales Institute of Architects the following officers were elected for the ensuing twelve months: President, Mr. Percy Thomas, O.B.E., F.R.I.B.A.; vice-presidents, Messrs. H. C. Portsmouth, F.S.Arc., C. F. Ward, F.R.I.B.A.; hon. treas., Mr. H. Teather, F.R.I.B.A.; hon. auditor, Mr. C. S. Thomas, F.S.Arc.; hon. librarian, Mr. C. H. Kempthorne, Lic. R.I.B.A. Central Branch Members: Messrs. J. P. D. Grant, A.R.I.B.A., C. F. Jones, A.R.I.B.A., A. G. Edwards, M.S.A., T. Alwyn Lloyd, F.R.I.B.A., W. S. Purchon, M.A., A.R.I.B.A., Cecil Wilson, F.R.I.B.A., J. Williamson, A.R.I.B.A., C. J. Ward, F.S.I., Lic.R.I.B.A.; Associates' rep., Mr. T. E. Llewellyn. Western Branch Members: Messrs. C. S. Thomas, F.S.Arc., H. C. Portsmouth, F.S.Arc., J. H. Jones, F.S.Arc., Glendinning Moxham, F.R.I.B.A., J. Cook Rees, F.S.Arc.; Associates' rep., Mr. G. L. Crocker. Eastern Branch Memb Messrs. F. Swash, F.R.I.B.A., C. Tebbs, A.R.I.B.A., R. Fisher; Associ rep., Mr. H. Jones. Northern Bra Members: Messrs. G. Vincent Ev Lic.R.I.B.A., J. Llewellin Smith, R.I.B.A., Jacob Rees, M.S.A.; A ciates' rep., Mr. B. T. Jones. Hon. Ivor P. Jones, A.R.I.B.A.

*The Threatened Building Stoppa*

The Council of the Manchester Soc of Architects, whilst feeling that the q tions involved can best be settled by employers and operatives themsel wish to offer their services in any they could be of use in preventin stoppage of the trade which would contrary to the interests of the pu and the two parties immediately cerned. The Council is convinced the present cost of building and the certainty of conditions prevailing vent a large volume of work being in hand, and that much more employm would ensue to the trade if the cos building could be reduced. The Cou urges that the dispute should be set by further immediate conference so a strike or lock-out may be avoided.

## A New London Viadu

Illustrated on this page is the viaduct which has been constructed the River Brent in connection with London Electric Railway extension f Golders Green to Edgware. The t length of viaduct, which is built Eastwoods' stock bricks, is about mile. The facings are machine-ma kiln-burnt stocks, whilst the back bricks are hard, well-burnt rough st supplied from the same works, and chi used in foundations, abutments, and taining walls. The bricks have been s plied at the rate of approxima 400,000 per week, and it is estima that the total number required to c plete the work will be ten to tw millions. All the glazed bricks for contract have been supplied by E woods, also a very large quantity ballast, etc., etc.

A NEW LONDON VIADUCT.

# Window Design and Daylight Illumination

JOINT discussion on "Window Design and the Measurement and Predetermination of Daylight Illu- ıation" was held at the Society of :s on March 27 by the Illuminating gineering Society, the R.I.B.A., and Surveyors' Institution. Messrs. J. Waldram, F.S.I., and J. M. ldram, B.Sc., in introducing the ject said: The only existing methods predetermining windows are certain l-known rules which purport to deter- ıe the area of glass as a proportion of floor area lit, possibly modified by ping the window head at a minimum ght determined by the depth of the m. Such rules, if correct for cases in ch the obstruction of neighbouring dings is negligible, must necessarily incorrect for obstructed windows, for obstruction necessarily alters the ntial properties which enable a win- to illuminate a room. These are :—

) The area, angular height, and pos- y the aspect of the visible sky at the k of the room, or at the worst-lit tion in the room—which determines minimum daylight factor due to ct light from the sky ; and

) The amount, and possibly the as- , of the visible sky subtended at the low, which, in conjunction with the ur of the walls and ceiling, determines contribution to be made to the imum daylight factor by diffusely cted light.

he term "visible sky" includes, of se, due allowance for any obstruc- s which can appreciably reflect light.

the large majority of cases windows be designed with much the same con- ıce as that which we should have in ıg a boat in the middle of a tidal ary without fear of running aground. only when we get into the shallows we feel the need for charts, sound- and tide tables.

xcept in crowded towns, it is generally difficult to light all interiors ade- ely by means of windows of moderate and height without spoiling the ıce of fenestration in adjoining ıtions or incurring the disadvantage cessive glass area.

ıis is rather apt to engender in the ner a misleading sense of ability to with all situations which may occur. only when he encounters cases of e sky obstruction coupled with deep s and the necessity or desirability of ning a small window area that he feels eed of more exact methods of prede- ning daylight problems, for a mis- once made, is generally irrevocable.

e object of this paper is to supply want. It is assumed that the ısions of the interior, the window he obstructions have all been fixed, that it is necessary to ascertain ıer those conditions will result in equate daylight factor at the worst- int, or at any number of doubtful s in the interior.

s thus at present mainly a trial and method. Although, with its help, it prove to be possible at a later date to ılate general rules giving the window ısions necessary under any combina- of circumstances, the labour in- d will necessarily be heavy.

The following summary of the operations necessary in any particular case will serve to indicate their simple character :—

(1) *Direct Light.*—From the worst-lit positions in the given interiors, or from any number of doubtful positions, the sky visible through the window, windows, or skylight over any obstructions which may be present is plotted by its angular co-ordinates on a suitable measuring diagram, representing the quarter sphere of visible sky. The divisions are so adjusted as to represent by the area of any piece of the visible sky its power of illuminating a surface at the point under consideration. This plotting can usually be done from the plans and sections, but the rather tedious work involved can be greatly reduced by the judicious use of simple trigonometry.

The direct light factor is then obtained by comparing the area of visible sky with the area of the diagram.

(2) *Diffused Light.*—To the above must be added the contribution made by diffusely reflected light. We certainly require much more and much better data of this, but it can generally be estimated as lying between the limits of 1 per cent. (sill ratio) in the case of exceptionally shallow rooms with large windows and nearly white walls, about 0·4 to 0·5 per cent. in ordinary rooms with light walls and ceilings and small obstruction, and well below the grumble point of 0·4 per cent. sill ratio when the obstruction is material. Diffused light appeared to be practically constant over the whole area of ordinary rooms.

(3) *Sunlight.*—The hours of possible sun which can enter the room can be ascertained by sky diagrams which were described in the paper.

However great might be the degree of accuracy to which we may bring methods of measuring and predetermining daylight, they can never take the place of intelligent observation, experience, and judgment, for no two cases ever present the same features.

The undue length of this paper may perhaps be forgiven when it is realized how wide is the gap between the mere measurement of daylight illumination in existing rooms—which is the limit of our present published knowledge—and any accurate solution of every-day problems, such as window design, especially if the methods adopted are to be simple and straightforward.

This paper does not purport to lay down dogmatic rules as to how that gap should be bridged ; it merely suggests a simple method of bridging it.

The authors have endeavoured to describe the proposed structure complete with all its details and calculations. They trust that your critical examination of it will be both searching and thorough.

### *The Improvement of Cases of Bad Lighting.*

Although in this country we are still protected from the more ghastly results of sky-scraper building, a typical example of which will be found in the Proceedings of the American Illuminating Engineering Society, Vol. IX., p. 646, yet cases of bad lighting can undoubtedly be found in many of our older industrial buildings. The typical modern factory has usually plenty of glass area. Some, in fact, appear to have too much, the glazed openings being unnecessarily large, and extended to positions where no useful light can enter.

It is quite possible to reduce the solid walls of a factory to a point where even exorbitantly expensive warming and ventilating plant will not suffice to keep the rooms reasonably warm in winter and healthily cool in summer.

But even these evils are preferable to the poky and often dirty little windows of the typical early Victorian factory. One finds only too frequently in palatial blocks of City offices back rooms devoted to clerks and typists, who have no trades union and no factory inspectors, most inadequately lit from light wells which the architect has been tempted to reduce to insufficient dimensions for the sake of additional floor space. It is true that such light wells are generally faced with white glazed bricks and occasionally they are cleaned. But even if such glazed walls could reflect 100 per cent. of the light incident on them and were kept perfectly clean, they could never equal the sky which they replace. A glazed wall facing south would certainly be in a position to reflect light from a portion of the sky which, *on fine days*, is of a greater average brightness than that which is opposite to a window facing north. But it is on dull days, not on sunny days, that the mischief is done. Even the best glazed facings waste some 20 per cent. or more of the light which falls on them in the process of reflection when clean, and considerably more when neglected. Also they can generally receive light from only a small portion of the sky, and are therefore necessarily much darker than the sky itself. In addition, they are often cut up by windows, the glass of which reflects practically no useful light.

The improvement of cases of bad natural lighting is invariably attempted on the general lines of making the most of what sky is left. Light coming from the sky at too steep an angle to enter the window or at least to penetrate far into the room is caught on inclined mirror reflectors placed outside the window and directed more or less horizontally into the room.

The same effect is obtained by the use of prismatic glass either glazed in the window sashes or used in the form of independent outer sashes inclined at a suitable angle to effect the desired refraction.

Much care has been directed to the production of these prismatic glasses, of which some excellent kinds (Luxfer, Pilkington's, etc.) are on the market, and when properly installed they can undoubtedly effect remarkable improvements in the lighting of basements and of rooms at the bottom of deep light wells.

Where light is required mainly in a horizontal direction as in basement stores, they are excellent ; but for clerical work the unnaturally horizontal direction which they give to the light and their tendency to specular reflection and glitter is undoubtedly bad, and rooms lit with them should always be so arranged and furnished that the occupants shall normally work with a side light.

The chairman (Mr. D. R. Wilson) remarked that quite 75 per cent. of work was carried on by daylight and it was therefore of great importance that provision of window space should be scientifically studied. He also referred to the very extensive series of measurements of daylight-conditions in factories made for the Home Office Departmental Committee on Lighting in Factories and Workshops, with which he was associated. The paper contained a most useful survey of the subject.

Mr. G. F. Collinson, F.R.I.B.A., expressed appreciation of the paper. Mr. J. W. T. Walsh, of the National Physical Laboratory, gave a brief account of some of the work done at the National Physical Laboratory on parallel lines. He was particularly interested in the formula proposed by the authors for the predetermination of daylight, which he had examined and found to be very accurate, the difference between the results given by it and by the very long and intricate exact formula being extremely small. The formula would be of great use in connection with their work at the National Physical Laboratory. As regards the author's comments on the National Physical Laboratory methods of measurement he realized that there was something to be said for the methods which involved comparison of indoor illumination with a direct observation of sky-brightness. The trouble was that so frequently one was unable to get a satisfactory observation of the sky, and in many buildings a measurement made through the glass of windows might be appreciably affected by variable absorption due to dirt.

Mr. J. Mackentyre (H.M. Office of Works),
Mr. A. Blok, and Mr. R. Langton C
F.R.I.B.A., also referred to the pape
appreciatory terms.

Replying to the discussion, Mr. P. V
dram pointed out that even the very s
difference between the authors' form
and the exact formula for a comp
window noted by Mr. Walsh was a
matically corrected by plotting the o
ing on the diagram.

A vote of thanks to the author
proposed by the chairman and secon
by Mr. Leon Gaster. Mr. Gaster reca
that Mr. P. Waldram had been a men
of the committee of the Illumina
Engineering Society concerned with
natural lighting of schoolrooms, w
reported in 1914. He also raised
important question of regulations b
ing on cleaning of windows in facto

At the conclusion of the discuss
much interest was taken in a series
models illustrating the methods descri
in the paper.

# The Use of White Lead in Paint

THERE has just been published the long-awaited Report of the Committee on Industrial Paints appointed in 1921 to re-examine the conclusions of the earlier Departmental Committees (appointed in 1911), which, it will be remembered, recommended in effect the total prohibition of the use of white lead for the painting of buildings. The report of the new Committee reverses the findings of the earlier Committees, saying that "from a general review of the evidence that has been placed before us, and in the light of the experience gained since the previous committees reported, we feel we cannot support their recommendation that the use of lead paint, for the painting of buildings, be entirely prohibited. We are satisfied that for outside painting, and for certain kinds of internal painting, there is at present no efficient substitute for lead paint."

The conclusions of the earlier Committees were very largely influenced by the evidence tendered by the officials of His Majesty's Office of Works that leadless paints had been used since 1907 with satisfactory results. The reversal of those conclusions by this new Committee was again greatly influenced by the fact that the Office of Works has now found it impossible to maintain public buildings effectively, and with due regard to national economy, with leadless paints. In an appendix to the report striking examples are given of the durability of lead paints, and the short life of leadless paints, on Government buildings. In the quadrangle of Buckingham Palace there were surfaces which were painted with white lead in 1895 which, upon examination in 1921, were found to be, although inevitably dirty and discoloured, "in a remarkably good condition, the protective qualities of the paint remaining unimpaired," whilst in other parts of Buckingham Palace leadless paints which had been applied so recently as 1913 were found in 1921 to have almost completely disappeared, the only paint which adhered being the white lead which had been applied in 1895. At No. 1 Whitehall, where zinc paint was applied in 1914, the analysis of the remaining paint-layer showed that there was only 1·8 per cent. of zinc oxide to 84·8 per cent. of white lead, so that "practically nothing now remains of the . . . zinc base paint applied in 1914, and . . . the protection still existing (in 1921) is due to the lead coats previously applied." Another appendix contains a summary of answers to questions addressed, at the instance of the International Labour Office, to Government departments, and to the more important City and county borough councils. These replies indicate that "apart from the enforced use of the substitutes brought about by war conditions, the replacement of lead paints had made little progress. During the war the use of leadless substitutes, often of an inferior character, was almost inevitable, and the experience gained was so unsatisfactory that a return to the use of lead paints, at least as regards buildings, was made as soon as possible." These replies emphasize the indispensability of white lead "in the atmospheric conditions of manufacturing cities"; "for under-coatings where there is exposure to sea air or sea water"; "for public baths and washhouses and for boiler-houses."

In regard to the hygienic aspect of the problem, the figures of lead sickness which are given show that the attack rate per thousand for painters is very much less than that for other lead industries (except for printing, where the numbers exposed to lead are a very small proportion of the total employed), being 4·5 for 1914, and only 0·28 for 1921. The Committee state that "the view that lead poisoning among painters is almost entirely caused by dust is now generally admitted," and that by far the greatest amount of dust is caused by "dry sandpapering of either old or new paintwork and, in a less degree, the chipping and scraping of old paint." They say that "it is now generally accepted by the trade . . . that dry rubbing down is no longer necessary, and that this work can be done by a damp process." This damp process has been made practicable as a matter of routine by the introduction of a waterproof sandpaper upon which technical reports have been made "which confirm its efficiency and which provide
convincing evidence that the da
method can be successfully adopte
"The remaining risks from dust . . .
from dry paint splashes on person
clothing, can be minimized only by
necessary provision for, and practice
personal hygiene."

The Committee therefore recomm
that legislative effect should be giver
a set of draft regulations (set out in
appendix) which have been prepared
the Painters' Industrial Joint Counci
collaboration with the Home Office,
which have been approved by the Natio
Federation of Building Trades I
ployers. These regulations comprise
prohibition of dry rubbing down,
provisions for cleanliness, medical
spection, notification, etc. The C
mittee indicate that they are satis
that these regulations will reduce t
minimum the dangers attendant on
use of lead paints.

It will be remembered that the d
convention proposed by the Inte
tional Labour Conference, 1921, prov
for such regulations and also for the
hibition (as from November, 1927) of
use of lead paints for painting interi
with somewhat wide permissive exe
tions for cases where lead paints are
dispensable, as for railway stations
industrial establishments. The C
mittee consider that this draft con
tion should be adopted, but point
that the use of leadless paints for inte
painting "is likely to involve an incr
of cost," a conclusion "based on the
sideration of the total outlay require
maintain, respectively, lead and exis
leadless paints in comparable condi
over a reasonable period of years." T
recommend, however, that the exe
tions should be further widened to
the case of other places where the
ditions require lead paints, such
"police and county courts, post offi
and other buildings which are frequer
by the general public."

The report finally suggests the appo
ment of a technical commission for
investigation of problems connected
British paint technology: such as
standardization of paints, the testin
new paint bases, etc.

nesday, April 18, 1923 Vol. LVII. No. 1476

# THE ARCHITECTS' JOURNAL & Architectural Engineer

*With which is incorporated "The Builders' Journal."*

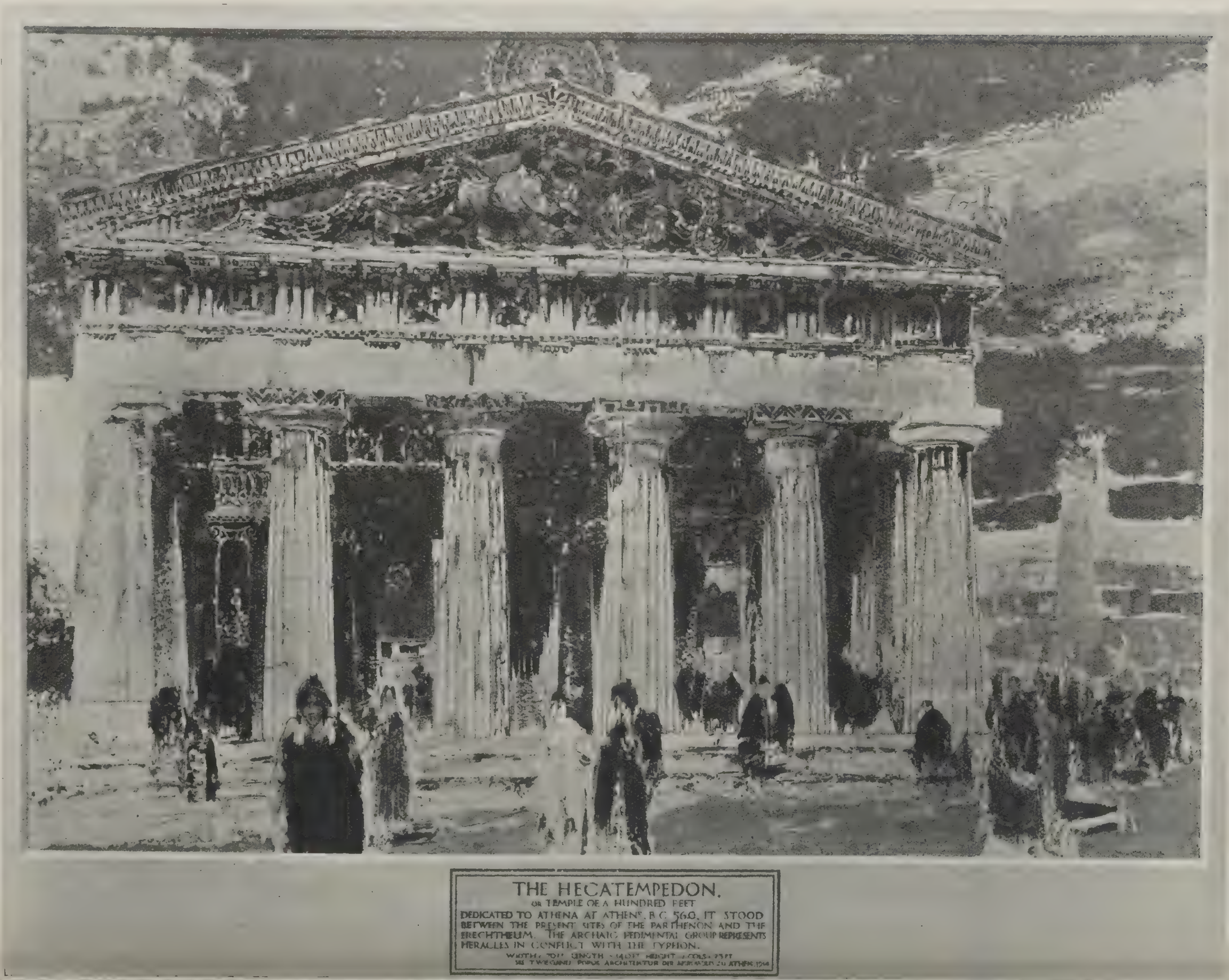
*Photo: D. L. Bridgwater.*

A VASE IN THE FAMOUS AVENUE AT VERSAILLES.

27-29 Tothill Street, Westminster, S.W.1.

The Hecatempedon, or Temple of a Hundred Feet

From a Painting by William Walcot, R.E.


THE HECATEMPEDON.
OR TEMPLE OF A HUNDRED FEET
DEDICATED TO ATHENA AT ATHENS, B.C. 560. IT STOOD BETWEEN THE PRESENT SITES OF THE PARTHENON AND THE ERECHTHEUM. THE ARCHAIC PEDIMENTAL GROUP REPRESENTS HERACLES IN CONFLICT WITH THE TYPHON.

THE
ARCHITECTS' JOURNAL
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# Architectural Criticism

RECENT events must have turned the minds of many to the oft-debated subject of architectural criticism. For our own part we have always maintained that architectural criticism on the ole is beneficial. That it may be degraded with person ties and subverted to petty ends is undeniable, but there no human pursuit but is capable of abuse. It is the nduct of the pursuit rather than the pursuit itself that y be ignoble. No art can flourish under public neglect l indifference, and the most vital art periods have been t those in which interest in art has been greatest. There indeed a constant action and reaction between the ist and the public, the one being stimulated to action l the other to appreciation and interest.

The history of art criticism is a study of much interest l brings with it many great names, of which one of the liest is Aristotle who may be regarded as the founder literary criticism. Thus at the outset we find that the ctions of creator and critic can be combined in the same son, and to turn to more modern times, some of the st, noblest, and most inspiring passages in English rature, Francis Thompson's essay on Shelley, Walter er's Renaissance, the writings of John Ruskin, to name a few at random, are in the form of art criticism. But production of such beauty is only one of the incidental antages of art criticism, and the one with which we are cerned is that the critic, by his utterances, stimulates interest of the public on whose behalf as a layman he aks, and this interest in its turn re-acts on the artist rring him ever towards higher things.

ll writers of the finer forms of literature have their nterparts in journalism, with their consequent broader less specialized appeal, and the art critic of to-day a definite place in the social hierarchy, his function ng, as it were, to epitomize, to guide and to stimulate lic opinion. His position is, therefore, at once one of t importance and responsibility, and for the wise and scientious fulfilment of it certain qualifications are essary. It is a regrettable fact that to-day much of the ent art criticism in our daily and weekly journals has pted a petty and personal note. Dignified criticism of past eschewed the first person singular, modern criticism ls in personalities and, for the most part, emphasizes ephemeral and incidental while ignoring the permanent essential. This is one of the facts which is responsible the opposition that has appeared in certain quarters nst the attempt which is being made to encourage and lop architectural criticism until it naturally assumes place in this respect alongside that of the other fine . Architects feel that they do not wish to be subjected he personalities of some journalist who screens his bad e and ignorance behind the veil of anonymity. Never- ess, the need does exist for the development of an ghtened tradition of architectural criticism, and it is her to the good of architects nor architecture that this ich of the fine arts should escape public critical atten- . The opposition to criticism would seem to be another manifestation of that aloofness which has such a disastrous effect upon the whole welfare of the profession.

The qualities which an architectural critic must bring to bear, in addition to a breadth of vision and a generosity of spirit—for an embittered critic is a source of much evil—is a knowledge of past achievements, of the difficulties and limitations both of conditions and of medium under which the architect works and of the present-day problems with which the architect is confronted, together with a sound judgment. Such qualifications can be acquired only gradually and as a result of patient study of all that is best of what has survived. Gradually a good critic will learn to accept that which is good, enduring, and satisfying and to reject that which is bad, ephemeral, and meretricious. But at the best his verdict is but a personal opinion and must be accepted as such. Nevertheless, according to his knowledge, his capacity, and his honesty, he will assist the less specialized public in the formation of their own standards.

The acquirement of standards for architectural criticism is, we admit, more difficult than for the other branches of the fine arts. For some of these the very intimacy of architecture with our daily lives is responsible. Others arise from certain extraneous qualities which architecture gathers to itself in the course of time, notably picturesqueness. This picturesqueness is ultimately of two kinds, which are so amalgamated with each other in infinite variations that in the particular it is difficult to decide the preponderant factor. The one kind is objective and takes effect entirely through the vision; the other is subjective and acts more directly upon the mind of the beholder. Both render serious criticism extremely difficult if definite standards are lacking. The objective picturesqueness is often nothing more than the legacy of time, the gentle mellowing of passing years, or sometimes a more ineffable quality caused by shadows, the particular lighting of the moment, or the choiceness of a background. The subjective picturesqueness arises from certain sentiments and emotions to which the contemplation of a building may give rise owing to the association of ideas or romantic suggestions. Whatever the cause, such influences constitute pitfalls for the tiro critic, for they are potent, insidious, and quite irrelevant.

It has been suggested that the power of the lay press to-day is so great and so often abused for personal and selfish ends that to encourage an interest in architecture is to court a danger which it would be far better to avoid. The Press, it is maintained, should deal only with expressions of fact and not opinion. It will be found, however, that often the distinction between facts and opinions is arbitrary. We know how facts can be distorted by suppressions here and emphasis there. Absolute impartial presentation is difficult, and the opinion of the writer colours all, but provided he states his opinion honestly that in writing he is not actuated by personal motives but by a desire to lead mankind towards a better appreciation of truth and beauty, we certainly feel that ultimate good will emerge from the development of architectural criticism. What common quality is in such diverse works as the Temple of Neptune at Paestum, the library at St. Mark's, Chartres Cathedral, St. Sophia, the St. James Club, Piccadilly? Whatever it be is it not desirable that the public should acquire a capacity for discrimination and appreciation? By so doing, not only would it bring a new interest into its own life, but it would also be in a position to assist in the building up of more beautiful towns; for however much the individual architect may strive to produce the best results, the larger aspects of our towns must ultimately reflect the outlook of the people, just because architecture is not a personal art but depends in its realization upon the assent and collaboration of untrained minds who are always in a position to impose restrictions and limitations.

## The Building Trade Dispute

The building trade employers and operatives are to be sincerely congratulated on their eleventh-hour agreement to submit their dispute to arbitration. As a result of this decision, the masters have withheld their notices, and the two main points at issue—the interpretation of the National Wages and Conditions Council Agreement and the question of wages—are to be referred to an arbitrator appointed by the Lord Chief Justice, together with two assessors. In addition, the men are to ballot on the question of longer hours, which will also go to arbitration if necessary. For this very satisfactory basis of agreement we have, first of all, to thank Lord Buckmaster, whose intervention in the dispute, though resented in some quarters, had the effect of clearing away the many entangling side-issues and directing attention to the validity or otherwise of the National Agreement. In the second place, we have to thank Mr. Ramsay Macdonald, who, by persuading the two parties to come together in a final attempt to find a *via media*, has rendered the country a notable service, besides enhancing his reputation for statesmanship. The validity of the National Agreement will be the first question to be considered by the arbitrator. If the operatives' contention is established—that the agreement holds good until March, 1924—wages will remain as they are, and we shall then have only to await the result of the ballot on hours, which has to be completed within a month. If, however, the employers' case is made good, the arbitrator and his colleagues will have to tackle the problem of a new wage basis. Everybody will wish them well in such an unenviable task if, in the event, they find themselves confronted with it. The employers are asking for an extension of hours from forty-four to forty-seven for the working week during summer time. The request, we think, is a reasonable one. The operatives' objection to it is that it can only tend to create more unemployment. This is a very unsound assumption, for obviously the resulting economies would cheapen building, and would consequently encourage people to build, and thus create *more* employment. Increased production is the primary necessity, and without it there can be no hope of improved conditions for the workers or for the return of our national prosperity. It is a matter for congratulation that both parties to the present dispute have throughout the negotiations maintained an attitude of reasonableness and moderation. Without goodwill on both sides we should by now have been involved in a stoppage that might have meant disaster. Never before, we think, has there been so general a realization that it is the public interest that finally matters, and that no one body of men should be allowed to inflict grievous harm upon the community, whether by lock-out or strike. The firm establishment of the principle of arbitration is another point to the good. The principal lesson to be learned from the dispute is, however, that industrial disagreements should never be allowed to reach the acute stage. It is far better to invite mediation at the outset.

## "Wembley's Big Landmark"

Every great exhibition or pleasure resort must have i giant attraction. This tradition apparently dates from th time of the transfer of the Crystal Palace from Hyde Par to the heights of Sydenham, when the tall flanking towe were added. M. Eiffel created some excitement when h built his tower for the Paris Exhibition, but he had by n means exhausted the possibilities of sensational constru tion. To somebody the idea suddenly occurred of combi ing immensity with *movement*, and then we had an epoc of big wheels, which, when they became stuck, with a loa of passengers at the top, were apt to provide rather mo excitement than had been intended. Numerous variatio of the idea followed: there were "revolving towers," wit a circular cage that took you up several hundred feet spir fashion; "flip-flaps," with long counterbalanced arms tha swept you through the sky in an immense arc; "flyin machines" that whirled you out into space by centrifug force. These things the public patronized in their thousand and some considerable fortunes must have accrued to th owners of the mechanisms. Remembering this, we are no surprised to learn that the British Empire Exhibition a Wembley is to have its giant attraction. This is to take th form of a "Fly-wheel Tower," 600 ft. high (900 ft. abov sea level), from the top of which it will be possible to se "the lights of Birmingham and of ships far out in th Channel." The tower is to be built of concrete, "stron enough to last for ever." But these things are not wante for ever; they have a habit of becoming old-fashione and end as they began—on ground level. Where is the bi wheel of Earl's Court to-day? There is a prophetic sign ficance in the fact that it was in Wembley Park the Watki Tower (demolished—what there was of it—over fiftee years ago) was planned to soar to a height of 1,200 ft. Bu we welcome this new tower of Wembley. It will doubtle enjoy immense popularity until somebody builds anothe from which you may get a view of New York.

## Exhibitions Old and New

Touching on the subject of great exhibitions, it is curiou to note how these places sooner or later lose their power appeal. Earl's Court, a great centre of attraction before th war, has never been revived, and now lies derelict. Th Crystal Palace, except upon rare occasions, such as do shows, band contests, and Handel Festivals, is generall deserted—or else the vastness of the place gives it th appearance of being so. Alexandra Park, on a smalle scale, has the same untenanted aspect. The White City i still closed, but we believe is to be opened again in du course. With all these places available it seems like a wast of money and effort to create new ones—in turn to fall int disuse and, possibly, decay. But in reality this is not s The building of a great new exhibition centre such as tha at Wembley is demonstrably beneficial. For one thing i creates an immense amount of direct employment; bu over and beyond this it has by its novelty and freshness stimulating effect upon industry that reacts to the ultimat benefit of the whole country.

## The Housing Bill

The Government's Housing Bill, the text of which wa issued last week, does little towards solving the housin difficulty. Its main proposal of a twenty years' subsidy £6 for the smallest type of working-class house or flat wil we should think, secure the very limited object aimed a But the housing shortage is widespread, and is nowher more acutely felt than by what are described as the middl classes, for whom no real provision is made. Another defe of the Bill is that it promises very little with regard to th clearance of slum areas; but it must be remembered tha Mr. Chamberlain has intimated that another Bill dealin with this pressing problem will be introduced later in th year. The immediate duty of all who have any regard f the welfare of a very considerable section of the communit is to press the Government to extend the scope of the sub sidy to the parlour type of house.

# Mr. William Walcot's Ancient Temples

## By MALCOLM C. SALAMAN

SO enthusiastic a student is Mr. Walcot of every aspect of life in ancient Rome, Greece, and Egypt, so alive is his archæological knowledge, so creative his architectural imagination, that antiquity would m to hide no secret from him, and no fragment of a ssic ruin can deny him a pictorial vision of the original ilding in its completeness, amid all the peopled circum- nce of its functional condition. And this vision he is vays ready to set down th distinguished art upon ivas or copper-plate. He uld have earned a liberal asure of gratitude from nt-collectors, who trea- e them, and architects, o may draw inspiration m them, had he wrought thing but that noble series etchings known as the oman Compositions," in ich, with artistic fusion knowledge and imagina- n, he has reconstructed great buildings of Im- ial Rome, not merely as y might have looked, but they must have looked, hen Plancus was Consul." t now, as we are pri- ged to see in the gallery the Royal Institute of tish Architects, Mr. Wal- is offering students a ther inspiration; for he is ivifying the vanished or gmentary temples of the ients with the same pic- ial magic that on his per-plates transformed storied ruins of Rome the animate structures their olden glory. Not medium of etching, how- r, has he chosen for this h adventure, which has upied him of late years his studio at the British ool in Rome, but as a nter with a full palette has aimed at showing the chromatic splendour with ich the ancients were wont to decorate their temples, l so interpreting something of the emotional expression eligious and national life that the Temple stood for.

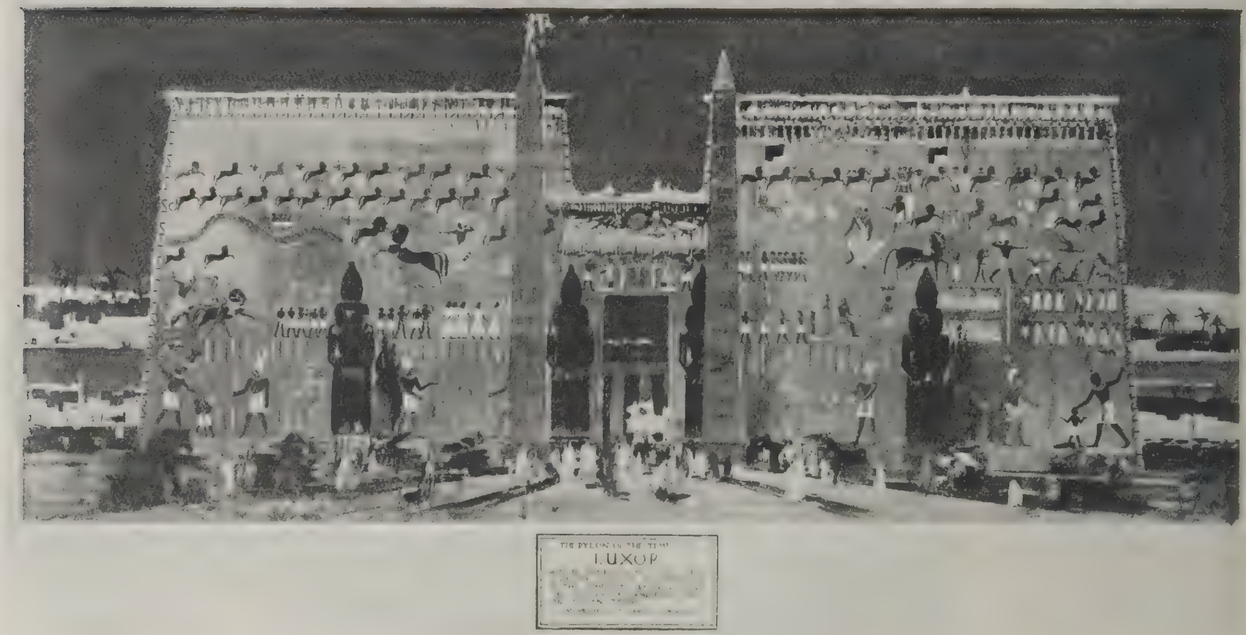
MR. WILLIAM WALCOT, R.E., F.R.I.B.A

hese dwelling-places of the Gods have long lured Mr. lcot's imagination, and so richly has he stored his mind h the lore of antiquity that when he makes his dream- rneys into the distant past there are for him at Rome, or ens, or Ephesus, at Selinus, or Baalbec, or Luxor, no s or vacant places where famous temples once were onged with worshippers. But on his return to the actual dern world he simply makes his plans of those wonderful ples as he has visualized them in their ancient splendour, rebuilds them upon his canvases as surely as if he were ly one of the architects of Tarquin or Hadrian or neses II. With Vitruvius at his fingers' ends, all avail- documents, of course, he has examined, all the re- ches and conjectures of the archæological authorities as studied and absorbed, but his imagination, with its l constructive power, has taken him beyond the known into the unknown, and the result is these glowing, living visions of the past, which help us to realize that life among the ancients was lived not in a cold classicality of pale-hued togas and white marble, but with such fervour and gaiety of spirit as could delight in the brightest of colouring.

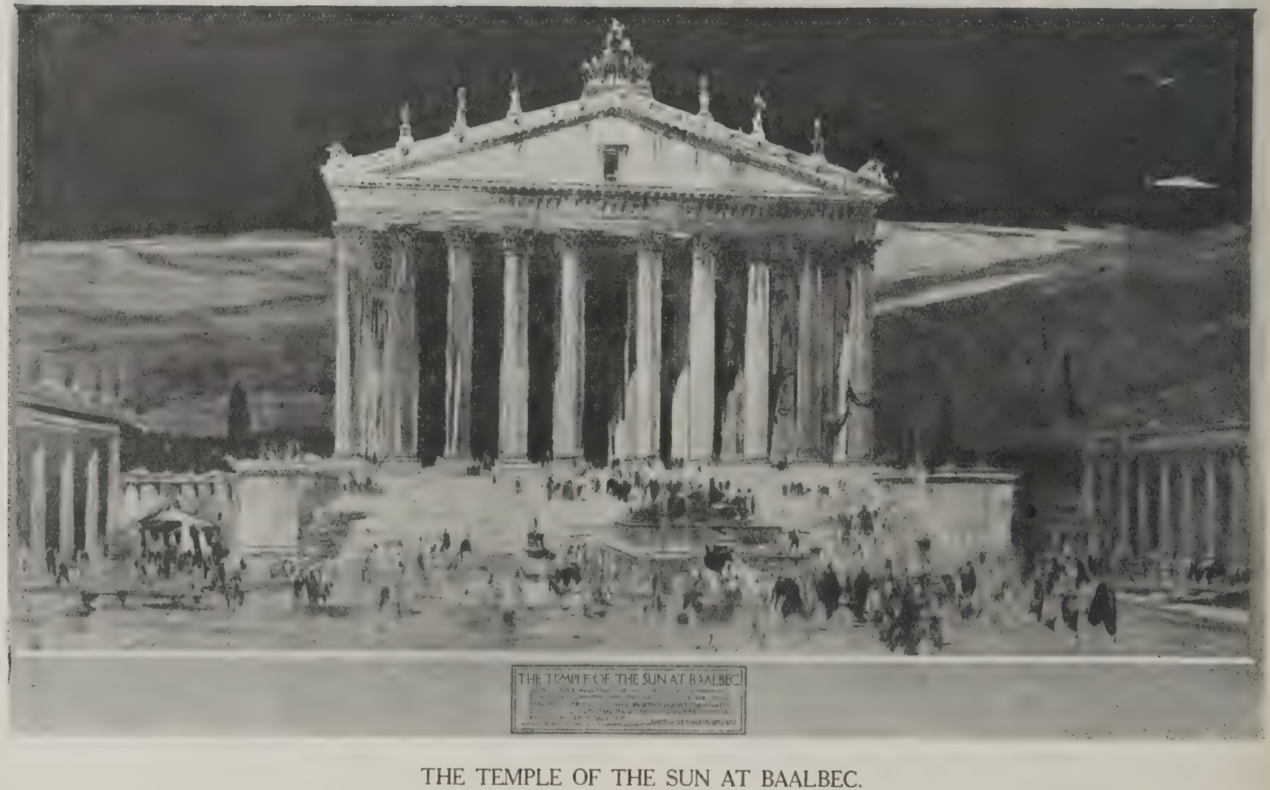
How the early Roman temple derived from the Etruscan model; in what several manners Greek, Roman, and Egyptian provided for the needs of worship and ritual; how the Greek and Roman differed in the matter of substructure, the Roman podium instead of the Greek stylobate of steps; in what relation the altar stood to the temple, and with what traditional beauty and dignity of building and sumptuousness of adornment these wonderful temples arose upon their sacred sites, all this Mr. Walcot knows more thoroughly, perhaps, than he knows how some of our newest shop façades can justify themselves in London streets. That any such temple was regarded by the ancients as one of the wonders of the world does not daunt his pictorial imagination, rather is it an incentive; thus, as we walk round the galleries at the Royal Institute of British Architects we find ourselves face to face, for instance, with the great Temple of Diana, or Artemis, at Ephesus. This, which was said to have eclipsed all other temples in magnificence and renown, was rebuilt seven times, and it is the seventh and last wooden archaic temple that Mr. Walcot has chosen to picture with its gay and brilliant colouring, in which green jasper plays an important part amid the blue and red, impressively set off by a dark, starry sky. This is the building, we may suppose, that Herostratus burnt down in 356 B.C., on the very night that Alexander the Great was born, actuated by the vanity of perpetuating his name in connection with so world-shaking a deed. The eighth building was more magnificent than ever before—and a few of its fragments may be seen in the British Museum; but Mr. Walcot presumably gave preference to the last of the wooden edifices because of the greater scope it allowed his generous sense of colour, and he has given us two views of this temple.

The primary and secondary colours would seem to have been largely used in the decoration of these ancient temples, to judge by Mr. Walcot's evident delight in them, and, even if one were not sure that he must have excellent authority for this, one would gladly commend the pictorial inspiration that placed those brilliant reds, blues, and greens in such impressive juxtaposition, not only in the columns and decorative details of the buildings, but in the costumes of the priests, worshippers, and great personages who constitute the pageant of the ritual. This blaze of colour may be a

# Mr. William Walcot's Restorations of Ancient Temples



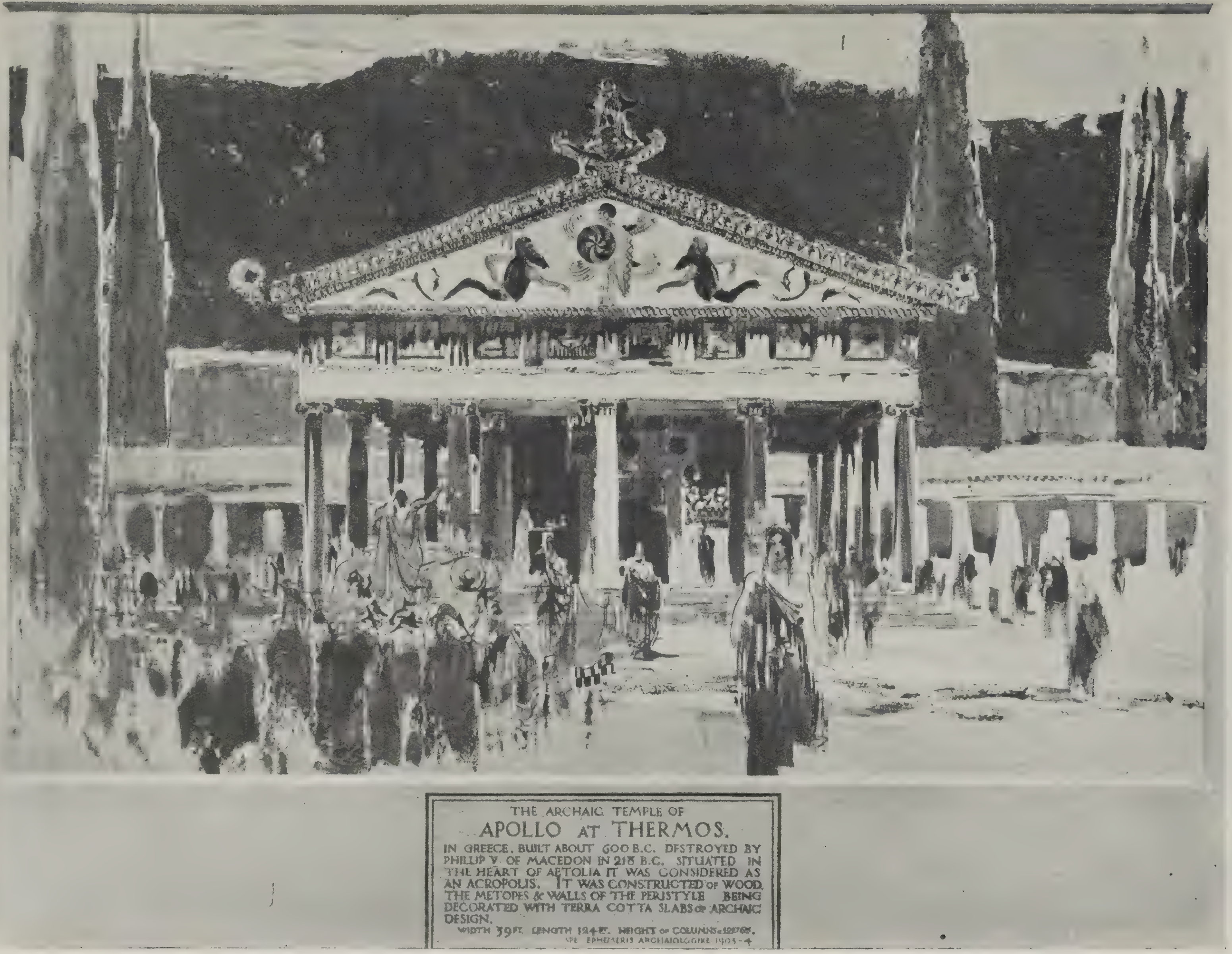
THE PYLON OF THE TEMPLE OF LUXOR.


THE TEMPLE OF THE SUN AT BAALBEC

THE TEMPLE OF THE SUN AT BAALBEC.

The Archaic Temple of Apollo at Thermos

From a Painting by William Walcot, R.E.


THE ARCHAIC TEMPLE OF
APOLLO AT THERMOS.
IN GREECE. BUILT ABOUT 600 B.C. DESTROYED BY PHILLIP V. OF MACEDON IN 218 B.C. SITUATED IN THE HEART OF AETOLIA IT WAS CONSIDERED AS AN ACROPOLIS. IT WAS CONSTRUCTED OF WOOD. THE METOPES & WALLS OF THE PERISTYLE BEING DECORATED WITH TERRA COTTA SLABS OF ARCHAIC DESIGN.
WIDTH 39FT. LENGTH 124FT. HEIGHT OF COLUMNS c 12FT 6.
SEE EPHEMERIS ARCHAIOLOGIKE 1903-4

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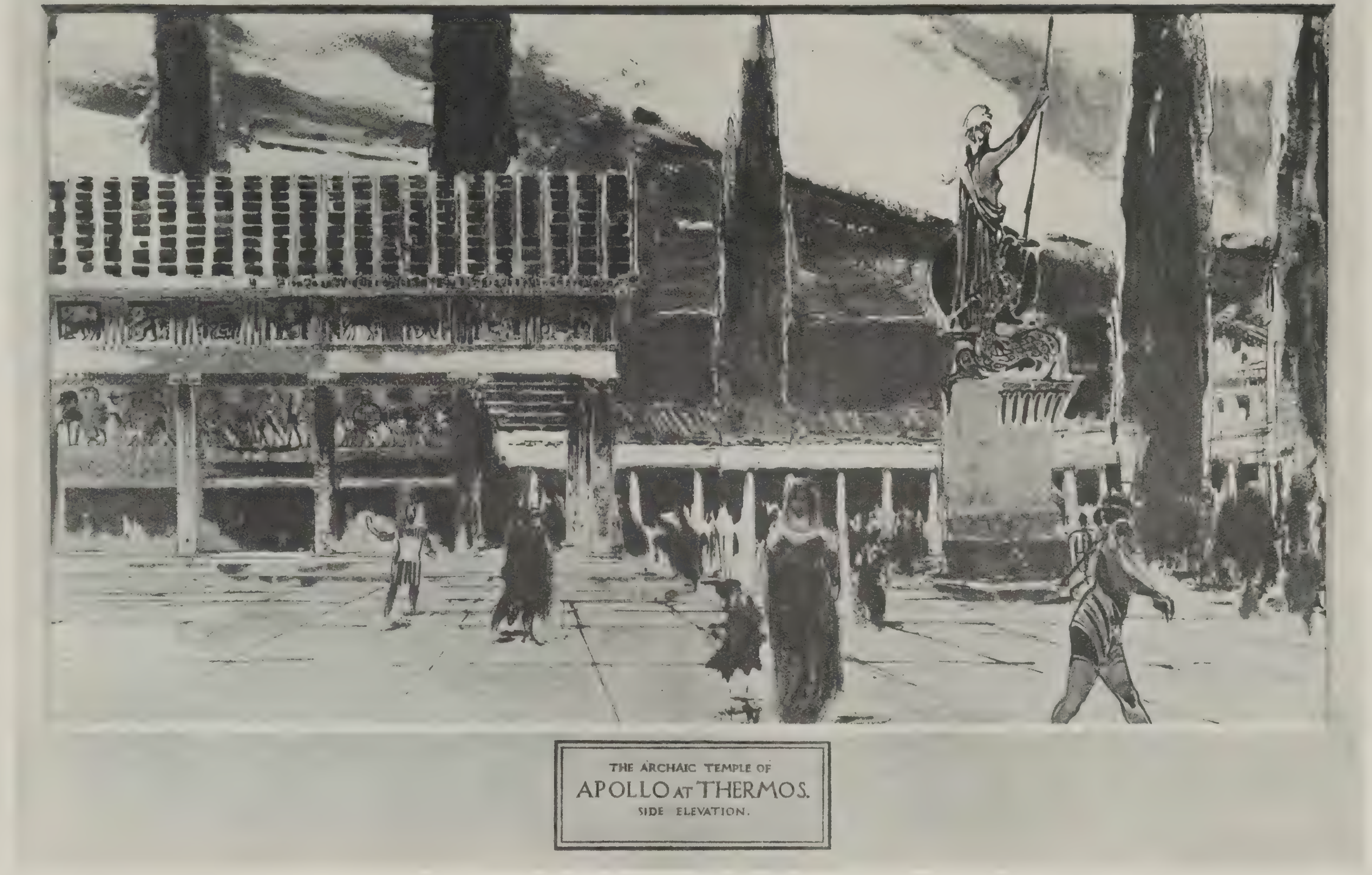
The Archaic Temple of Apollo at Thermos: Side Elevation

From a Painting by William Walcot, R.E.


THE ARCHAIC TEMPLE OF
APOLLO AT THERMOS.
SIDE ELEVATION.

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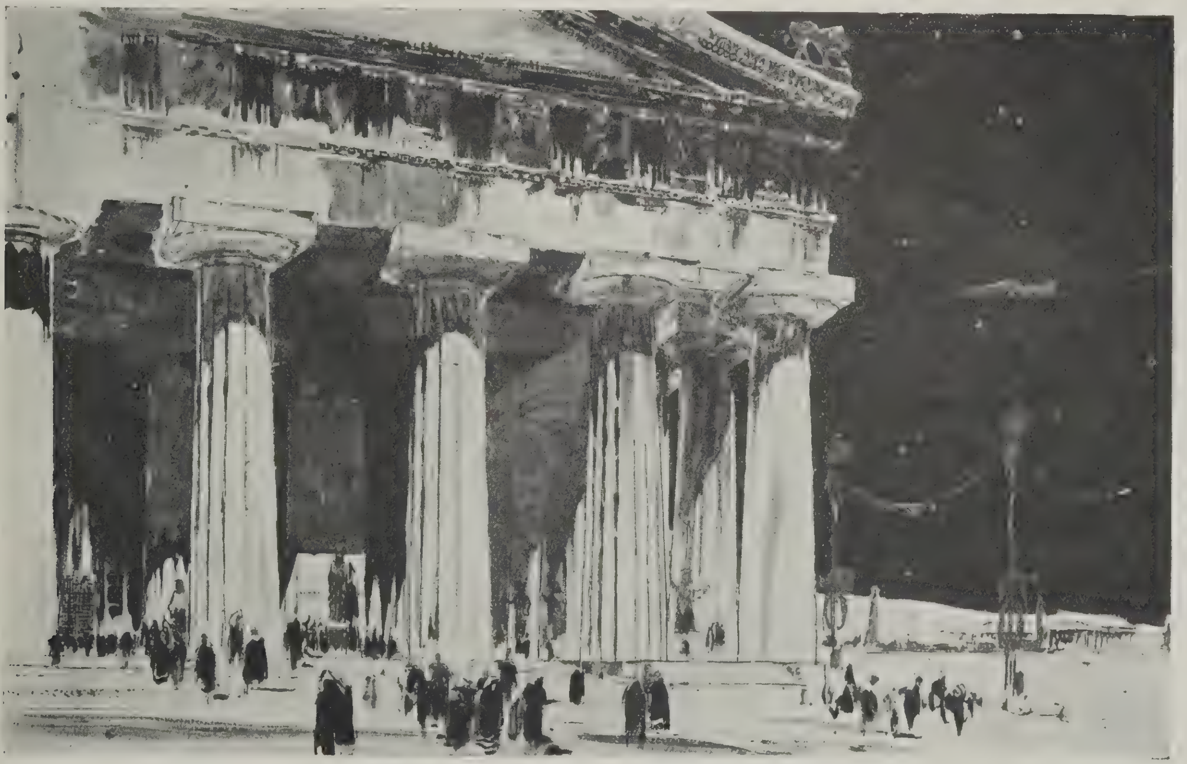
tle startling at first when one sees it on the canvas repre-
nting "An Early Etruscan Temple in its Original Barbaric
rm," but one is quickly reconciled to it in the splendid
ture of the "Etruscan Temple of Jupiter Capitolinus."
. Walcot has imagined here the first of the four great
nples which stood in turn upon the Tarpeian Rock, that
ich was begun by Servius Tullius, finished by Tarquinius
perbus, and consecrated by Horatius, the Consul, in
9 B.C., after Rome had expelled the Tarquins. This first
nple, which was burnt in 83 B.C., was, as Mr. Walcot
ows us, barbarically ornate in colour, and nobly built,
th open pediment for the light to enter, and an ascending
proach of one hundred steps for the worshippers and
ppliants of the god, while on either side Juno and Minerva
d each her temple, in accord with the custom borrowed
m the Etruscan religion.

Mr. Walcot's architectural imagination has been inspired
ain to pictorial reconstruction by the Temple of Apollo
Thermos in Aetolia, which, built of wood brightly painted,
th the metopes and walls of the peristyle decorated with
ra-cotta slabs of archaic design, was destroyed in 218 B.C.
er standing some 400 years. Then here, charmingly
sented, is the famous Temple G., dedicated to Apollo,
as some think, to Zeus, that stood majestically in its
omplete beauty on the cliffs at Selinus in Sicily, its
ilding never finished, though begun in the far-away past
d resumed from time to time until 409 B.C. The slender
l columns festooned with green suggest a gracious festival.
e Temple of Luxor Mr. Walcot has, of course, not been
e to resist, and he shows not only the four great statues
Rameses II, but the sculptured reliefs on the pylon walls
ebrating the Pharaoh's wonderful victory over the
eta at Kadesh. Perhaps the most charmingly pictorial
Mr. Walcot's paintings is "The Acropolis, Athens, after
Roman Restoration," a subject that has naturally
hanted his vision The classic beauty of the Heca-
npedon, or Temple of a Hundred Feet, dedicated to
hens' presiding goddess, which stood between the sites
the Parthenon and the Erectheion, also claims admira-
n as our artist presents its noble proportions, while in
decoration of the pediment he shows Hercules struggling with the Typhon, a wondrous coiling monster. Not the least, perhaps even the most, impressive of all Mr. Walcot's pictures of the temples is that which hangs by itself among the etchings in the smaller gallery. This is the Temple of the Sun at Baalbec, which even in its ruined condition is still accounted one of the most wonderful and beautiful relics of ancient architecture dedicated to the worship of the gods. Mr. Walcot shows the temple standing, in its original perfection, under a deep blue sky against its magnificent background of the mountains of Lebanon. In a great square court, flanked with porticoes, the altar stands, and some ceremonial of worship is in progress. The mighty stones of Baalbec have served in turn the Pagan and the Christian worshipper, and I am tempted to quote from a description of a visit to the ruins some sixty years ago. "The Temple of Jupiter, under the deceptive lighting of the moon, looked perfect. It seemed as if just finished by the architect, and to-morrow might be the day of its dedication. To-morrow Antoninus, Pontifex Maximus, might himself be coming to consecrate it to mighty Jove. The religion of the Roman has been celebrated there. Sacrifices to the gods of Baalbek were offered there for near four hundred years after the Christian era. Then another religion occupied its halls and shrines. The Christians possessed it. The Cross was erected where the beardless statue of Jupiter had stood. The Bishop of Heliopolis sat in the Council of Antioch. Three centuries heard the hymns of the Church chanted in its temples, and the lay processions of the priests swept through its Hexagon and Quadrangle. Then war was in the land. The exterminating conquests of the Crescent, with a tide of blood, flowed from the ocean-board to the deserts of Damascus, and quenched the lamps that had burned everlastingly before the altars of the City of the Sun."

Students not only of architecture but of ancient history also should visit this stimulating exhibition in Conduit Street, while lovers of etching will find there, in addition to all the familiar plates of the "Roman Compositions," a new etching of great beauty and distinction, called "An Egyptian Palace," which Mr. H. C. Dickins will shortly publish.



RESTORATION OF A TEMPLE AT SELINUNTE, SICILY.

*(From an Original Water-colour by W. Walcot, R.E., F.R.I.B.A.)*

# The Homes of Well-known Architects

## 3.—Mr. Raymond Unwin's House, "Wyldes," Hampstead

THE ridgeway which runs across Hampstead Heath to Highgate is well known as The Spaniards. On either side the Heath falls away in ancient and ragged patches. In many places, as it is now, the old prints and paintings show it to have been a hundred years ago. London Town has crept up to and around it like a tide, but in its venerable aspect the Heath remains the same. And in spite of the asphalted and lamp-lighted road which now crosses it, I never look down upon it without its conjuring up a picture of Haggard Egdon in my mind.

Many of its trees must at one time have formed part of the great Middlesex forest, and the firs that were painted by Constable still stand sentinel at its farthest end.

"Wyldes" lies down under the side of the Heath which looks to the new garden suburb. It is an irregular, rambling group of buildings, with red-tiled roofs, weather-boarded walls, and hatchet-hewn beams of black oak. It consists of the Home Farm and its barn and outhouses of former days made into one dwelling, a bit at a time, as suited the convenience of successive tenants. "A hundred and fifty years back," says one historian of the place, Mrs. Arthur Wilson, "the Home Farm was old. It must be ages ago since the first fire was kindled in the wide ingle-nook beneath its central chimney."

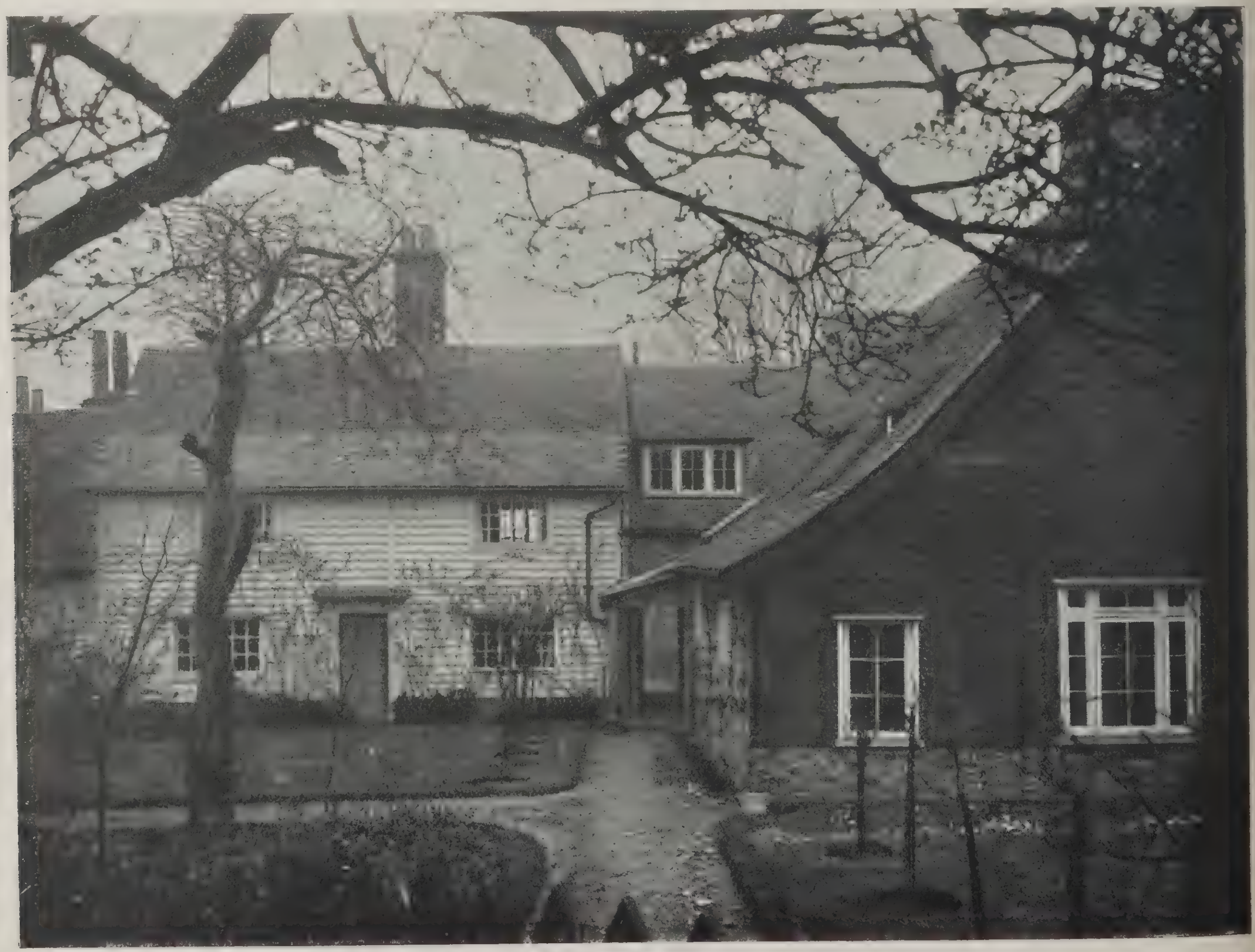
There is a history behind "Wyldes," and the name appears upon the oldest maps. The origin of the name is lost in antiquity. Possibly it is identical with the ordinary English word *wild* or *wilds*, and like it derived from the Anglo-Saxon, signifying a far-off or uninhabited place.

"For 454 years," says Mrs. Wilson, writing in 1904, "'Wyldes' has been the property of Eton College; but during a far longer period its traces can be dimly follow through mediæval mists, for the story of these green pa tures and smiling cornlands leads us afar, to the strife churchmen and the courts of kings."

The estate in the parish of Hendon known as Wyld was held by Eton College as Trustees for St. James's Ho pital for Leprous Maids at Westminster, and when Hen VIII suppressed the hospital and installed St. James Palace and St. James's Park on its site, the college w allowed to retain Wyldes in its own right. Isolated from other possessions, the 320 acres of Wyldes came down one tract, and with but slight changes, until the planni of the Hampstead garden suburb, which is now laid ou acre by acre, upon this ancient ground.

In a short article in "The Hampstead Annual" upon t old house and its associations, Mrs. Wilson sketches t history of the place during the last century. At the begi ning of the century the house was the Home Farm, and w occupied by John Collins, who, and his sons after him, we dairy farmers. Besides the produce of their sixteen cow they sold strawberries, currants, and apples. Drinkin water, at five farthings a pail, was supplied from the vario wells on the farm, and was delivered by a man carrying yoke and two buckets. It must have been an excelle tonic, for no ordinary pipes will stand the corrosion of t iron it contains.

Having more room than they required, the Collins l part of the house, and hither, in 1823, came John Linnel the painter, with his family. The next year, Linnel retaining his house in Cirencester Place as a studio onl took one end of Collins's farm as a permanent abode, an here he was visited by Morland and Constable, Varle



THE HEATH FRONT.

# Wyldes, Hampstead. The Residence of Mr. Raymond Unwin, F.R.I.B.A.

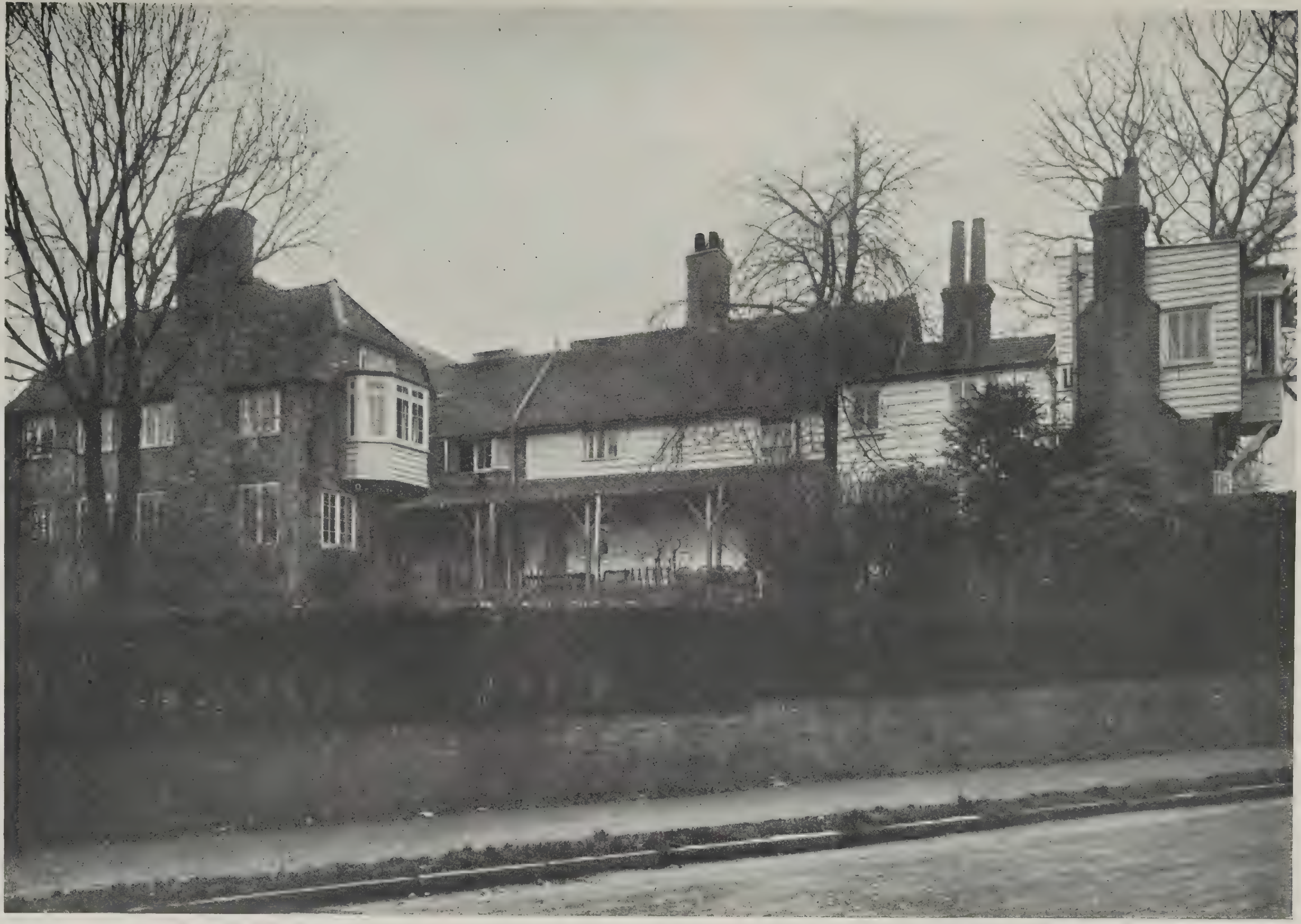


*Photo: Architects' Journal.*

In a quiet corner of Hampstead, between the Heath and the Garden Suburb, stands an old wooden house known locally as Wyldes Farm. It is probably the oldest house in Hampstead, and parts of it date back to pre-Tudor times.

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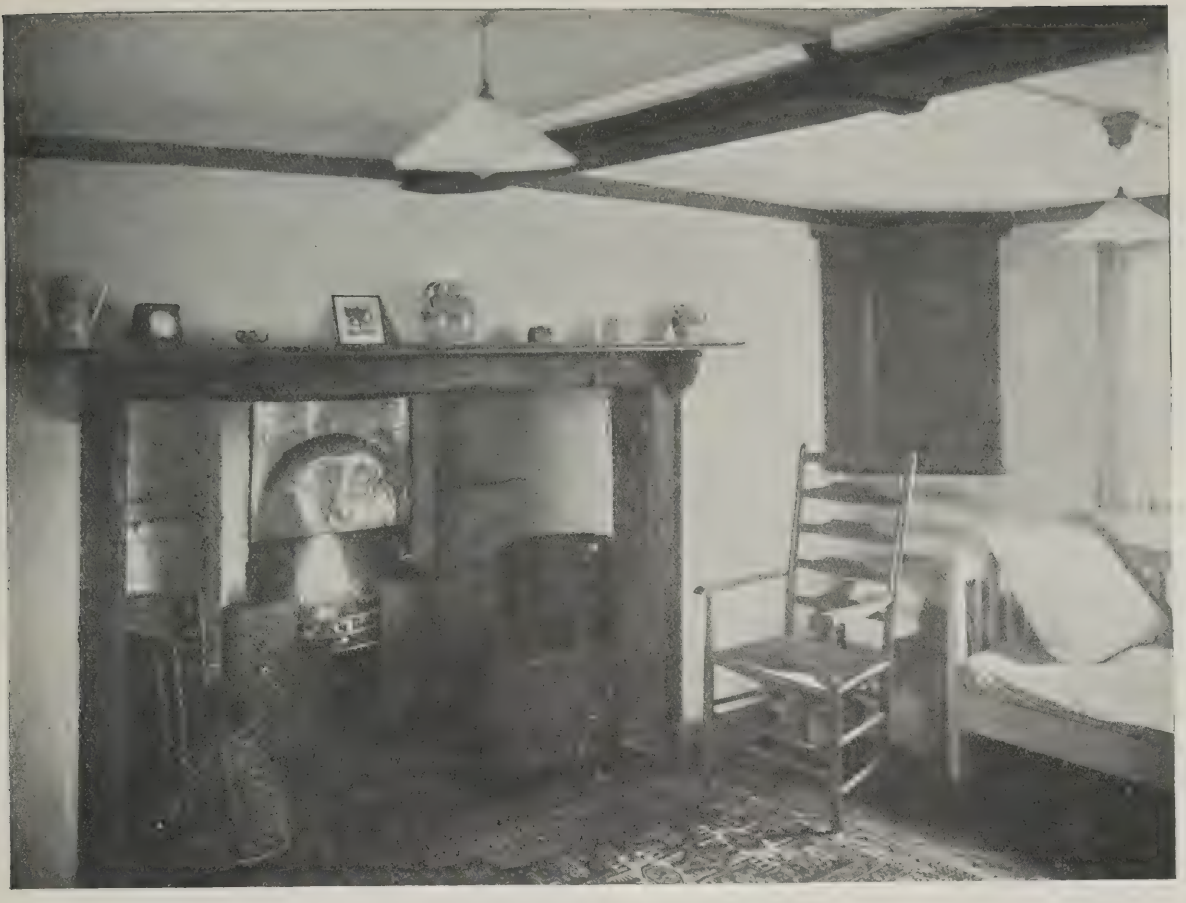
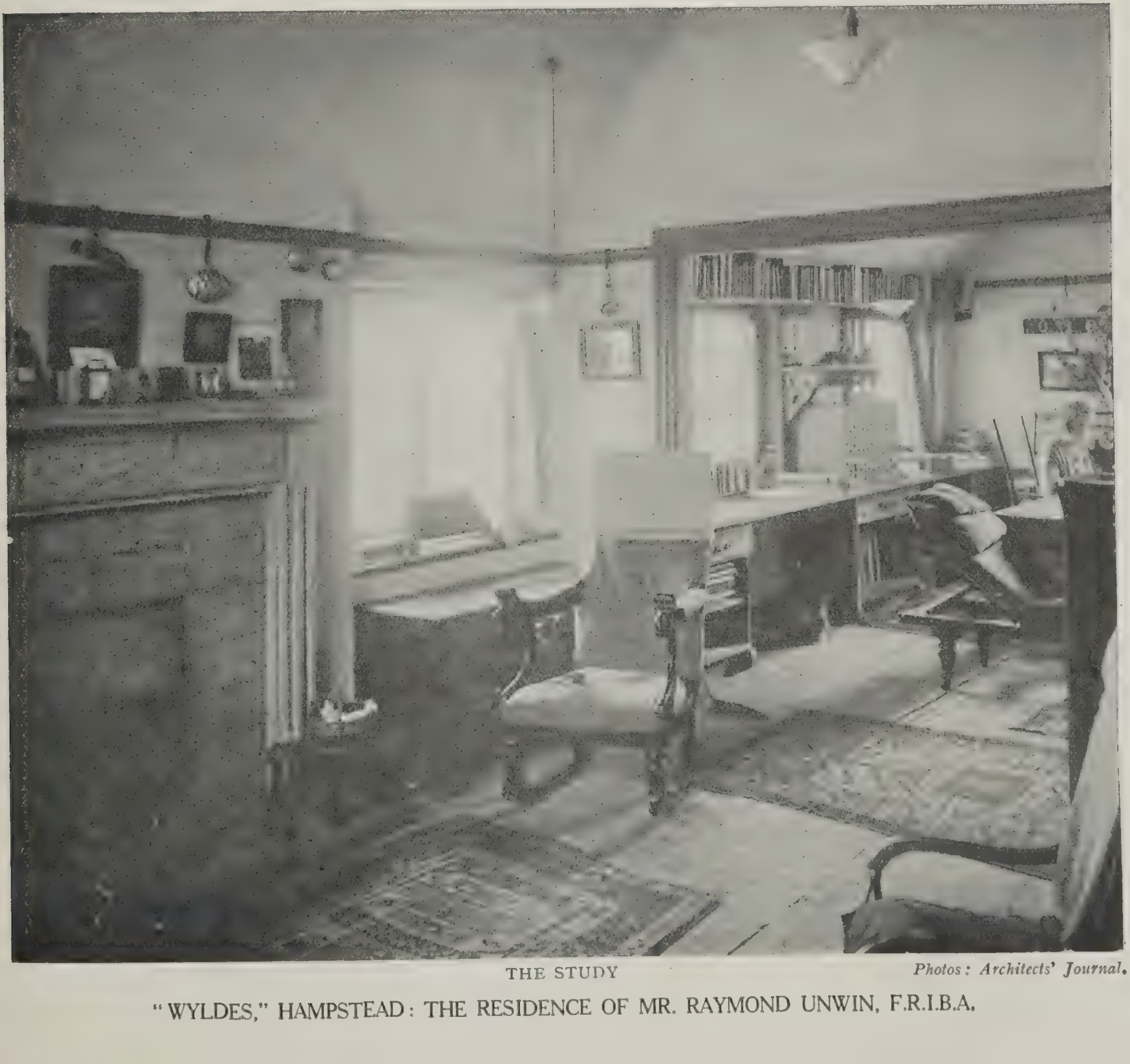


AN OLD FIREPLACE ON THE GROUND FLOOR.



THE STUDY *Photos: Architects' Journal.*

"WYLDES," HAMPSTEAD: THE RESIDENCE OF MR. RAYMOND UNWIN, F.R.I.B.A.

Thornton and Blake. The last stayed for weeks at a time, but as there was no bed for him in the Linnell's four rooms at the farm, he slept at Hope Cottage in the village.

In 1826 Linnell built an additional room, a lean-to kitchen, with his own hands. He probably had the still-existing hob grate put into the ingle-nook of his parlour, the old "house-place." In 1827 his health broke down, and he removed to Bayswater; but the Collins's, and Mr. Sharman after them, continued to let the end of the house, which had been arranged as a cottage distinct from the rest. It had a separate entrance and a staircase running straight up out of the dining-room, with a coal-hole underneath.

This primitive little place became the country retreat of a succession of more or less well-known persons, some of whom were merely temporary lodgers, and others permanent tenants. Many artists and literary men lodged here from time to time, amongst them Lover, Birkett Foster, and Charles Dickens. The last-named used occasionally, when he visited at North End in later life, to bring a friend to see the old place where he had stayed as a young man.

Meanwhile, the other end of the house had been joined to the adjacent barn by a little upper chamber, built by John Collins for his daughter, the passage below walled in and a dairy constructed within the barn itself. The outbuildings beyond were later made into a parlour and bedroom, and gradually the whole barn has been transformed into a wing of the dwelling-house, whilst the cottage has again become a part of the main building. H. JOHNSON.

[The previous articles in this series appeared in our issues for November 22nd, 1922, and January 17th, 1923.]

Photo: Architects' Journal.

THE OAK ROOM.

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# The New Imperial Stadium at Wembley

## JOHN W. SIMPSON, PP.R.I.B.A., and MAXWELL AYRTON, F.R.I.B.A., Architects

THE great Imperial Stadium at Wembley Park (in the grounds of the British Empire Exhibition), which has been built at a cost of nearly £300,000, is now ready for the Cup Final on April 28. The immense popularity of this event made it imperative that accommodation should be provided for at least 125,000 spectators, all of whom should have an uninterrupted view of the game. This object has been admirably achieved by the combined efforts of the architects (Mr. John W. Simpson, PP.R.I.B.A., and Mr. Maxwell Ayrton, F.R.I.B.A.) and the engineer (Mr. E. O. Williams, B.Sc., A.M.I.C.E.).

The Stadium, which is well shown in the accompanying photographs, plans and sections, is of immense size, the overall length on its major axis being 900 ft., and the maximum overall width 650 ft. It contains at its centre a round-headed oblong of grass measuring 492 ft. long and 260 ft. wide. Around this there is a cinder running track, which, in turn, is encircled by a wide-stepped slope for spectators, beyond which begins the structural work, with its terraces of concrete steps. These for a length of 650 ft. on each side of the Stadium are roofed in, and provide seating accommodation.

Before coming to a consideration of the structure, we may give some particulars of the general accommodation provided.

For the purpose of general reference the Stadium has been divided up into four wings: north, south, east, and west. The north wing includes the north grand stand and enclosures and ring seats within the enclosure boundaries. The south wing includes the south grand stand, enclosure, and ring seats within the enclosure boundaries. The east wing consists of the east terraces and ring seats, and the west wing, the west terraces and ring seats.

The accommodation for spectators is distributed as follows: seated grand stands, 24,586; ring, 9,799; standing enclosures, 33,151; terraces, 57,665. Total, 125,201.

There are only three entrances to the arena, namely, the Royal entrance, the players' entrance, and the athletes' entrance.

In order to enable athletes to reach the Royal box satisfactorily for the purpose of receiving prizes, a special staircase has been erected, following the line of the enclosure, and passing over a gallery immediately in front of the box. Athletes will be enabled to pass up one staircase and cross in front of the box and down a second staircase on the opposite side.

The Royal box is situated in the centre of the north stand, and is approached by the Royal entrance beneath the stand which leads only to the box and on to the track. It is possible to enter the banqueting hall through a withdrawing room situated immediately below the Royal box; otherwise access to the Royal box is only by way of the Royal entrance.

Accommodation for approximately 1,000 competitors has been arranged for. This is situated under the stand in the east wing and in the north wing. The quarters contain lockers and an adequate number of shower baths and hand basins. Athletes will be able to pass from their dressing quarters into the arena by a direct gangway.

Provision is made in the permanent training quarters for a board room of sufficient dimensions to meet the requirements of any association using the Stadium.

A box office is established in the training quarters for the purpose of dealing with tickets for big meetings such as the Final Tie.

A large gymnasium is situated in the permanent training quarters in the west wing, and is of such a size as to be available for displays. Temporary seating accommodation for 250 spectators is provided.

A large recreation room capable of holding three billiard tables and reading tables is constructed in the permanent training quarters.

A banqueting hall has been planned to seat approxitely 1,000 people. It is situated in the north wing and rlooks the rest of the exhibition grounds.

The terracing and enclosures are divided by means of riers which are placed in such a way as to overlap the rier immediately in front. It has been found by prac- that crush barriers laid out in this manner are more isfactory than "penning."

Buffets will be opened in the south wing immediately ler the grand stand on the first floor. These will be manent. Temporary buffets will be opened in the east l west wings to meet the requirements of a big crowd upying the terraces.

Adequate cloak-room accommodation is provided to et the requirements of the greatest number of people it are likely to attend a function in the banqueting hall. ese rooms are situated immediately in the rear of the nqueting hall.

Athletes will enter the arena through the gangway in the st wing leading from the main corridor directly on to the ck. Stewards will be detailed to control the passage of hletes crossing the track when big meetings are being ld in the Stadium.

Judges, etc., for athletic meetings will be admitted to arena through the players' entrance leading from the ining quarters.

Football players will gain admittance to the arena rough an underground passage leading from the training arters in the west wing direct on to the track.

The entrances to the various parts of the Stadium lead in nost every case directly from the main circulating corri- r which is situated under the superstructure of the adium. All these entrances are capable of being closed nen required, and certain of them are controlled by means turnstiles whereby it will be possible to check entrances.

A main entrance to the Stadium is constructed about o yards from the west wing leading in from the Wembley ll Road. This entrance is so constructed as to meet the quirements dealing with the largest number of people at are likely to gather in the Stadium. Until May 1924 is will be the only direction from which it will be possible gain admittance to the Stadium, but after that month is hoped that spectators arriving at Wembley Park ation will be diverted through the Exhibition ground.

The public entrance to the Stadium is arranged in two groups. The one leads off from the main circulating corridor of the Stadium building to the terraces of the east and west wing, the stand of the south wing, and the enclosure of the south wing. The second leads from the monumental building over the park and admits to the grand stand and the north wing.

Entrance to the principal part of the north stand is gained through the tea-rooms situated above the banqueting hall.

At present heating arrangements are installed in the training quarters, and all the buildings in the north wing, which comprise the banqueting hall, tea-rooms, etc.

An observation gallery is constructed in the west wing over the permanent training quarters. This gallery is in telephonic communication with all parts of the Stadium.

Office accommodation is provided in the permanent training quarters. There is an adequate number of offices for the Stadium administration, as well as those necessary for control of a permanent football club.

A Press gallery is constructed in the north wing above the tea-rooms. It is fitted out to meet the requirements of reporters. Telephonic and telegraphic communication direct to the Exchange is installed, and it is hoped that the Post Office authorities will establish a Press telegram receiving office. The gallery is fitted with Press seats capable of accommodating at least one hundred reporters.

Special Press seats are constructed immediately in the rear of the seats behind the Royal box. A gangway leading direct to the Press gallery enables Press messengers to take their messages uninterruptedly to the telephone boxes.

A space of 16 in. is allotted for each ring seat, the only division mark being a painted line.

A space of 17½ in. is allotted for a grand stand seat, there being a division between every three seats.

Turnstiles to the number of seventy-two are situated in the main entrance to the Stadium. A further twenty-four turnstiles are placed in the Stadium building at appropriate places in order to facilitate the control of spectators entering the Stadium from the exhibition grounds during the period of the exhibition.

There are two tracks in the Stadium, one a quarter of a

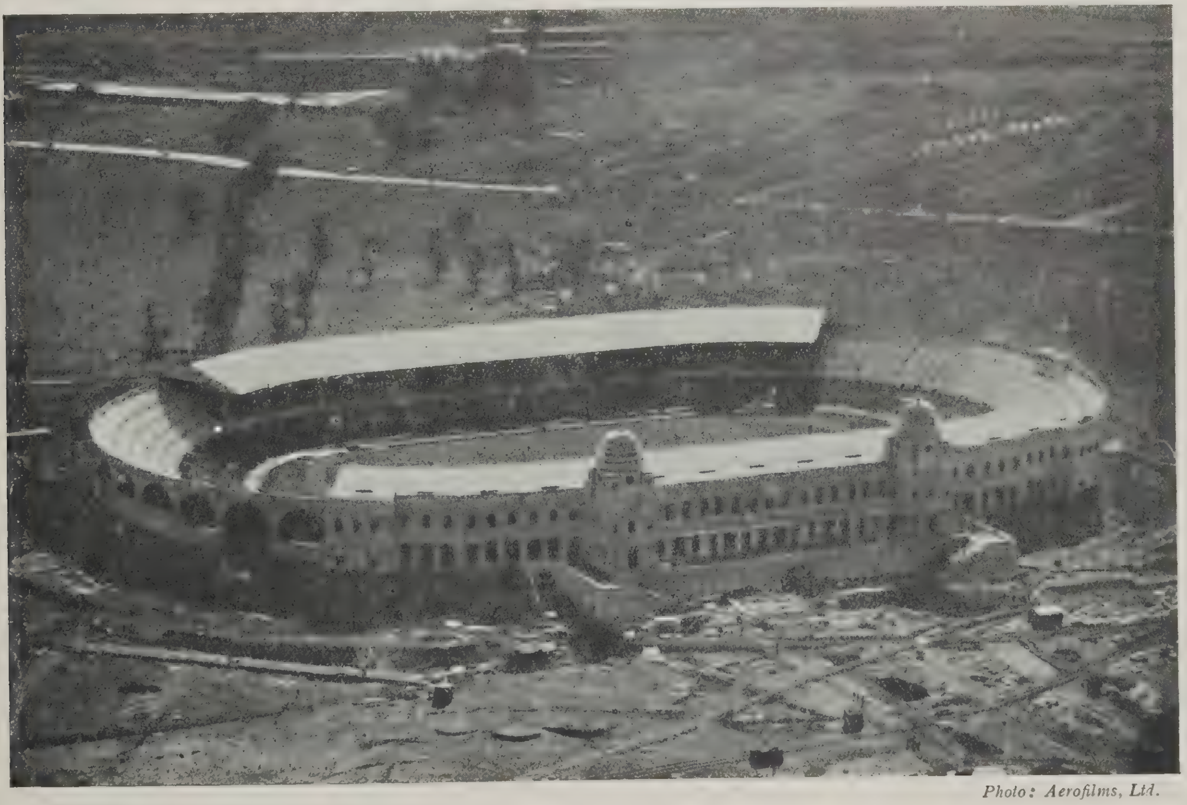


*Photo: Aerofilms, Ltd.*

AN AERIAL VIEW OF THE STADIUM, SHOWING, IN FOREGROUND, THE NORTHERN FRONTAGE, TERRACES, AND TOWERS.

mile, surrounding the playing-field, the other a sprint track for the straight distances up to 220 yards. In order to get this latter distance, it has been necessary to tunnel under part of the superstructure of the Stadium in the west wing. In constructing the tracks it has been necessary to excavate to a depth of 2 ft., this excavation being filled with varying grades of cinder, and a special 6 in. top finish laid.

Three and a half acres of the centre of the Stadium are laid out for the purpose of football. The foundation of the playing pitch is the natural clay. This has been covered with 10 in. of varying grades of cinder, and 5 in. of specially prepared soil and turf, $2\frac{1}{2}$ in. thick laid upon this.

The field of play for Association football is 120 yards long and 80 yards wide. The maximum dimensions of a pitch are 130 yards by 100 yards, but the former measurements are recognized for International purposes.

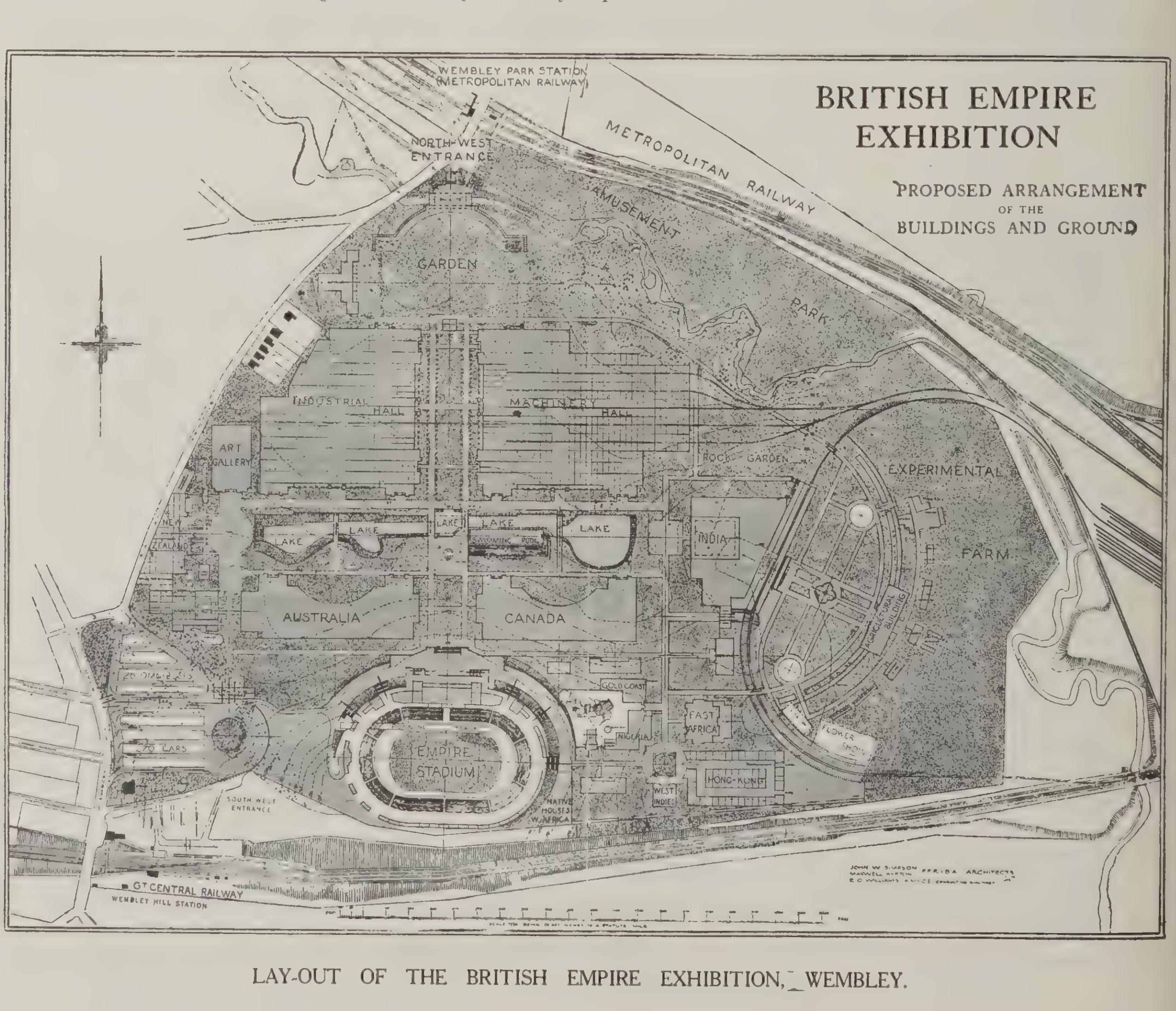
The height at which the Stadium is constructed, and a system which has been adopted for drainage purposes, require that there shall be an adequate water supply for the playing-field as well as for the other parts of the Stadium. To meet this, hydrants are installed, six in number, at intervals round the playing pitch.

Arrangements have been made for wireless to be installed in the observation tower of the Stadium, a receiving set is being presented for this purpose.

The following particulars are quoted, with permission, from "The Engineer." Although in selecting the site for the Stadium advantage was taken as much as possible of favourable contour lines, a very considerable amount of excavation had to be carried out. In fact, for one purpose and another, as many as 120,000 cubic yards of material—mostly yellow clay—had to be removed, and an equal amount used in filling.

It is around the outermost of the lower terraces of steps that the building proper of the Stadium may be said to commence. All round the building there is a practically uninterrupted series of thirty-one terraces of concrete step measuring 2 ft. 2 in. wide and having rises of 1 ft. 1 i They are erected on bearers consisting of 14 in. by 6 in. b 46 lb. and 57 lb. rolled steel joists spaced generally 14 ft. 4 in. centres. The joists, which are set at a slope two to one with the horizontal, are supported at their lowe extremities by being attached to the reinforced concret wall which stands on a solid concrete foundation, and built round the outside periphery of the ramp of steps firs mentioned. At their upper ends they are supported by th outside wall of the Stadium. These joists are at thre points in their length connected together by lattice girder to which they are riveted, and every third joist is supporte at the junctions of the joists with the girders by stee columns of increasing heights. These columns are made steel channels and lacing bars, and they are spaced radiall at 17 ft. 4 in. centres. The tallest of these columns is 32 ft. high and the shortest 16 ft. high. In the shortest there are tw 9 in. by 3 in. channels; in the intermediate two 10 in. b $3\frac{1}{2}$ in. channels; and in the tallest two 11 in. by $3\frac{1}{2}$ in channels, the lacing bars in all cases being $2\frac{1}{4}$ in. by $\frac{5}{16}$ in These columns are erected on solid concrete foundation taken well down into virgin ground. The two oute rows of columns are braced together, and the outermos row is braced to the outer wall. The risers of the steps ar formed of pre-cast reinforced concrete beams 14 ft. 3 in long by $4\frac{1}{2}$ in. wide and 1 ft. $4\frac{1}{2}$ in. deep, set on edge. Th ends of these beams rest on specially shaped pressed stee knee-pieces of the steel joists. No less than 5,000 of thes beams were required. The treads of the steps are forme of reinforced concrete $1\frac{1}{2}$ in. thick and were cast *in situ.*

The steps situated in the centre portions of the covere areas have been furnished with lift-up wood seats each 16 in. wide. In the wing portions of the covered are sitting accommodation is provided by means of planed woo planks fastened to the concrete treads. The roofs have stee



LAY-OUT OF THE BRITISH EMPIRE EXHIBITION, WEMBLEY.

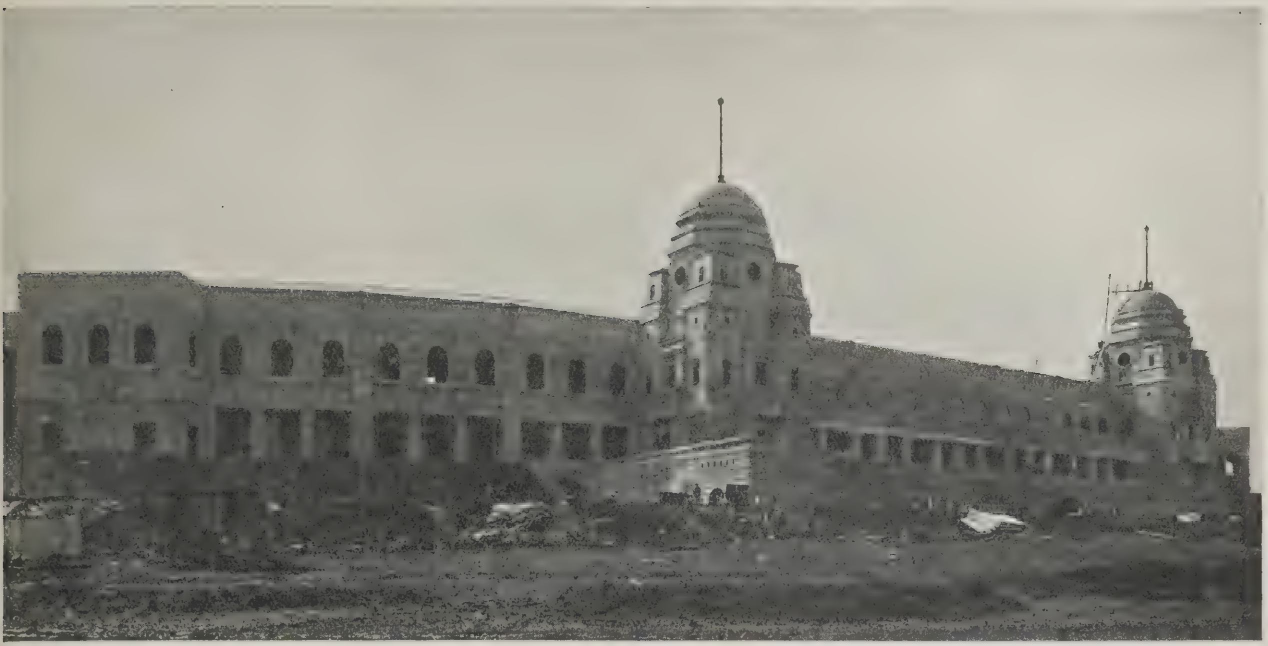


Photo: Campbell Gray, Ltd.

A NEAR VIEW OF THE MAIN FRONTAGE, WITH ROYAL ENTRANCE ARCHWAY AND THE TWO MASSIVE TOWERS 160 FT. HIGH.

mework covered with corrugated asbestos sheets. The ncipals are supported partly by the outside wall and rtly by means of pre-cast octagonal reinforced concrete umns 32 ft. high, and 13 in. by 13 in. in cross-section the major portion of their length, but increased in nensions at the top and bottom. There are sixteen of se supporting columns on the south side of the arena spaced at equal distances apart, i.e., 43 ft.

The banqueting hall is a large room which measures 5 ft. long by 70 ft. wide, and from it doors lead on to a le terrace which runs along the north face of the building. mediately over the hall and at a height of 25 ft. above is a tea-room, which is also a large room that will be le to accommodate 600 people at a time.

The whole building is constructed of concrete on a steel eleton. A noteworthy feature is that fluted shuttering s been employed with excellent effect. The outside wall the Stadium, saving where the building on the north e comes, is formed of a series of nearly semicircular hes carried on vertical piers. The piers arise to a height 25 ft. above the corridor, and the height to the crown the arches is another 20 ft. 6 in. The arches vary ghtly in span according to their positions and to the ount of curvature of the outside face of the wall at the ints where they occur. The average span is, however, out 50 ft. Both piers and arch ribs are of reinforced ncrete cast *in situ*.

Access to the corridor from the outside is obtained by ans of five separate flights of reinforced concrete steps, ile the terrace on the north front, which is practically the same level as the corridor, is reached by means of o sets of forty reinforced concrete steps which are about ft. wide. It is from this corridor that all parts of the dium are approached.

Reporting on the tests made as to the stability of the dium, Messrs. David Kirkaldy and Son state :—

'On an area intended to accommodate 2,000 spectators load of sand equal to the weight of 4,000 people was plied, and no signs of weakness were observed. Stair-es were subjected to a similar intensity of loading with ally satisfactory results.

'A battalion of 1,200 men marched about the Stadium close formation. They stood and sat in unison, they rked time in step, and they swayed and surged upon barriers. No dangerous strains were caused by these rations.

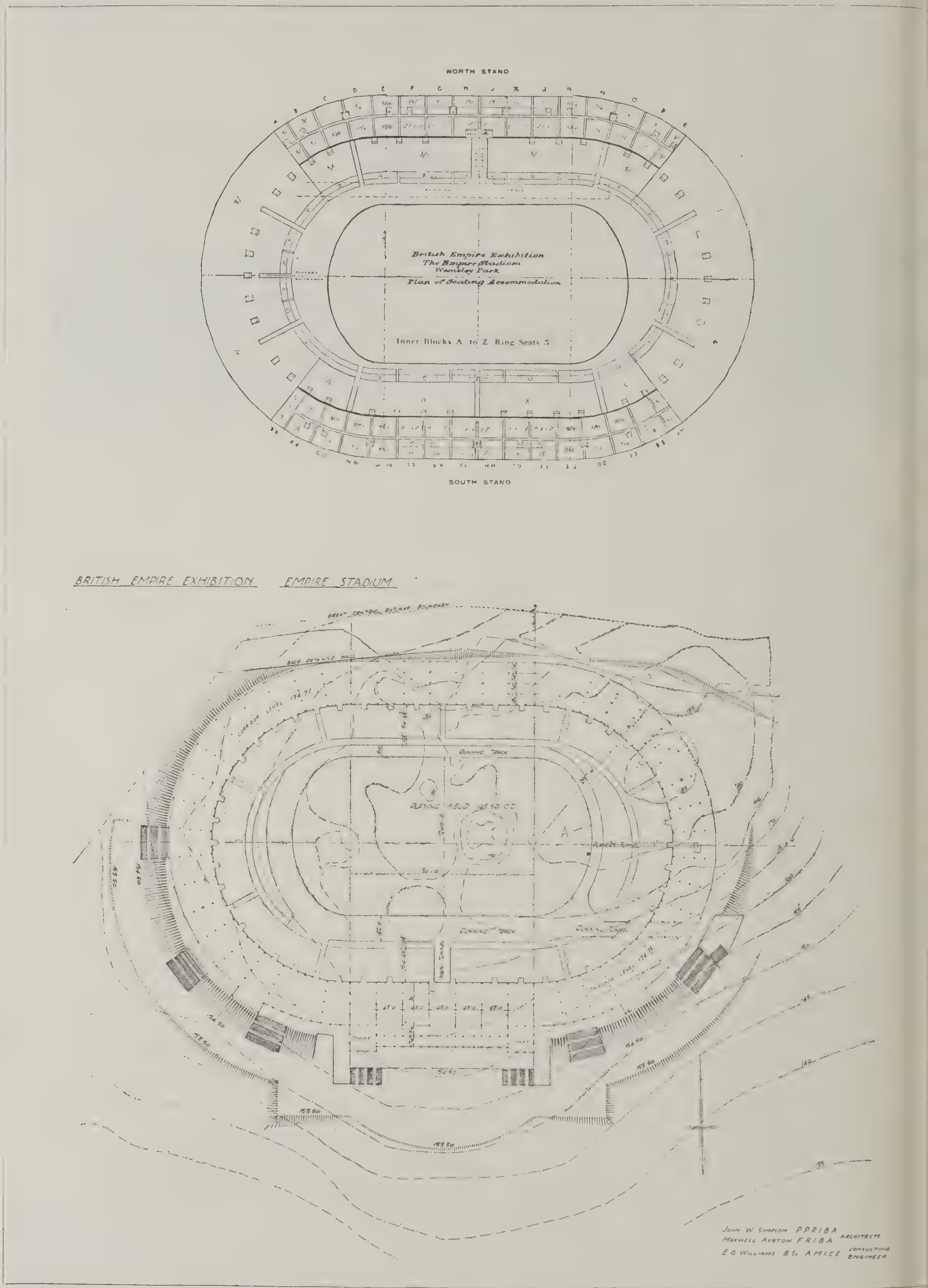
"We are of opinion that the Stadium is of adequate strength to carry safely a far greater number of spectators than it can possibly hold."

The entire sanitary equipment of the Imperial Stadium was supplied by Messrs. Mellowes & Co., Ltd. The firm's work includes the equipment in the Royal retiring rooms, in the lavatory blocks for the general public, in the cloakrooms to the banqueting hall, and in the dressing-rooms for home and visiting teams and for the athletes. The dressing-rooms are fitted with shower baths. A large number of the lavatory basins are of Mellowes' new "Vitrio" ware. The water-closet compartments are formed by Mellowes' improved steel doors and partitions finished in enamelled paint of neutral tint and fireproof. The sashes and casements have also been carried out by Mellowes & Co., Ltd., the whole of the sections for the work being specially rolled in Sheffield.

The work executed by Messrs. Electrical Installations, Ltd., includes 1,000 electric lights, and 20,000 candle-power is used in lighting each of the two stands. Fifty miles of wire have been used. The electric cooking installation was carried out in three weeks.

The Trafford tile, manufactured by Messrs. Turner Bros. Asbestos Co., Ltd., of Rochdale, has been adopted for the covered stand roofs of the Stadium, and for the whole of the main permanent buildings of the Exhibition. The tile has, it is claimed, materially assisted the engineer in producing the light superstructures which have been so favourably commented upon.

The general contractors for the Stadium are Sir Robert McAlpine and Sons, and the following are sub-contractors : Edward Wood & Co., Manchester, John Booth and Sons, Bolton, Teeside Bridge and Engineering Co., Middlesbrough, and W. Richards, Leicester (steelwork); Christmas, Hulbert and Waters, Ltd., Westminster (Insley chuting tower); The Bucyrus Co., Westminster (mechanical digger); J. Jeffreys & Co., London, and R. Crittall & Co., London (heating installation); The Stanton Ironworks Co., Ltd., Nottingham (R.I. concrete pipes); Staveley Coal and Iron Co., Ltd., London (C.I. pipes); The Palmer Foundry Co., Ltd., London (C.I. gutters); Mellowes and Co., Ltd., London (glazing, sanitary goods, and casements); Cement Marketing Co., London, and The British Standard Cement Co., London (Portland cement); Turner Bros. Asbestos Co., Rochdale (asbestos tiling); Electrical Installations Co. (electrical work).



PLANS SHOWING SEATING AND LAY-OUT OF PLAYING FIELD

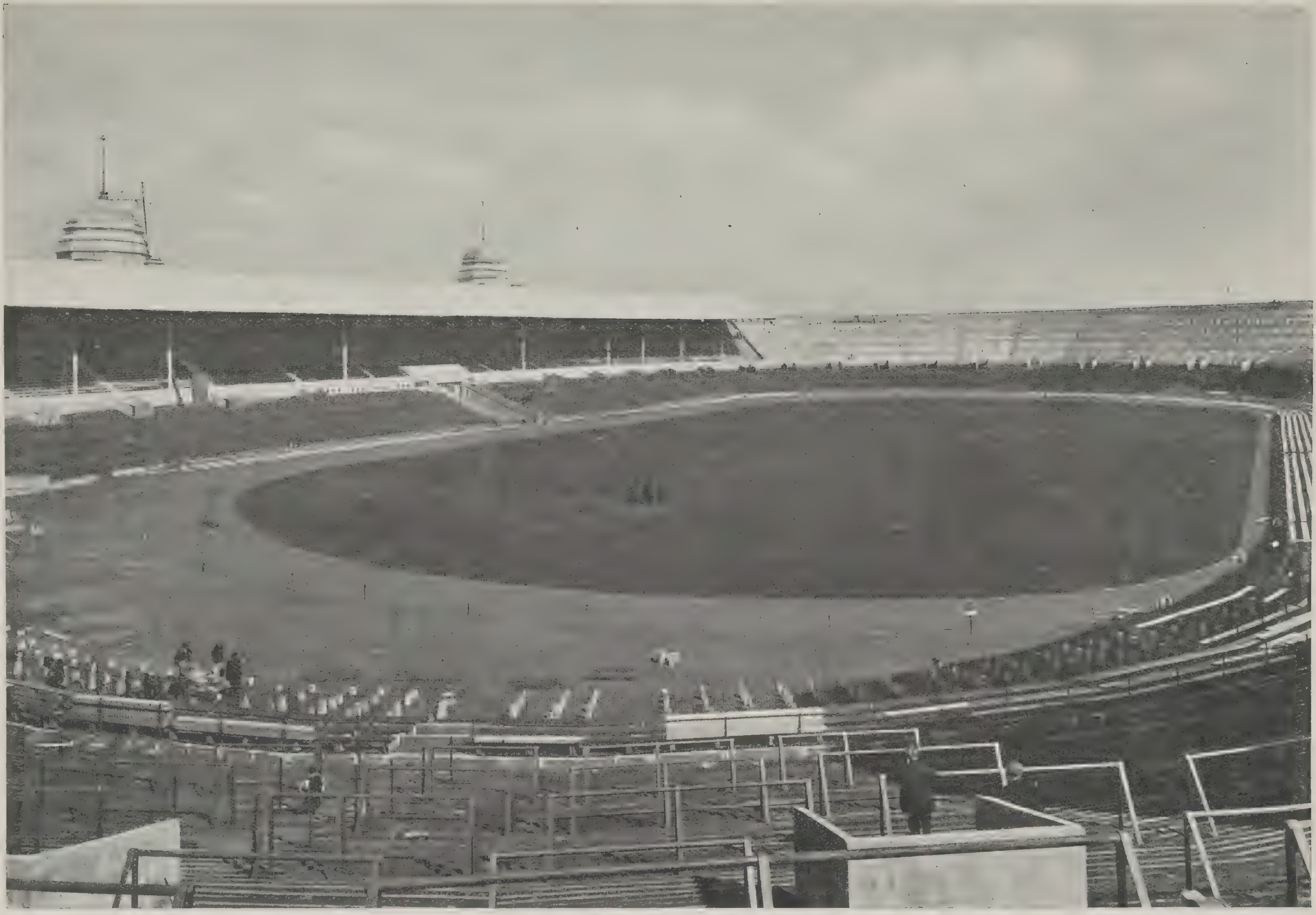


Photo: Campbell Gray, Ltd.

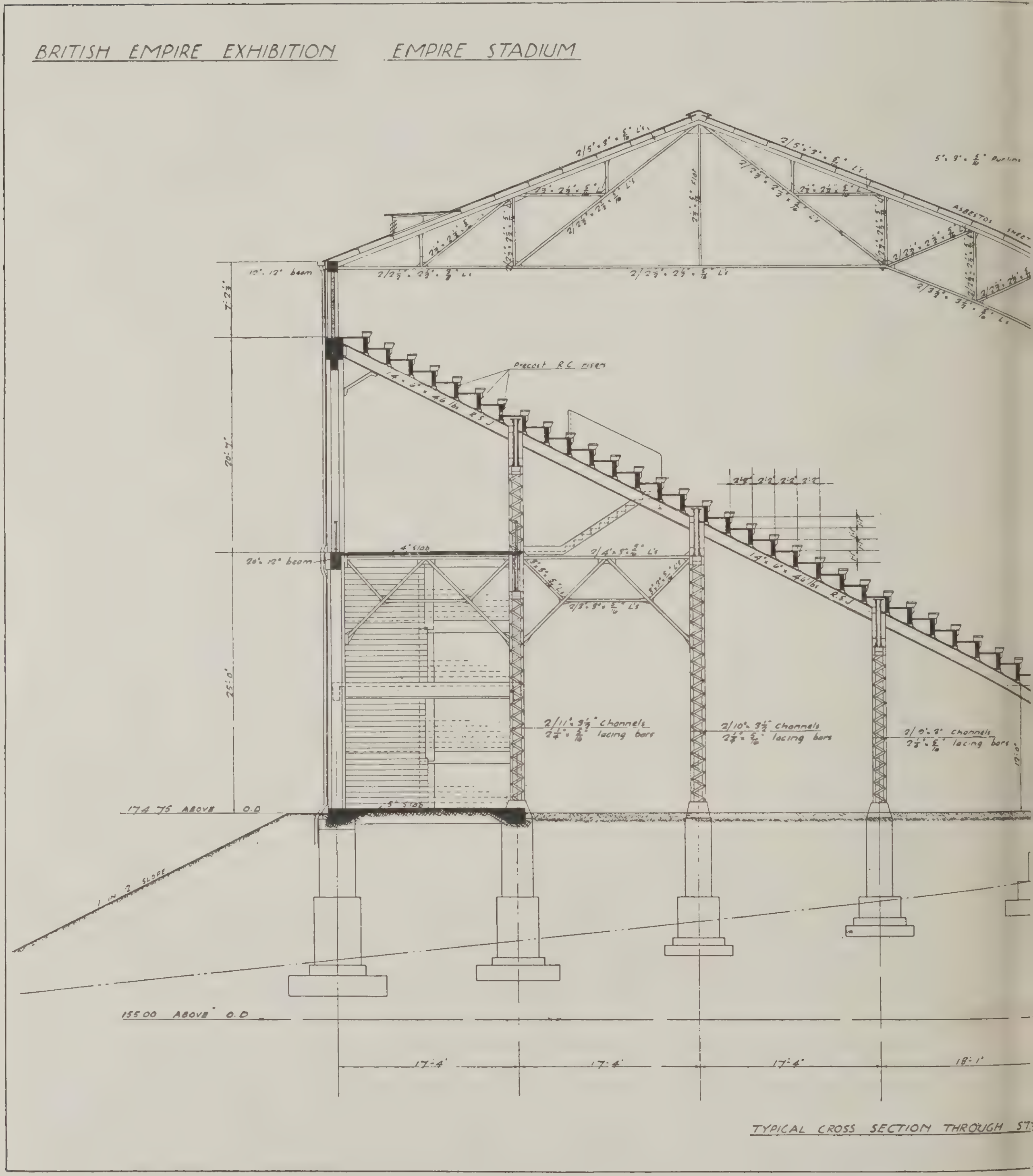
THE NEW IMPERIAL STADIUM AT THE BRITISH EMPIRE EXHIBITION, WEMBLEY: FULL VIEW OF THE ARENA.

(*The photo shows the stage of progress reached at the beginning of the present month.*)

JOHN W. SIMPSON, PP.R.I.B.A., AND MAXWELL AYRTON, F.R.I.B.A., ARCHITECTS.

# Architects' Working Drawings. 60.—The Empire Stadium, Britis

John W. Simpson, PP.R.I.B.A., and Maxwell Ayrton, F.R.I.B.



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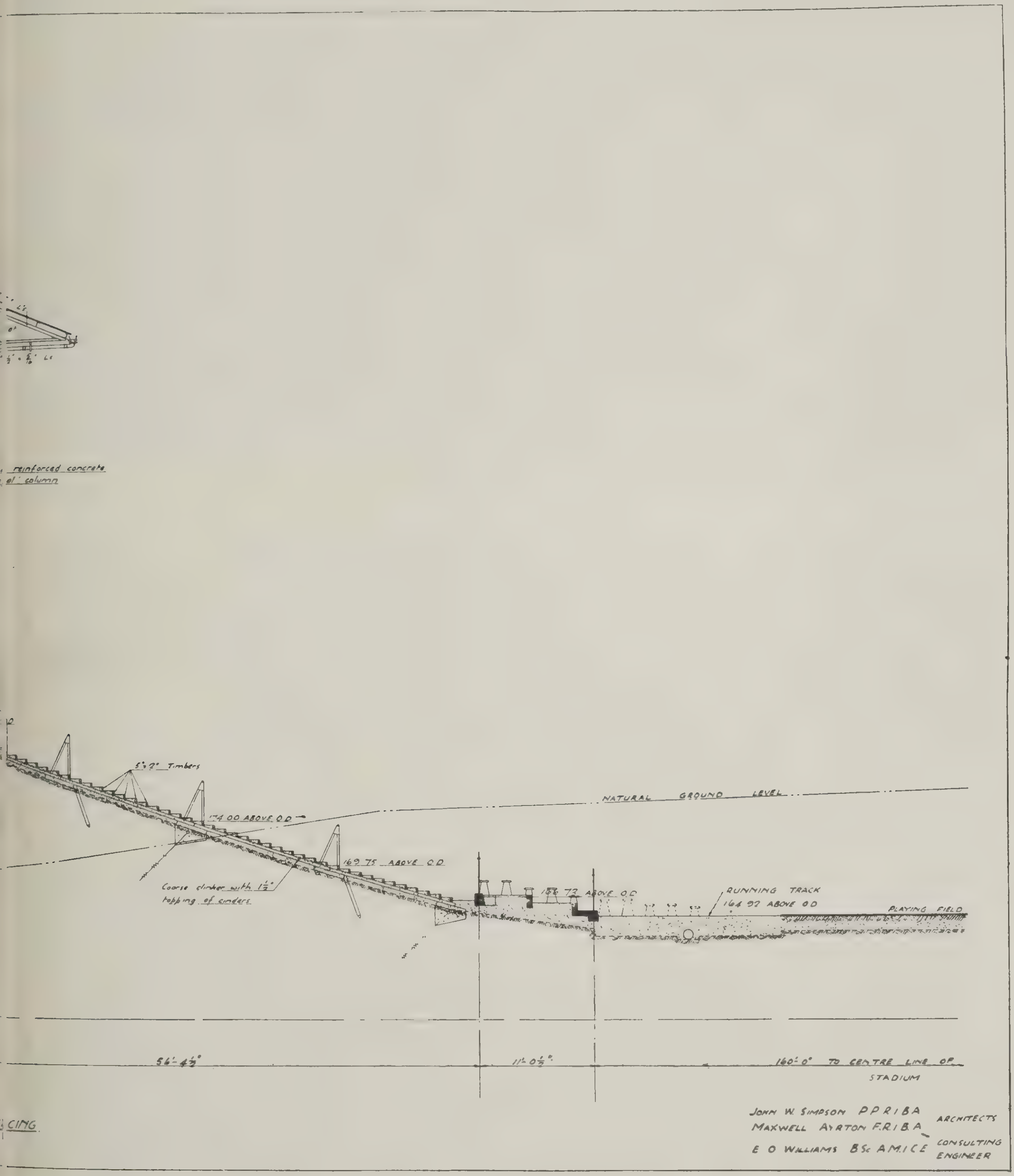
# Exhibition : Typical Cross Section Through Stand and Terracing

s. E. O. Williams, B.Sc., A.M.I.C.E., Consulting Engineer



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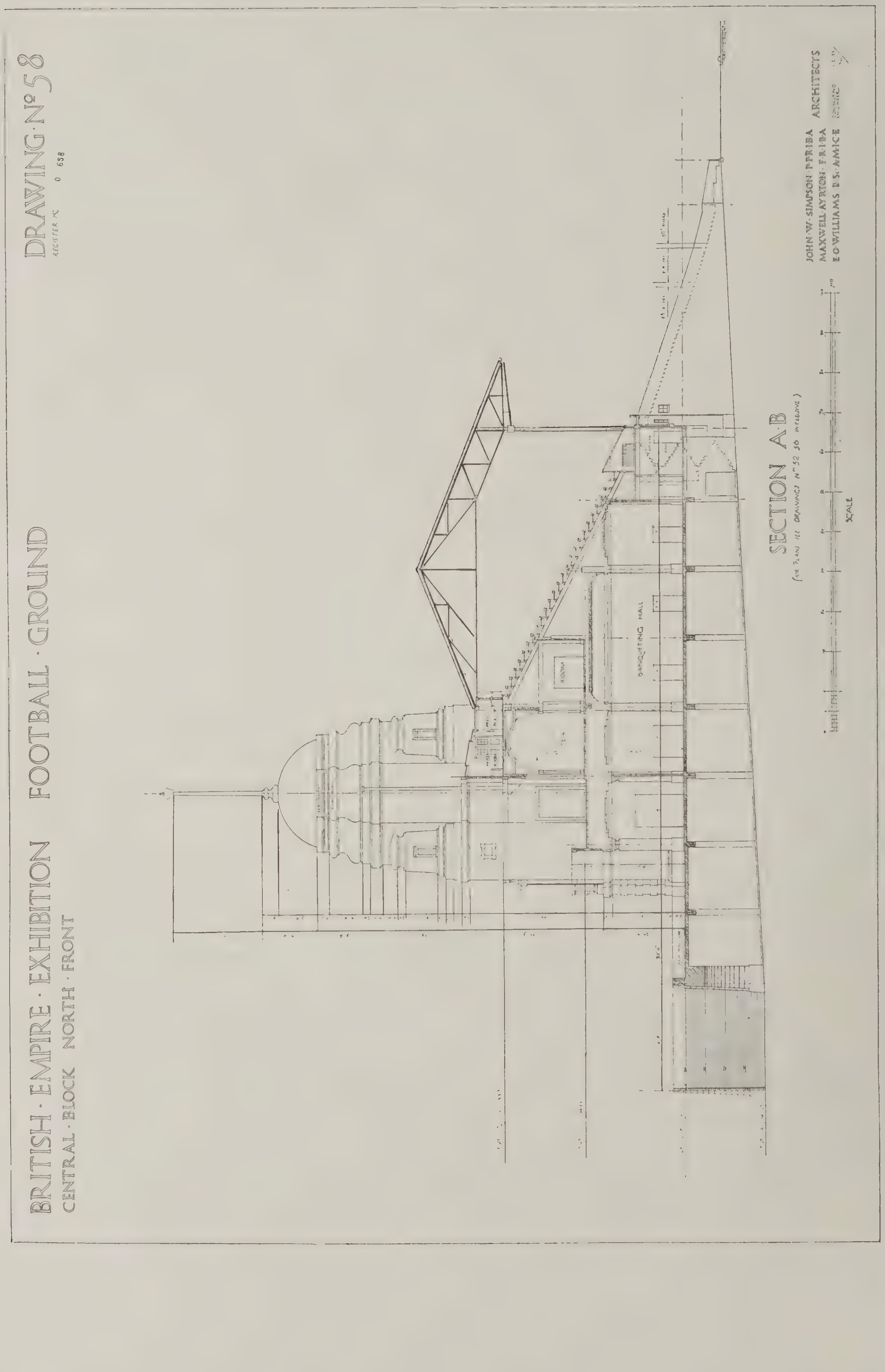
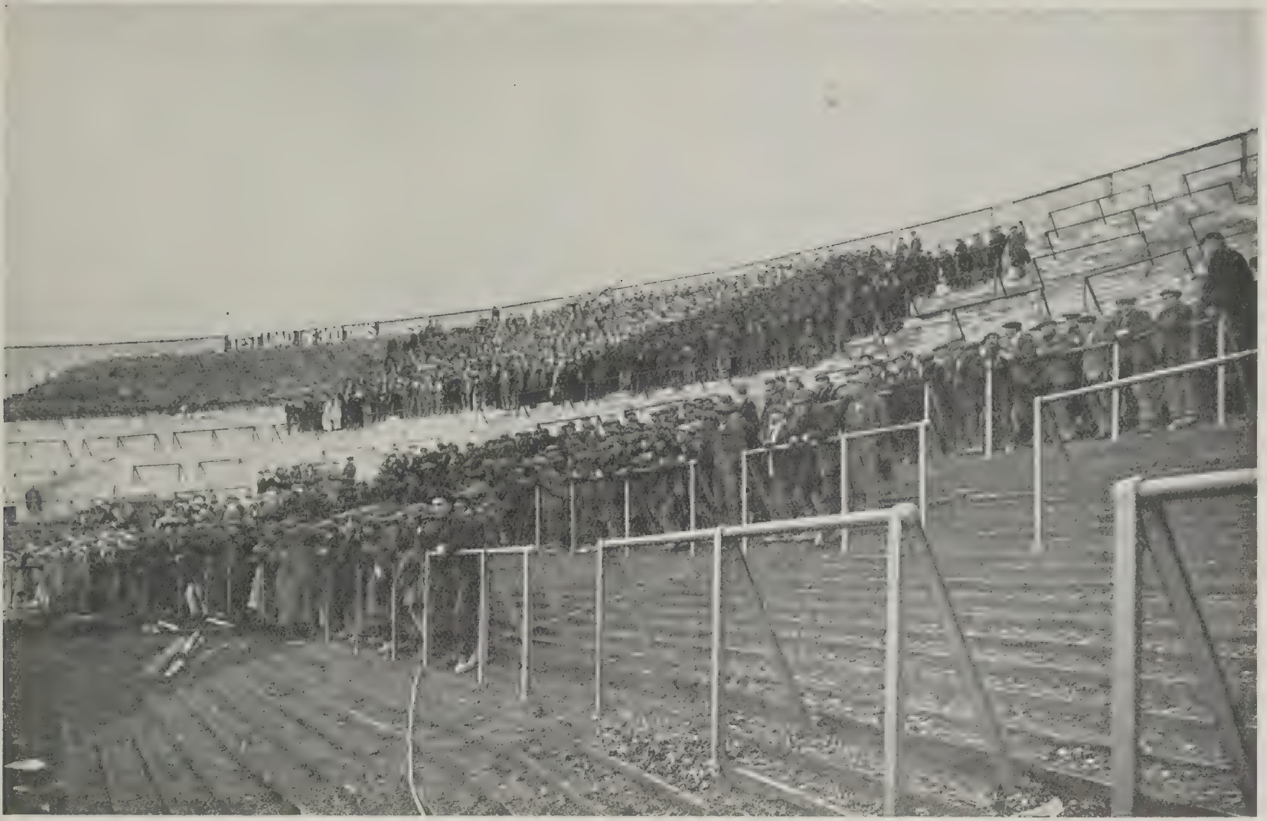
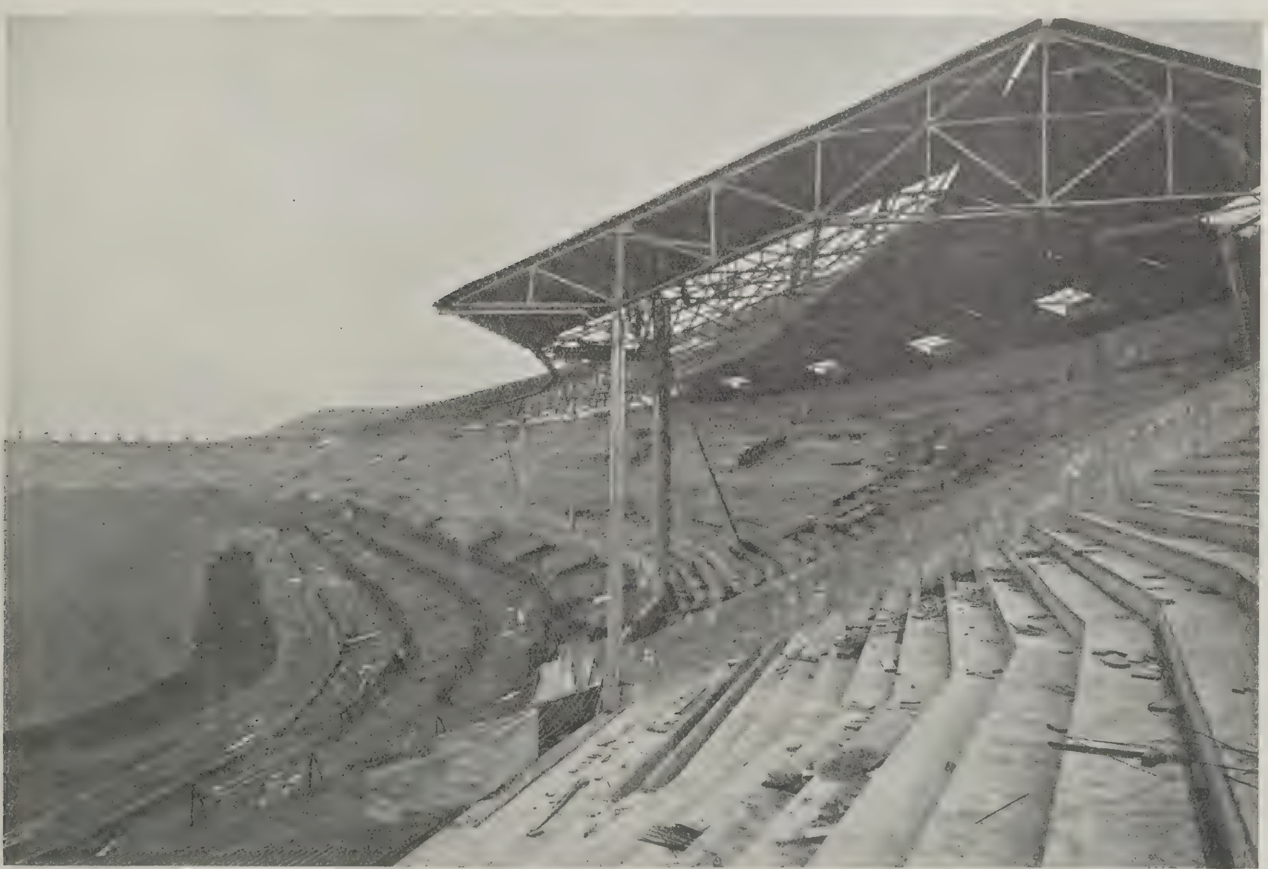

BRITISH · EMPIRE · EXHIBITION FOOTBALL · GROUND
CENTRAL · BLOCK · NORTH · FRONT
DRAWING · Nº 58
REGISTER Nº 0 658
BANQUETING HALL
ROOMS
SECTION A·B
(FOR PLANS SEE DRAWINGS Nos 52 56 INCLUSIVE)
SCALE
JOHN · W · SIMPSON · P·P·R·I·B·A
MAXWELL · AYRTON · F·R·I·B·A ARCHITECTS
E·O·WILLIAMS B·Sc·AM·I·C·E CONSULTING ENGINEER

SECTION THROUGH ONE OF THE STANDS IN THE CENTRAL BLOCK.



AN ARMY OF 12,000 MEN WHO TESTED THE BEARING OF THE STANDS



*Photos: Campbell Gray, L'd.*

ONE OF THE COVERED STANDS NEARING COMPLETION.

THE NEW IMPERIAL STADIUM AT THE BRITISH EMPIRE EXHIBITION, WEMBLEY.

# The Architecture of Provincial France

## By H. M. FLETCHER, F.R.I.B.A.

MR. HENRY M. FLETCHER, F.R.I.B.A., addressed a meeting of the R.I.B.A. last week upon the subject of "The Architecture of Provincial France."

Mr. Fletcher said that in France an architect could scarcely go wrong. Wherever you went there was architecture. The most striking characteristic of France, urban and rural alike, was its Frenchness. In spite of what they said of the cosmopolitanism of our day, other civilizations might beat against France again and again for centuries without reducing one jot of that Frenchness.

Architecturally, the influence of this great civilization on our own had been very small. In the Middle Ages, of course, this influence was at its height, but even then it was exercized rather in lesser things than in greater, rather in detail than in spirit. The picturesque was a much less integral part of French architecture than it was of our own, and more emphatically of German. It was rarely sought for its own sake, but occured rather as a by-product arising out of accidents of site or conveniences of construction, and not as a native element of design. Not that French towns and countrysides were devoid of picturesqueness, far from it. There was, indeed, a corner of France where you would find the intentionally picturesque theatrically rampant. That was Brittany, where the mystical Celtic genius revelled in bulging and bickering gables, barge-boards, and dormers.

But they soon cloyed, and a return to the clean-cut lines and sweet reasonableness of such cities as Chartres, Bourges, and Bordeaux was like a cool breeze after a feverish dream. This moderation of emphasis in ordinary buildings had much to do with the harmony of French towns. An absence of over-emphasis was to be observed in the *tours-de-force* both of structure and design, and this the French could accomplish almost unaware with the easy grace of a perfect fencer, so that you had to be "in the know" to detect the difficulties they had mastered.

All Gaul was divided into two very distinct parts—north and south. In the region with which he was dealing, you might take Limoges as the point of division. On the hither side the architecture had the familiar features of Northern France, steep-pitched roofs with many dormers; on the farther side, flat-pitched roofs covered with half-round tiles, and because of their pitch almost devoid of dormers.

The scale of buildings, which in the main depended upon the height of stories, increased as you went south, though even in the south it did not attain Italian majesty. In the cathedrals, the abbeys, and the greater churches, the scale was definitely not smaller. That of Chartres was majestic without parallel.

It was commonly thought by the uninitiated that colour became richer as you left England and went south. This was surely not true of France. The colour both of landscape and towns was lighter and fainter. Only at evening or in wet weather did you see the heavy greens and rich purples of the English misty landscape. The colour of France found its truest interpretation in Corot, of England in Constable. In the towns England leant to full warm tones, France to light and cool.

On the afflicting topic of restoration he would touch but lightly. At long last there were signs that the true philosophy of restoration—reverent repair, not rebuilding—was beginning to make headway even in the commission of historical monuments. But one word of warning—never go to Périgneux. He had seen it and knew.

He was not there to attack commercialism, but its most ardent champions might admit that some of its manifestations were less delectable than others. It had made our towns dirty instead of clean, and was solving the housing problem by turning decent habitations of men into cinema theatres.

In most of France this had not come about because the people cared more for civilization than luxury. In process of time, and with the development of electricity, we, too, might regain command and make mechanical invention a means to decent life rather than an end in itself. In preparation for such a victory of commonsense it behoved us to guard carefully our sense of the superfluousness of superfluities, to keep before our eyes the unsullied loveliness of architecture and countryside that still remained where commercialism was the servant and helper, not the master, of the community. And he did not know where this loveliness could be more profoundly and delightfully studied than in provincial France.

# Alterations to an Elstead Cottage

## KENNETH M. B. CROSS, M.A., Architect

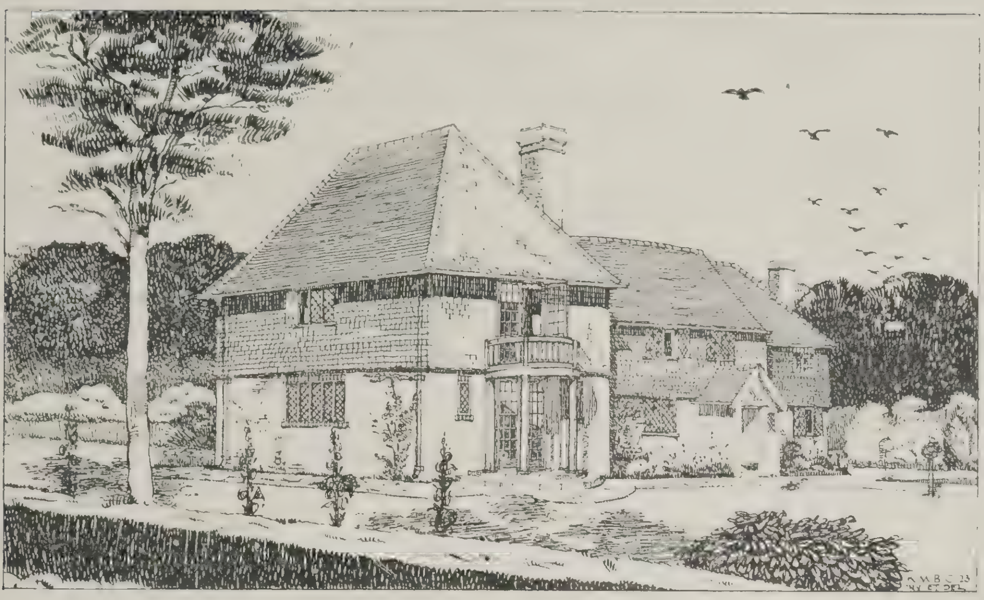
THE addition of a new library and bedrooms and other alterations have just been completed at Guinea Common Cottage, Elstead, from the designs of Mr. Kenneth M. B. Cross, M.A., of Messrs. A. W. S. Cross, M.A., F.R.I.B.A., and K. M. B. Cross, M.A., architects. In its original state the cottage consisted of a living-room and scullery, facing west, with two, and later, three bedrooms on the first floor, and it was damp and dark.

A slate dampcourse has been inserted under the external walls of the existing building, all the old floor at the ground floor level has been taken up, and the site has been drained, and hard core and waterproofed cement concrete has been laid. The roof was thickly overgrown by creepers, and large portions of the old roofing had to be re-laid, re-battening being effected where required.

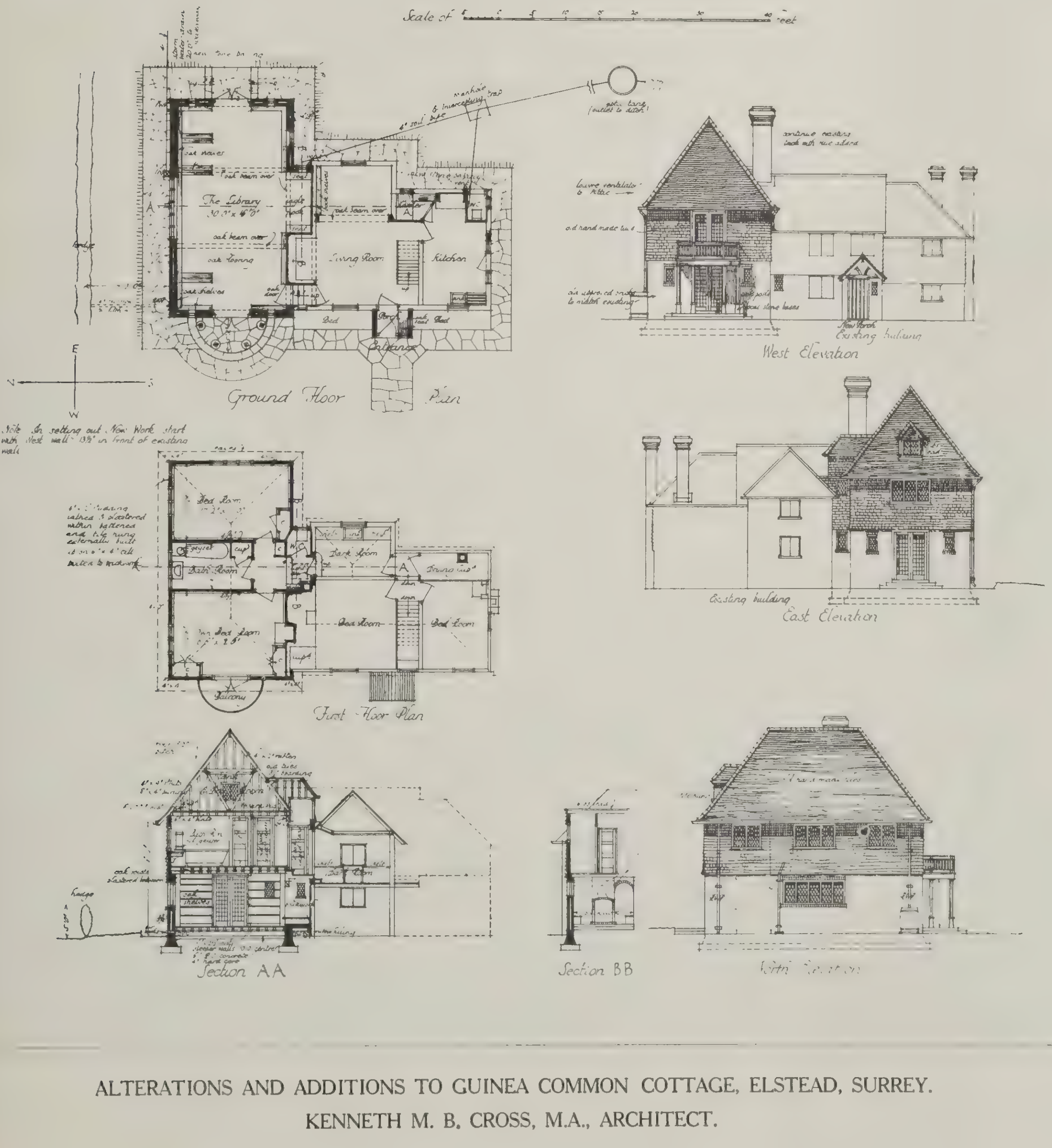
The new building adjoins the northern extremity of the cottage. It comprises a library, 30 ft. long, 16 ft. wide, and 8 ft. high, with oak flooring. Oak shelves line the walls and project to form recesses, and oak first-floor joists and beams are exposed. An ingle, in fair-faced brickwork, and adequately lighted, occupies the recess formed by the fireplace and chimney stack of the older building. Externally the new wing is built of dull multi-coloured sand-faced bricks to harmonize as nearly as possible with the earlier work, and dull-coloured, hand-made plain tiles. An oak verandah, semi-circular on plan, is a feature of the west end of the addition.

The living-room has been enlarged by the inclusion of the former larder, and thus gains additional lighting and a view through to the garden at the back. Two new bedrooms, one opening on to a semi-circular balcony, and a bathroom occupy the first floor of the new wing to which access is to be obtained through a lobby.

The staircase has had oak treads and risers inserted, and an oak dado. A small brick and tiled porch has also been added. Iron casements and frames with leaded lights, and oak window and door frames have been used throughout the new work. The internal joinery is chiefly of oak, the door hinges being made by the local blacksmith. Messrs. Glazier and Ellis, of Elstead, Godalming, were the builders.



A PERSPECTIVE VIEW.



ALTERATIONS AND ADDITIONS TO GUINEA COMMON COTTAGE, ELSTEAD, SURREY.

KENNETH M. B. CROSS, M.A., ARCHITECT.

# Magazines of the Month

## A Literary and Pictorial Digest

THE ARCHITECTURAL REVIEW for April opens with an article upon Barnet: a place which, though now shorn of much of its former glory, still keeps many reminders of it, such as its fine common, the large oaks and elms and chestnuts (some of the last of the giants of the old Middlesex forest), and the stately houses and old inns.

Those who know the High Street, which just manages to push its way past High Barnet church, will say that the place sadly wants town planning. It does, indeed, but one is torn between one's love of life and limb and love of the past.

The article is illustrated with many excellent photographs, and one or two old drawings; twenty years hence such as these may be the only records of the charming town. Flats are being built on the side of Macadam's hill, and the old inns are being replaced by green and pink brick-fronted alehouses, with large windows of patterned plate glass.

Modern work in the REVIEW is represented by some domestic work by John Russell Pope, and a power house at Queensferry, Flintshire, designed by H. B. Creswell. Of this last, we reproduce an illustration.

These works were built facing the London and North-Western main Holyhead line, some twelve miles from Chester, on a site between the railway and the estuary of the Dee. They were taken over by the Government during the war and developed for the manufacture of chemicals. In this process no consideration was given to the sensibilities of the architect nor to the view from windows of houses and farms on the slope which rises, on the south, to the village of Hawarden three miles away. It is difficult to give a good lay-out and architectural quality to industrial buildings, because industrial enterprises usually have small beginnings, or, if not, the forethought which defines beforehand the lines of future extensions frequently fails of its intention from the unexpectedness of directions of growth. The works were, however, laid out complete and on a large scale for the manufacture in England of a well-established French boiler—the Niclausse Water-tube.

The problem the architect set himself was to express the dignity associa with engineering works in a sou inexpensive brick structure which sho not claim kinship with traditions building associated with quite ot planes of activity than the manufact of boilers. In this he was not entir successful: although he desired o that the building should look like w it was, the public desired more. Una to accept it as looking like a town h or a bank, or a home for inebriates, to trace in it the lineaments of West architecture, the public not only explo the remotest wilds of Asia to seek comparison with the Tibetan Rock M astery, but adopted the salient feat of the boiler works as a local traditi and workmen's villas, that sprang in the vicinity, vied with one anot in a display of superfluous and inc venient battered buttresses.

These buttresses express the structu needs of the walls of the several shop packing, machine, tube, power hou and engine house. The floor enclo by the walls is divided into bays by c iron stanchions carrying roof-girders s porting the principals of a "Belfa roof. The roof-girders and feet of p cipals bear on the walls at points wh

BARNET: THE BEGINNING OF HADLEY GREEN.

*(From "The Architectural Review.")*

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* All the above magazines and many others may be seen in the Reading Room at 29 Tothill Street, Westminster, S.W.1.

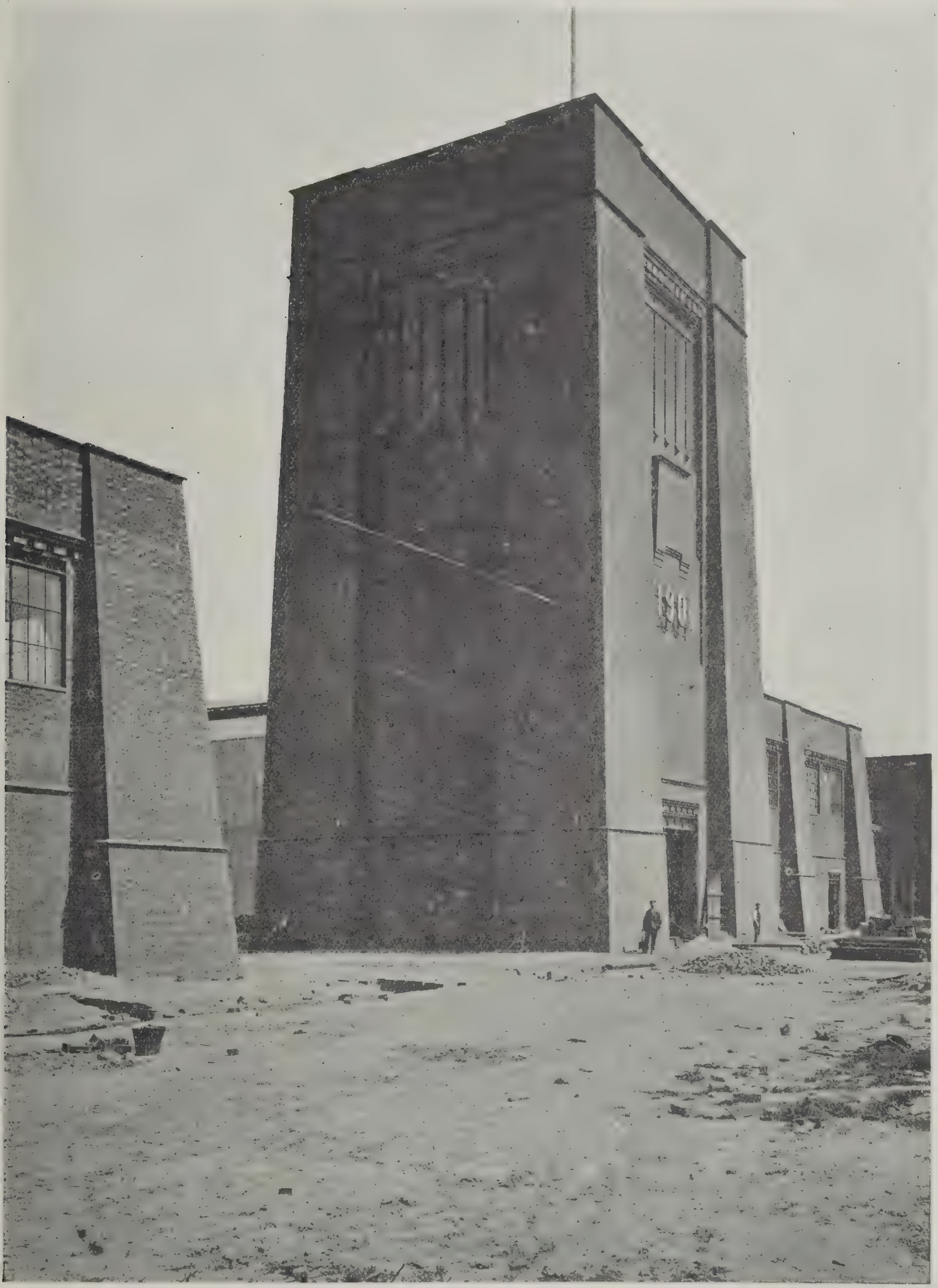
buttresses occur, but the chief duty he buttresses is to resist the lateral sure of wind sweeping over a wide nse of light-boarded and felted roof. battered buttresses also distribute the at ground level and make it possible eep the underside of the concrete dations less than 2 feet below the ice.

ne subsoil is sand, in which water lies mean depth of about 4 feet and rises alls as much as 12 inches in sympathy spring tides, so that a wide spread hallow foundations was necessary. foundations of the tower carry a of 1,000 tons, and are formed by an oured-concrete raft, extending to t below the surface and rising inside to form a floor 6 inches above the ground. Purple brindled bricks were used as facings, and the same clay, burnt to a vitrified face, was used in making the coping blocks. The lintels over windows and doors are of cast-iron, with shaped feathers.

THE AMERICAN ARCHITECT AND THE ARCHITECTURAL REVIEW for March contains illustrations of some of the school buildings erected in New Jersey from the designs of Mr. Ernest Sibley, architect, in association with Messrs. L. C. Light, Hacker and Hacker. Among them are plans, elevations, and details of the Hempstead High School, Hempstead; the Tenafly High School, Tenafly; and the Roosevelt School, Ridgefield Park.

Mr. Sibley says that "in creating a plan for a school building designed to meet adequately the needs of children, it is not sufficient that we plan with a careful regard to the fundamentals of school organization and administration, for progressive educational thought expresses itself in a demand that the modern educational system shall be 100 per cent. efficient.

"The 100 per cent. efficient school not only makes sure that the importance of English, spelling, reading, writing, and mathematics is sufficiently stressed, but boldly lives up to the ideals of our day by satisfying all the natural requirements and cravings of child life, those natural desires taken from him under the old tra-



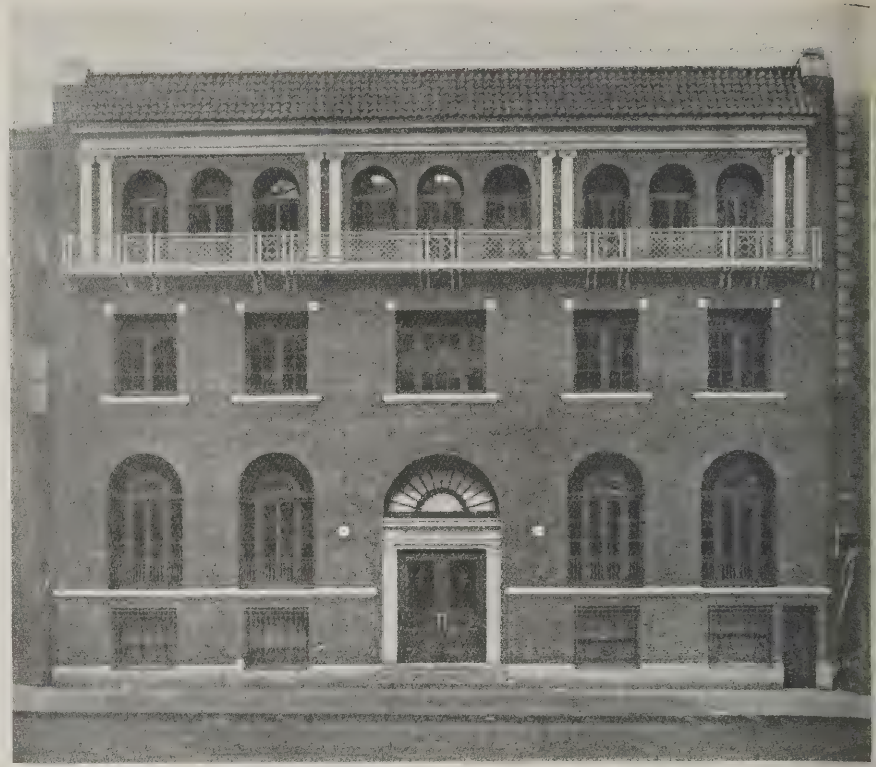
A POWER HOUSE, QUEENSFERRY, FLINTSHIRE: THE TOWER. H. B. CRESWELL, ARCHITECT.

*(From "The Architectural Review.")*

ditional school, without a corresponding compensation.

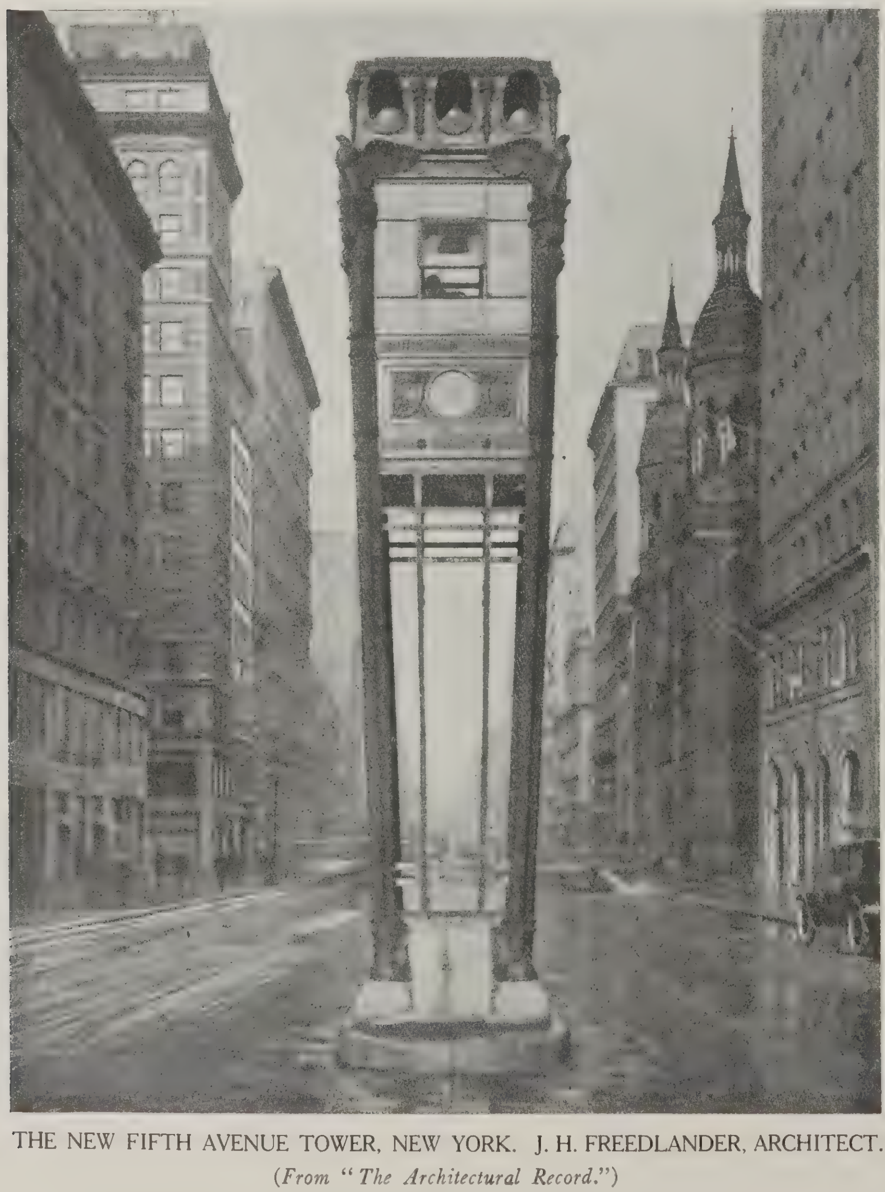
"This recognition of the necessity for making education satisfy and develop every side of child nature is responsible for the creation of modern school programmes. Educators have worked out the methods for providing the complete and well-balanced curriculum, and it is the task of the school architect to plan buildings wherein these methods can be carried out efficiently. The development of the ideal plan presupposes an adequate and well-located building site. Upon this site the architect must place the school home of the children with due regard to the correlation of the various school activities. I believe that wherever architects have studied school planning in an earnest effort to secure the best results, basements have been eliminated and buildings have been reduced in height.

"We no longer tolerate one, two, or three flights of stairs to the sanitaries; we do not approve placing gymnasiums and rooms for cooking, sewing, dressmaking, shop work, etc., in dark poorly ventilated basements at the end of long and dark basement corridors. Rather do we recognize the large and important places these units hold in modern programmes, and we are determined to feature such rooms, giving them as valuable space as any other depa
ment.



ST. JOHN'S SETTLEMENT HOUSE, NEW YORK. DE ROSE AND CAVALIERI, ARCHITEC

(*From "The Architectural Record.*")



THE NEW FIFTH AVENUE TOWER, NEW YORK. J. H. FREEDLANDER, ARCHITECT.

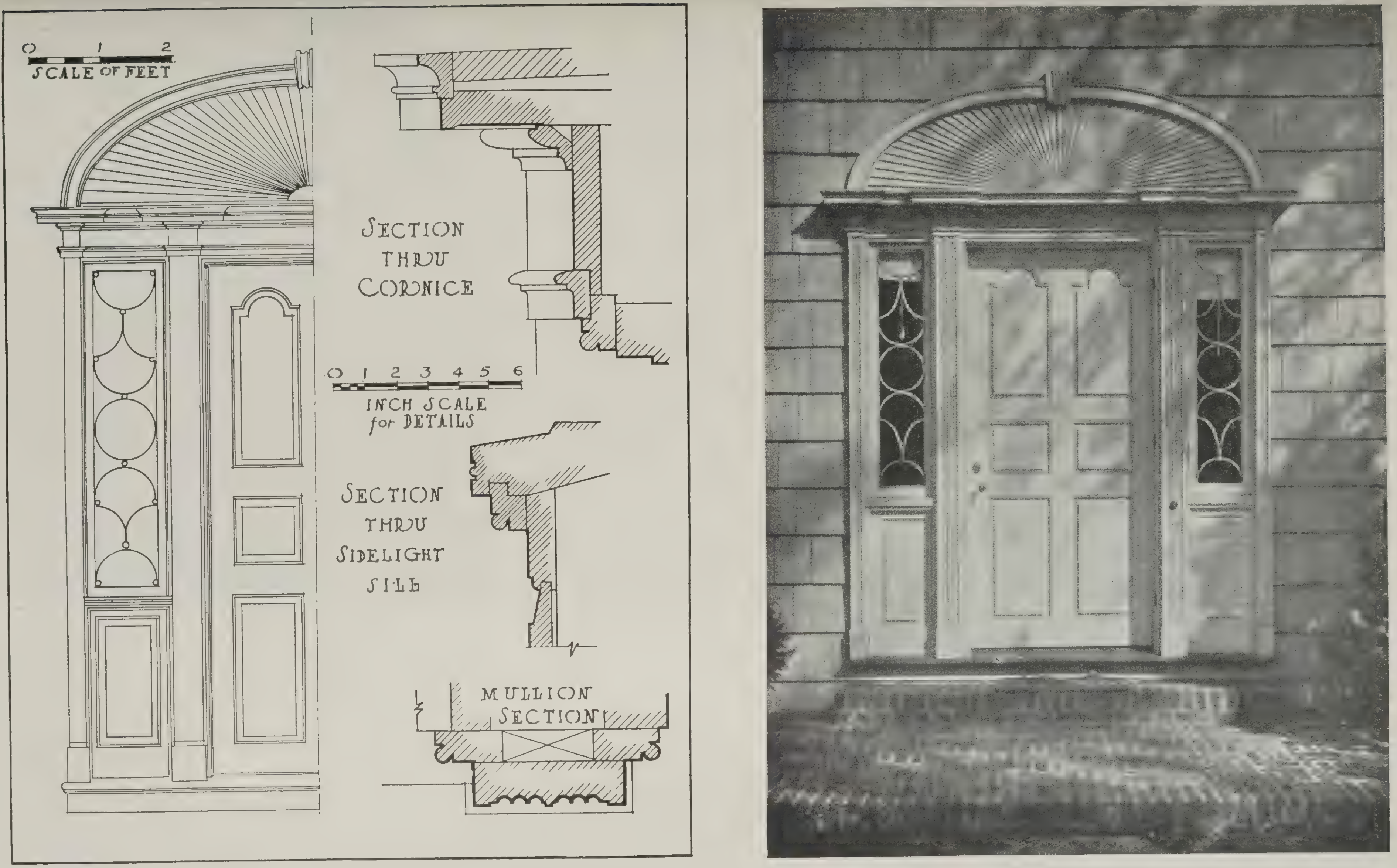
(*From "The Architectural Record.*")

"After properly locating on the groun
that portion of the building used for soc
and community purposes and linking
the physical training unit with the pla
ground, an important consideration is t
orientation. On this point we meet
widely diversified opinion. My expe
ence, study, and research in connecti
with the orientation of school buildir
have brought me to this conclusion: th
study, class, and recitation rooms shou
have north-west, north, or north-e
light. I realize that this is in part co
trary to the opinions that have been ma
tained for the past twenty-five years,
most writers on this subject have
manded sunlight in these rooms at so
time during the day. I have reached
conclusions from personal observat
and through discussion on this subj
with educators with whom I come
contact. Sunlight in these rooms
been demanded principally on accou
of its therapeutic value.

"This value is questioned, as the air
the room is constantly changing and
being brought in from the great outdoo
where the sunlight has already perform
its work of purification. Any bene
derived from sunlight in study, class
recitation rooms must needs be unqu
tioned in order to offset the injury a
discomfort provoked by the glare
direct sunlight in the eyes and on
work of pupils."

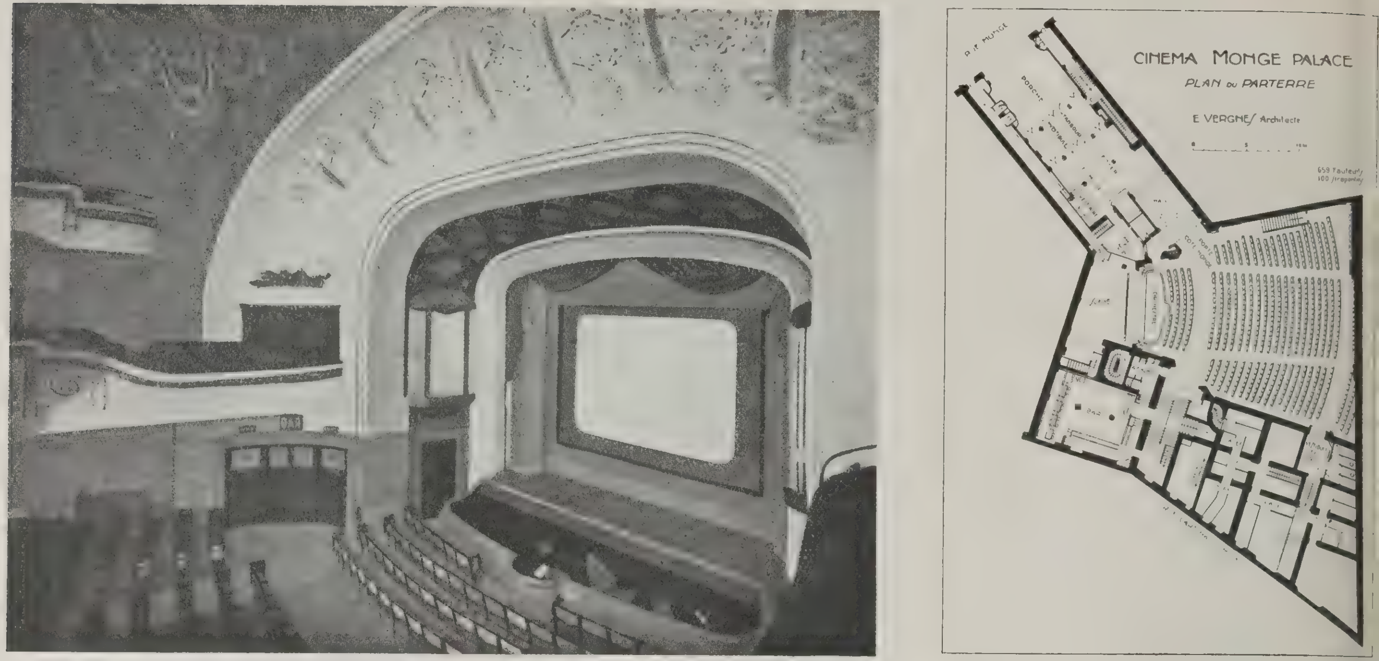
The student's work which secu
first mention in the Society of Bea
Art Architects, Class B "II," Proje
The Interior of a Private Theatre,
also illustrated. Among the ot
articles of special interest are "Sump
ous Simplicity, A Note on the Eli
bethans," by P. M. Stratton, A.R.I.B.
and "Some Colonial Lettering,"
Wm. M. Campbell.

Sir Lawrence Weaver writes brillian
in the April LONDON MERCURY upon



HOUSE AT FIELDSTON, N.Y.: DETAILS OF ENTRANCE DOORWAY. DWIGHT JAMES BAUM, ARCHITECT.

(*From "The Architectural Forum."*)



CINEMA MONGE PALACE, PARIS. M. E. VERGNES, ARCHITECT.
(*From "La Construction Moderne.*")

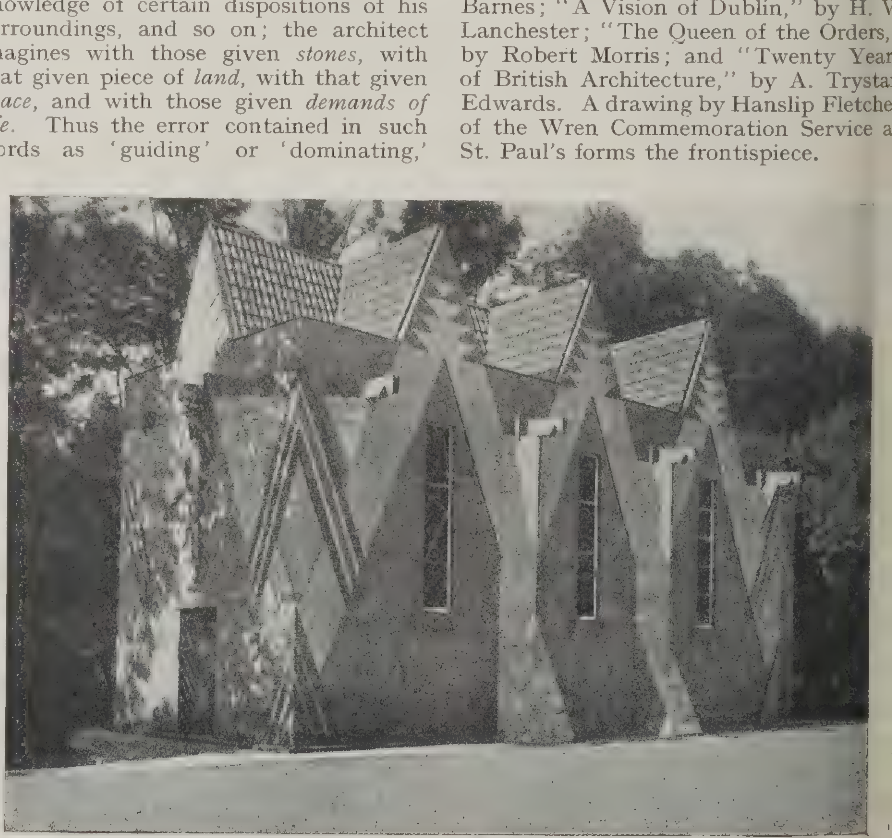
Christopher Wren. He concludes with the following :—

"In the two centuries that have elapsed since his death Wren has been admired and followed from very different points of view. It has been justly said that he has been in fashion and out of fashion, and is now above fashion. Any doubt as to the reality and massive quality of his genius can easily be dissipated by a consideration of what imitators have done. No domed church on the lines of St. Paul's has achieved equal beauty and grandeur, nor have any of the innumerable steeples, based on his inventions, been of the same rank. In domestic buildings his special character remains pre-eminent and informs the best work of to-day—a certain graciousness that in others degenerated often into heaviness. There is a vast gap between Wren at Hampton Court and Talman at Chatsworth. Thus it is that in this Bicentenary Year there is the same feeling that caused Sir John Vanbrugh to refuse the succession to his office 'out of tenderness for Sir Christopher Wren,' and that led the 'Spectator' to publish a noble tribute repudiating the ingratitude of his dismissal. The lovers of architecture everywhere will feel that in honouring Wren they have honoured the Art to which a man of such amazing gifts and nobility of character was content to devote the flower of his life.

"Sir Christopher Wren was the very fulfilment of Wotton's prophecy—'Architecture can want no commendation, where there are Noble Men or Noble mindes.'"

In ARCHITECTURE for April there is a translation by Douglas Ainslie of an article on "The Nature of Architecture," by Benedetto Croce. "It has been remarked," says Benedetto Croce, "that a single glance suffices to determine the difference between purely artistic and practical architecture, the latter being marred with practical wants, and that architecture as it appears in a painting and architecture really carried out prove this to be the absolute fact. The observation, though ingenious, is not, however, quite just. A man in the act of conceiving a piece of architecture in an ideal or idealized landscape is in different conditions to a man who is conceiving it on real land and with materials that actually exist : it is a question of two intrinsically different representations, which makes the comparison vain. It may be said that the architecture painted in the picture is *more beautiful* than that to be seen in the stone. Why ? How can we compare the surroundings of the picture with the surroundings of life ? The poet imagines with the assumption of the words used by his own folk, with the knowledge of certain dispositions of his surroundings, and so on; the architect imagines with those given *stones*, with that given piece of *land*, with that given *space*, and with those given *demands of life*. Thus the error contained in such words as 'guiding' or 'dominating,' applied to economic motives in thei relation to the work of art, is made clea Economic motives, when they do ente art, instead of guiding and dominatin are on the contrary guided and domin ated by it; art subjects them to itself. I however, this does not happen, if a artistic ambition is neglected in the pu suit of an economic end, art does no exist; or (when a fruitless attempt at a is made at the same time) we have th ugly. But here, too, architecture in n way differs from the other arts."

Other articles include "In Memoriam The Whitgift Hospital," by Harr Barnes; "A Vision of Dublin," by H. V Lanchester; "The Queen of the Orders, by Robert Morris; and "Twenty Year of British Architecture," by A. Trysta Edwards. A drawing by Hanslip Fletche of the Wren Commemoration Service a St. Paul's forms the frontispiece.



ÉGLISE DE CHAMPAGNE. PROFESSOR BEHRENS, ARCHITECT.
(*From "L'Amour de L'Art.*")

# Correspondence

## R.I.B.A. Exhibitions

*To the Editors of* THE ARCHITECTS' JOURNAL.

SIRS,—The practice of the R.I.B.A. in losing its exhibitions at 1 o'clock on aturdays seems to be a sad state of ffairs, and in contradiction to its efforts ) make architecture less frightening to ıe layman. The Institute organizes ublic lectures and exhibitions of drawgs in its Galleries; we are told that they re intended to attract the layman as well the architect. It does not seem logical, ıerefore, to close the Galleries on the ternoon when the younger generation e more often free. Has the Council the R.I.B.A. forgotten that it was fficult "to get the afternoon off" in ıe's early days?

If it be that the attendance does not arrant the opening of the Galleries on turday afternoon it is surely time that e Institute studied the gentle art of vertising, because Saturday afternoons e those on which the greatest number of xhibition-goers" do their rounds.

If it be on grounds of economy, cannot e Council profit from the sad fate of ently suggested "economies" in the ucational world?

ALISTER G. MACDONALD.

## The Use of Colour

*To the Editors of* THE ARCHITECTS' JOURNAL.

SIRS,—No one will disagree with Mr. I. Hogge's suggestion, published in your RNAL, that there is a big field open architects in the imaginative use of ur externally in domestic architece. Most architects, however, who have lied the possibilities of colour schemes applied to the façades of domestic itecture, have come to the conclusion t, until we get more drastic legisla- from Westminster to abolish the ke curse, it is useless to apply to ses in English towns many of those ghtful combinations of colour which a feature of the cleaner continental s.

ver since the days of Queen Elizabeth wasteful burning of soft coal has insed to such an extent that sunlight, h shows up the natural colours of the tryside, is, to a large extent, excluded our great cities. When the smoke age over our houses is regarded by e in authority as a criminal offence nst humanity, it will then be time for sh architects to employ colour as Mr. ge suggests. There is also the factor umidity to consider. The dry atmore of an Alpine village permitting the use of colour externally, is very rent from the humid atmosphere in country, which creates different r values.

. Hogge's reference to the garden is likely to discredit a healthy reform wn development. The modern conon of a garden city is not, as Mr. e implies, a collection of houses, one detached, with its own enclosence, and proclaiming its own inuality from the house-top in high of colour. It is, instead, a town cond as a whole, where every building bears a definite relationship to its neighbour, and this can, for the most part, be achieved by a harmony of colour, such as one sees in those old towns of Italy and France, where all buildings have roofs of similar colour and texture.

In this country, where uncontrolled individualism has already run riot, it is surely dangerous to encourage any but the most skilful artist in the use of glazed brick, blue-green tiles and ceramics.

W. HARDING THOMPSON.

## "Who's Who in Architecture," 1923

*To the Editors of* THE ARCHITECTS' JOURNAL.

SIRS,—From the heavy returns of completed forms which have been received for this book it is evident that architects generally realize the great advantages that will be gained by its production, and the assistance which such a work of reference and professional information must render.

Its importance to the lay public and the lay Press hardly needs emphasizing, but as editor of the work, I should be grateful if I might draw the attention of your readers to the fact that if anyone is omitted from it through neglecting to send in his form the fault must not be visited upon me.

The active co-operation extended to the publication by the R.I.B.A., the Society of Architects, and the Architectural Association, must of necessity complete the effort to obtain information as well as to acquaint the profession with what is required for its compilation.

I am anxious to get this book published at as early a date as possible, and if any of your readers have not received forms, or have mislaid them, I shall be happy to send fresh ones by return of post to all who apply for them.

F. CHATTERTON, F.R.I.B.A.,
Editor, "Who's Who in Architecture."

## The R.I.B.A. Elections

*To the Editors of* THE ARCHITECTS' JOURNAL.

SIRS,—With reference to the forthcoming election of Members of Council of the R.I.B.A., it seems that members are being widely canvassed by party politicians, and that an attempt is being made to split the Institute into definite political groups.

So far as I am aware, up to the last election, except in comparatively trivial cases, Members of Council were elected solely on the ground of individual ability; but, unfortunately, the Institute appears to be now rapidly arriving at that stage in the history of its constitutional development when party politics threaten to subvene, sacrificing, as they necessarily must do, the general interests of the Institute for party issues, or for one issue alone.

Should this system of party politics become established, it must necessarily mean that members of the Institute will be represented on the Council simply by groups of tacticians, pledged to follow a leader, vote like sheep, and generally conduct themselves with that virtuous obedience and commendable lack of intelligence that is so conspicuously the attitude of many of the professional politicians.

I would suggest to all those members of the Institute to whom are addressed Forms of Guidance for the Election of Members *en bloc* that they at once destroy them, make their own selection, and base it, not upon any particular issue, but on the merit of the candidate to whom they feel can best be entrusted the settlement of any and every question involved in the advancement of the profession.

S. D. ADSHEAD.

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# Parliamentary Notes

[BY OUR SPECIAL REPRESENTATIVE.]

### *The Housing Bill.*

Mr. Bonar Law, the Prime Minister, informed Sir Kingsley Wood that the second reading of the Housing Bill would be taken on Tuesday, April 24.

Major McKenzie Wood asked the Minister of Health whether he would consider the possibility of making the housing subsidy of £6 a year available for utility societies and other approved bodies in areas where the local authority decided not to avail itself of the Government offer.

Mr. N. Chamberlain said he had already considered the difficulty, and hoped to meet it in the proposals in the Housing Bill.

### *The Prices of Building Materials.*

Asked by Mr. Short if he could state the names of the committee who were to watch the prices of building materials, Mr. N. Chamberlain said the composition of the committee was not yet completed but he hoped to be in a position to make an announcement very shortly.

### *Scottish Housing.*

Capt. Elliot informed Major M. Wood that it was not proposed to introduce a separate Housing Bill for Scotland.

### *Housing Progress.*

Mr. N. Chamberlain informed Capt. W. Benn that the number of houses completed and under construction by local authorities and public utility societies was as follows :—

| During Month of— | Number of Houses. Completed. | Under Construction. |
|---|---|---|
| January 1922 | 7,629 | 63,814 |
| February ,, | 6,686 | 59,133 |
| March ,, | 8,675 | 52,417 |
| April ,, | 7,145 | 47,102 |
| May ,, | 8,238 | 40,970 |
| June ,, | 6,908 | 35,971 |

The numbers of houses completed under the private builders' subsidy scheme for the same months were :—

| During Month of— | Number of Houses completed. |
|---|---|
| January 1922 | 1,724 |
| February ,, | 1,394 |
| March ,, | 1,747 |
| April ,, | 1,322 |
| May ,, | 2,167 |
| June ,, | 3,495 |
| Total | 11,849 |

Information as to the number of houses under construction by private builders during this period was not available.

# Law Reports

## Question whether Premises Collapsed through Non-repair

*Parkes Drug Stores, Ltd.* v. *W. F. Edwards and Son, Ltd.*

King's Bench Division.
Before Mr. Justice Sankey.

This was an action by Messrs. Parkes Drug Stores, Ltd., of Harmood Street, Kentish Town, against Messrs. W. F. Edwards and Son, Ltd., of Swan Yard, Upper Street, Islington, to recover possession of premises at the rear of Upper Street, Islington, and the substantial point in the case was whether or not the premises collapsed by reason of non-repair.

Mr. Croom-Johnson appeared for the plaintiffs, and Mr. W. Elliott Batt for the defendants.

Mr. Croom-Johnson said the action was for forfeiture based on non-repair of the premises in pursuance of a covenant in the lease dated April 1920 for seven years. A feature of the case was that the notice given under section 14 of the Conveyancing Act provided for the rebuilding of a section of the premises which fell down. The claim in all was for possession, mesne profits and for damages for alleged breach of covenant to repair the premises. The substantial issue was whether or not the premises collapsed by reason of non-repair. If they did not collapse by reason of non-repair, were defendants nevertheless liable to repair them ? That went to the claim for mesne profits and for damages for non-repair. There was also an issue as to whether defendants gave up possession or not. He apprehended defendants abandoned possession at some period. Defendants took up the position that the landlord was bound to rebuild when the building collapsed, and the plaintiffs took the position that the premises were out of repair and they served upon the defendant a notice under section 14 of the Conveyancing Act calling upon them to repair or make reasonable compensation. Defendants had done nothing. The reason plaintiffs put forward for the collapse of the building, which was sixty or eighty years old, was that it had been overloaded. Defendants carried on business as flour, corn and seed merchants, and stored goods on the premises. The rent was £120 per year. Plaintiffs did not admit any inherent defects in the building.

Mr. Batt pointed out that the notice under the Conveyancing Act was not served before the collapse of the building. His defence was that the building collapsed by reason of its faulty construction or inherent defects, and that the collapse was in no way due to defendants' non-repair under the covenant. He submitted that defendants had not overloaded the premises, and he pointed out that plaintiffs, whose place of business was next door, had the right to enter the premises twice a year to examine them, and they never exercised that right. If there had been any disrepair then plaintiffs would have seen it if they had visited the place, but he contended that so far as defendants were concerned the premises were never in a state of disrepair.

A number of expert witnesses were called for the plaintiffs and for the defendants.

His Lordship on the possession point found in plaintiffs' favour. With regard to the repairs defendants contended that they could not be called upon to do the repairs because they had not committed any breach of covenant, and said further that a special clause in the covenant excused them from doing the repairs because the building did not collapse consequent upon the non-observance or non-performance of their repairing obligations. In effect they said that the County Council condemned a part of the building and that the rest of it would have to be pulled down, and that the building's condition was not due to any breach of the covenant. His Lordship reviewed the evidence, and said he had come to the conclusion that the building was not improperly loaded. He thought the real reason of the collapse was faulty construction and the use of faulty materials. He thought the building was constructed in a way that it should not have been, and that the materials used should not have been used. The matter did not end there. He had to see if defendants were liable to comply with the notice under the Conveyancing Act, and he thought that in order to do so they would have to put up a very different kind of building from what was there originally because it was not simply a case of patching up an old building, but of pulling down the building and putting up a far different construction with far different material. There might be cases due to the hand of time where the obligation was upon the tenant to repair, and other cases where the obligation might fall on the landlord to repair. He came to the conclusion that in that case what had to be done was not merely a subsidiary part of a large structure, but that it was of such a character as to be substantially the re-erection of the house. This was, therefore, a case to which the tenant's liability did not extend, and he entered judgment for the defendants with costs.

## Alleged Obstruction to Ancient Lights

*Slack* v. *Leeds Industrial Co-operative Society, Ltd.*

Court of Appeal.
Before the Master of the Rolls and Lords Justices Warrington and Younger.

This was an appeal by the defendants from a judgment of Mr. Justice Romer, sitting in the Chancery Division, in favour of the plaintiff. The short facts were that Mr. C. H. Slack, who carries on business as a baker and confectioner at 2 to 4 Albion Street, Leeds, sought an injunction against the defendants to restrain them from erecting a building in or near Albion Square, Leeds, so as to cause a nuisance to him by the obstruction of his ancient windows as they existed before the pulling down by the defendants of 15 Albion Square, or so as to obstruct or interfere with the roadway of Albion Square and the free use and enjoyment by the plaintiff of the right-of-way. The plaintiff also complained
interference with his air rights.

Mr. Justice Romer held that the plai
tiff had failed to satisfy him that th
defendants' building would cause suc
an interference with his supply of a
as would entitle him to succeed, and upo
that issue he gave judgment for the d
fendants, with costs. With regard to th
issue as to the interference with the ligh
the learned judge held the plaintiff wa
entitled to the injunction, although h
said he did not think the interferen
would be so great as the plaintiff allege
but there was a probability that the
would be some interference. The issu
as to the alleged interference with th
right-of-way of the plaintiff, his lordsh
also decided in favour of the defendant
The latter now appealed from the jud
ment of the learned judge granting th
plaintiff an injunction upon the issue as
the interference with the light upon th
ground that the judge should, in the ci
cumstances, have awarded the plaint
damages in substitution of the injunctio

The Court, after hearing the leg
arguments, by a majority, dismissed t
appeal with costs.

The Master of the Rolls and Lord Justi
Warrington held that in the circu
stances and the law the learned judge ha
no jurisdiction to award the plaint
damages in lieu of the injunction.

Lord Justice Younger dissented, bei
of opinion that damages were the natu
remedy for such an injury as the plaint
complained of, and saying that injun
tions incautiously granted might cau
injury and arrest development. On t
facts found by the judge he thought t
injunction should have been refused.

## Housing and Town Plannin Act—Important Decision

*Alliance Economic Investment Co., Ltd.*
*Berton and others.*

Court of Appeal.
Before Lords Justices Bankes, Scrutton, and Young

This was an appeal by the defendan
who are the Estates Governors of Alley
College at Dulwich, from a judgment
Justices Darling and Salter, sitting in
King's Bench Divisional Court, in favo
of the plaintiffs.

The case raised an interesting iss
under section 27 of the Housing a
Town Planning Act 1919, which is
follows :—

"Where it is proved to the satisfacti
of the County Court, on an applicati
by the local authority or any pers
interested in a house, that, owing
changes in the character of the neighbo
hood in which such house is situate, t
house cannot readily be let as a sin
tenement, but could readily be let
occupation if converted into two or m
tenements, and that by reason of the p
visions of the lease or of any restricti
covenant affecting the house or otherwi
such conversion is prohibited or
stricted, the court, after giving any p
son interested an opportunity of bei
heard, may vary the terms of the lease
other instrument imposing the prohi
tion or restriction so as to enable

ouse to be so converted, subject to such
onditions and upon such terms as the
ourt may think just.”

In the court below it transpired that
e Alliance Economic Investment Co.
arry on the business of buying and ex-
loiting houses, and held from appellants
lease of Tollgate House, College Road,
ulwich, which had seventeen rooms and
garden of two acres. Experiencing
ifficulties in letting the house, and want-
g to cut it up into seven tenements, with
common kitchen, lavatory, and bath-
om, and which their covenants pre-
ented them from doing, they applied to
dge Parry at the Lambeth County
urt, who decided that, owing to a
ange in the character of the neigh-
urhood, the house could not be easily
t as a single tenement, but could readily
let for occupation if converted into
o or more tenements, and he sug-
sted the house might be made into
ree or four flats, and that plans should
submitted for that purpose. The
pellants appealed to the Divisional
urt upon the ground that the County
urt judge had misdirected himself, as
had no evidence of any change in the
aracter of the neighbourhood to justify
decision, and that the judge was
ong in taking into consideration, in
iding the matter, the surrounding
tricts such as Tulse Hill and Denmark
ll. It was further contended that there
s no evidence of change in the neigh-
rhood, the people who lived there
ng the same as before and of the same
ial position. It was stated that the
ellants were not unwilling that the
se should be changed into three flats,
their objection was that if there was
nding of a change in the character of
neighbourhood that would apply
only to Tollgate House, but generally,
vould render more difficult the desire
the trustees to preserve the estate as
igh-class one.

he respondents contended there was
ndant evidence to justify the County
rt judge finding as he had done.

he judges in the Divisional Court,
ing there was evidence to support
finding of the County Court judge,
med his decision and dismissed the
eal.

he defendants appealed from this
sion.

he Court allowed the appeal with
s, and a new trial was ordered to
held, Lords Justices Scrutton and
nger being of opinion that the
nty Court judge had apparently de-
d the case upon his own knowledge
he neighbourhood, and not so much
he evidence given before him.

## Contemporary Art

*Walker's Gallery.*

this exhibition there are nearly
hundred drawings in colour by
d W. Rich, about a third of which
framed. It is possible, therefore, to
very good idea of the artist's talent.
as considerable, graceful, and tradi-
l. He was an expressed follower of
Wint in his simpler and smaller
ner, of Cotman and of Girtin, and he
hese masters no shame. What Rich
hed in the book on water-colour
ing he published a year or two before
eath, extolling the early masters and
exhibiting their methods, he carried out in his own practice. It is astonishing that in an exhibition so extensive as this there should be so little monotony, but Rich was always interesting, even in his least considerable drawings, and sometimes he was impressive, as in the "Richmond" (No. 76). He was scholarly in his handling of trees: "Near Berkhamsted" (No. 39) and one or two other of the framed drawings are examples.

Adam Knight, whose drawings are shown in another room, is also a sincere artist in water-colour, and his seventy works reveal a talent too little known in London, although it has been expressed at the Royal Academy since 1900. The subjects of the drawings have been found in Normandy and Brittany and in England, and they include landscape and picturesque buildings, markets, and flower stalls. The treatment of them is restrained and leisurely, as if their author had enjoyed doing them and enjoyed the surroundings in which they were done. He certainly has an eye for the picturesque, but he never treats it in a common, nor in a casual way. The drawings are careful without being laboured; full of local sentiment, but empty of sentimentality, and they make a very pleasing show.

In the hundred drawings in water-colour by E. W. Powell, exhibited at the same galleries, a new talent is brought to the front and makes a good show. The most striking and challenging things are the mountain and cloud effects. These are good, and their treatment is daring and successful, without any scenic display. The quiet style of the architectural subjects is a contrast, and perhaps better to line with than the more challenging atmospheric records, but as introducing a somewhat original note into water-colour drawing it is the latter which are the more important. There are some aeroplane studies which seem particularly interesting.

*The Little Art Rooms in the Adelphi.*

Gerald Moira has called for colour times enough, and has blamed the architect because he employs it so little. Here in this selection of twenty small pictures in oil he shows how good a colourist he is on a small scale: we know how good a colourist he is on a large. The flower-pieces are sound, while the Dartmoor subjects are satisfying landscapes in satisfactory colour and varying weather. KINETON PARKES.

*Spring Exhibition at Birmingham.*

The 400 pictures in the rooms of the Royal Birmingham Society of Artists suffer a great disadvantage from overcrowding, and the lighting is not of the best, and certain pictures suffer badly from reflection and shadows.

Water-colours predominate, and we have all sizes and styles. John Keeley's two exhibits, "A Tributary of the River Union" and "Deep down the Glen," are strongly reminiscent of David Cox in subject, method, and colour. Needless to say they rank with the best. Geo. L. Leigh has two water-colours—"Regatta Day" and "The Bridge at Richmond." They are very well composed with effective use of curved shadows under stone arches, still water surfaces, and backgrounds of stately poplars.

The oil paintings are few but representative. Merret Hodges exhibits two portraits on sound traditional lines. His portrait of Master Edward Bartlett has fine qualities, apart from rendering. "Autumn at Enville," by Angela Gibbons, is free and individual painting, and has two good qualities—composition and colour.

Lancelot Roberts exhibits a fine oil—"Glorious Springtime." It has interesting qualities of light and shade on still water and smooth lawn surfaces. The same qualities are shown in his two pastels; "Under the Willows," a portrait of a child standing on the shaded edge of a pool. This is one of the finest works in the exhibition. His other pastel, "Blue Girl," is almost equally fine. Alfred Drury, R.A. (the president of the Society), exhibits a group in bronze, "The Kiss," which has very fine qualities of expression.

EDGAR LUCAS.

*An Exhibition of Architectural Etchings.*

An exhibition of architectural etchings by Frank Brangwyn, R.A., and William Walcot, R.E., reproduced under the artists' supervision by hand-printed photogravure, is being held at the Gallery of the Kensington Fine Art Society, 26 Alfred Place, South Kensington, S.W.7, until April 21.

## Town Planning Institute Dance

A dance will be given in the Galleries of the R.I.B.A., 9 Conduit Street, W., by kind permission of the Council of that Institute, on Thursday, May 3. It will be under the patronage of the council of the Town Planning Institute and of His Grace the Duke of Westminster and the Duchess of Westminster, The Most Hon. the Marquess and Marchioness of Aberdeen and Temair, Viscount Astor, the Rt. Hon. Viscount and Viscountess Gladstone, Viscountess Grey of Falloden, Sir Aston Webb, P.R.A., and Lady Webb, the Hon. Mrs. Alfred Lyttelton, Sir Richard and Lady Muriel Paget, the Rt. Hon. Neville Chamberlain, M.P., and Mrs. Chamberlain, Mr. and Mrs. John Brodie, Mr. and Mrs. St. John Hornby, Mr. and Mrs. John Willmott. The proceeds will be devoted to the purchase of a most valuable and interesting collection of maps and to the library fund of the Town Planning Institute. Dancing from 10 p.m. till 5 a.m. The price of tickets, including refreshments, is 21s., six tickets £5 5s. Tickets can be obtained from Mr. A. R. Potter, Secretary, 11 Arundel Street, Strand, W.C.2. Tel.: Central 637. Donations to the library fund from those unable to attend the dance may be sent to the secretary.

## Surveyors' Registration Bill

Mr. J. McClare Clark, the president of the Surveyors' Institution, speaking at the annual dinner of the Institution, held in London, appealed to those present to use their influence in the promotion of the Registration Bill now before Parliament. The Bill has been drafted by the Institution, in conjunction with the Auctioneers' Institute and the Land Agents' Society. Its object is to protect the public from unknowingly employing unqualified persons on the duties devolving upon surveyors, land agents, and auctioneers.

# London's New Trunk Roads

A LECTURE on "London's New Trunk Roads in the Making" was delivered by Mr. C. H. Bressey, O.B.E., F.S.I. (chief engineer, Roads Department, Ministry of Transport), before the London Society, on Friday last. The chair was occupied by Sir Henry Maybury.

In introducing the speaker, the chairman said there was no one better able to deal with the subject of London's new trunk roads than Mr. Bressey. Since the latter's return from France in the early part of 1919, he had devoted himself whole-heartedly to that very large and costly question. In addition to that, he had served as chairman of one of the committees dealing with London traffic, and he was, in fact, chairman of that committee at the present time, so that he had peculiar opportunities of studying the traffic requirements of London when viewed from a road point of view, and had also visualized the necessity for looking well ahead in the future when setting out and making the arrangements for the new roads he was now in charge of.

Mr. Bressey, in the course of his paper, said that the works of road construction which had been carried out in Greater London since the autumn of 1920 had cost a very large sum. True, the projects had provided employment for more than 30,000 of the workless, but now that the black cloud of unemployment showed signs of lifting, he imagined that criticism of the expenditure would not be wanting. By all means let the critics have full scope, but let them remember that the new highways which were taking shape had been earnestly advocated and eagerly awaited for some generations past. To those who reproached the road engineers of to-day with excessive zeal, he would be inclined to retort that censure might more justly be passed upon the inaction of their predecessors. Their expenditure of to-day redeemed the arrears accumulated during the long period of neglect.

Recognizing the utter disparity between traffic needs and traffic facilities, Mr. John Burns, then president of the Local Government Board, convened the Arterial Road Conferences of 1912 to 1916, when representatives of the local government authorities of London met to devise plans for the future. Their findings represented the verdict of the metropolis in its widest sense, but the outbreak of war and the lack of funds precluded any action. When, in the autumn of 1920, unemployment became acute, the Government, acting upon Sir Henry Maybury's advice, offered to participate with the local authorities on equal terms in the carrying out of the schemes which, needless to say, called for considerable revision as a result of building developments which had occurred in the meantime. It was, indeed, a case of now or never. Another few weeks and the way would have been barred.

Friendly negotiations led to the acceptance of the Ministry's terms by the county councils of London, Middlesex, Essex, Kent, Hertfordshire, and Surrey, not to mention certain county boroughs and minor authorities; the outcome being that an extensive programme of arterial road construction had been set afoot, destined to play an invaluable part in the development and growth of the metropolis. The lecturer then described the work which had been undertaken on many of the new trunk roads.

Following the lecture, Sir Henry Maybury pointed out that in all the works that had been put in hand in Great Britain since the date of the armistice, the local authorities, in connection with the Government, had spent something like £25,000,000. That was a very large sum indeed, but such expenditure was more than necessary to meet the very great problem of unemployment with which the country was faced immediately after demobilization. It would be agreed, he was sure, that they could not have spent money to better advantage. They had got something definite to show for that expenditure, and it was extremely fortunate that they had engineers of sufficient imagination and interest to get aeroplanes to effect the survey, so that the work could be put in hand promptly. The men were even engaged on the sections before the survey of them was completed, as so much pressure was being put upon the departments concerned to get the men to work. Sir Henry then proposed a vote of thanks to Mr. Bressey for his paper.

Mr. Arthur Crow said he had had the opportunity of seeing some of the work that had been carried out under Mr. Bressey's care and skill. One of the most important points in connection with that scheme of road-making was the way in which it would affect, in the near future, the commerce of London. It was of the greatest importance to Britain at the present time that money should be spent in directions which would advance their position in the Empire and in the world. The sum of £25,000,000 seemed to be a mere drop in the ocean compared with the results that must ensue from those magnificent roads in the immediate future, and still further enhance the history of this country. He (the speaker) touched upon that question of commerce partly because so deeply associated with the commerce of the country was the element of labour and the great problem of the housing of the industrial classes; and it seemed to him that not only would those roads facilitate the commerce between docks and manufacturing towns, but would also facilitate so materially the transport of the labourers from their busy hives to healthier surroundings than they could possibly obtain at the present time. His mind was drawn chiefly to the great docks at Canning Town, Silvertown and the neighbourhood, the Albert Docks, just recently opened, and the North Albert Dock which was to be put in hand, he believed, almost immediately, if it had not already been commenced. In that district there were something like 170,000 persons living in a state of severe overcrowding, and under most insanitary conditions. The problem of housing those persons had long been one for the deepest consideration, and the Garden Cities Association had entered into the thing most fully and freely, and had reported upon the very site which the London
County Council was now developing
Becontree. The only criticism he had
offer just now was that there should
a link from the western end of the b
pass to the Albert Docks, which could
made now on open ground at a very slig
cost, whereas if factories and buildin
were allowed to be put up on those emp
spaces, the linking up would be an impo
sibility in the future. He had gre
pleasure in seconding a vote of thanks
the speaker.

The lecturer, in reply to the last speake
said that regarding possible branch
from the by-pass referred to he shou
say the same remark applied to practical
every road that had been constructe
It was greatly to be hoped that loc
authorities who had been endowed
Parliament with very sweeping tow
planning powers would take advanta
to lay down the lines and see to it th
the spaces were kept open, so that if,
the future, there was a recrudescence
unemployment, the opportunity cou
be seized to enlarge the use of the road
which, after all, were only the beginni
and represented the skeleton.

Sir Henry New, in proposing a vote
thanks to Sir Henry Maybury, comment
upon the happy relationship existi
between the Ministry and the vario
local authorities in those matters.

Mr. Granville Smith, who said he w
the chairman of the committee of t
L.C.C. largely concerned with that que
tion for some three years, remarked th
the voice of the L.C.C. should not
silent on that occasion. The thanks
the nation were due in a very large degr
to Sir Henry Maybury for his persisten
in that work, for, even when the propos
was less popular, he stood manfully
his guns and never wavered.

In replying to the vote of than
the chairman said that without t
whole-hearted support of the L.C.
the work could not have been pr
ceeded with at all. The L.C.C. had tak
a hilltop view of the whole positio
They were faced with unemployment, b
they came to the front and showed gre
statesmanship. Without very much pre
sure they provided funds for work to
undertaken outside the L.C.C. area.
that way they had helped their poor
neighbours. Reference had been ma
to the necessity for still further work
be done in the dock area. No one realiz
the necessity for that more than they
the Ministry, but it must not be forgott
that a great deal of the congestion w
outside the border and outside the L.C.
area. The poorer districts of East a
West Ham could not deal unaided wi
those difficulties. They were the do
mitories of that great area, and in view
the fact that the work suggested wou
cost something like £3,000,000, it w
impossible and unthinkable that We
Ham could bear that burden. Th
approached the Government and start
to make out a scheme, and at no dista
date he was hoping that the L.C.
would join with them in carrying o
what would be a very great impro
ment, and which would materially he
the housing situation and prevent ov
crowding.

# Personal News

### *Capt. R. H. Ingham Clark Married*

The wedding of Captain Robert Harry gham Clark to Miss Audrey Fitch, only aughter of Sir Cecil Fitch (late Lt.-ol. R.W.F.) and Lady Fitch, took place t St. Margaret's, Westminster, on April 1. A full choral service was conducted y the Rev. H. F. Westlake, Custodian nd Minor Canon of Westminster Abbey, nd the happy pair were piped away om the church by the pipe-major of e bridegroom's regiment (8th Battn. , & S. Highlanders). Although there as no guard of honour, nine brother fficers, including Col. Ian M. Campbell, mmanding the 8th Battn., were present. fter the ceremony a reception, which as attended by a large number of disnguished guests, was given at the Hyde ark Hotel. The honeymoon is to be ent in Paris and the United States of merica. Captain R. H. Ingham Clark a director of the Associate Houses of obt. Ingham Clark & Co., Ltd., and . Gay & Co., Ltd., and elder son of r. F. W. F. Clark, chairman of the comany.

### *Presentation to a Leeds Architect*

An illuminated address and a cheque r £50 were presented at the annual eeting of the Leeds and West orkshire Architectural Society, to Mr. . H. Thorp, F.R.I.B.A., on his retireent from practice and going to live at Clifton, near Bristol. Mr. Thorp has given valuable public service as a member of the Art Gallery Sub-Committee of the Leeds Corporation Libraries and Arts Committee, and he was one of the founders of the Leeds and West Yorkshire Architectural Society, forty-seven years ago. He was the first secretary of the society, and afterwards held other offices, including the presidency, during his tenure of which he was a member of the Council of the R.I.B.A. The presentation was made by Mr. Eric Morley, on whose proposal, seconded by Mr. Butler-Wilson, Mr. Thorp was elected the first life member of the society, in recognition of his services to the profession.

The officers elected for the ensuing year were: President, Mr. Eric Morley; vice-presidents, Messrs. W. A. Jones and G. H. Foggitt; honorary treasurer, Mr. Wm. Whitehead; honorary librarian, Mr. J. Addison: honorary secretary, Mr. F. L. Charlton.

# The late Mr. A. Berrington

We deeply regret to record the death of Mr. Adrian Berrington at the early age of thirty-six, following a six months' illness. Mr. Berrington, who received his architectural education at Liverpool University, was an outstanding personality among the younger school of architects, being an accomplished draughtsman and a writer of considerable ability. For some time he was associated with the First Atelier of Architecture, and after the war he practised in Paris, winning, in conjunction with MM. Faure-Dujarric and Chaurès, the fourth prize in the Paris Town Planning Competition. He took up, in 1920, the appointment of Professor of Town-Planning at Toronto University. This sad termination to a career of much promise will be widely deplored.

# Big Salt Water Tank for the Zoo

The huge salt water tank which has been installed underneath the aquarium, now under construction in the Mappin Terraces at the London Zoological Gardens, will hold 538,560 gallons of water from the North Sea, brought direct in barges up the Regent's Canal, and piped across the road into this enormous tank.

The large storage tank will feed the eighty tanks built to contain the denizens of the sea. The water in this series of eighty tanks will be but one-sixth of the total sea-water required for the aquarium, the remaining five-sixths being in storage, in circulation, or in process of being filtered. The storage tank is 220 ft. long, 34 ft. wide, and 12 ft. deep. When completed the aquarium will be the largest in Europe.

The architect was Mr. J. J. Joass, F.R.I.B.A., and the contractors were Messrs. J. Jarvis and Sons, Ltd. "Colemanite" rendering has been used throughout.

A NEW SALT WATER TANK AT THE ZOO.

# The Week's News

### *Housing at Gloucester.*

The Gloucester City Council propose to build 142 dwellings.

### *A Plasterer's £5,000.*

Mr. G. T. Bedingfield, of Clacton, plasterer, left £5,009.

### *Worthing Parade Extension.*

Worthing proposes to spend £54,000 on extending the parade and on a band enclosure.

### *More Houses for Penrith.*

Forty new houses are to be erected by the Penrith Urban District Council on the Castle Hill estate.

### *The Lloyd Memorial Home at Deal.*

Mr. Frank Lloyd has given £4,000 towards the building of a new wing of the Lloyd Memorial Home at Deal.

### *More Derby Houses.*

The Derby Provision of Houses Committee are obtaining sites for 134 more houses, and one shop.

### *Housing at Manchester.*

Manchester Corporation have received sanction to borrow £64,000 to assist private builders of houses.

### *Housing at Workington.*

A proposal to erect 150 houses is being considered by the Workington Town Council.

### *Re-housing at Eccles.*

The Eccles Town Council have received the sanction of the Ministry of Health to the erection of 176 houses at Peel Green.

### *East Cowes Esplanade Scheme.*

East Cowes Town Council are considering a scheme, estimated to cost £150,000, for the extension of the esplanade.

### *Yorkshire Memorial Institute.*

Mr. and Mrs. G. W. Briggs, of Bridlington, have given a site at Cliffe on which to erect the proposed war memorial institute for the village.

### *Brighton Aquarium Scheme.*

Plans have been prepared for the laying-out of the Brighton Aquarium as Italian gardens. It is also proposed to erect a concert hall.

### *Change of Address.*

Mr. George Hollins, A.R.I.B.A., M.S.A., has moved to New Lloyds Bank Chambers, Newcastle, Staffs. Telephone No. 252 Newcastle.

### *The Manchester War Memorial.*

The Manchester City Council have refused to have the statues of city worthies removed from Albert Square, in front of the Town Hall, to make room for a cenotaph.

### *Preservation of Hexham Abbey.*

An appeal is made by the Hexham Parochial Church Council for £2,000 to carry out preservation work to Hexham Abbey. Several portions date from the sixth century.

### *Harrow Building Developments.*

Considerable building developments are being considered at Kenton, between Harrow and Hendon, and on the other side at Headstone Lane, on a large scale, in the parish of Pinner. Some 300 acres are to be developed.

### *New Secondary School.*

The application of the Southport Education Committee to acquire a site of 12 acres for a boys' secondary school in Scarisbrick New Road has been approved by the Board of Education.

### *Memorial Hall for Bridgwater.*

Messrs. Samson and Colthurst, of Bridgwater, are the architects for the proposed new school and memorial hall in connection with the Bridgwater Wesleyan church.

### *To Replan New York.*

Mr. T. Adams, the town-planning expert, who, at Northwood, held the first inquiry of the first town-planning scheme in England, has been appointed one of a committee of six to replan New York.

### *Professional Practice.*

Mr. William H. Thorp, F.R.I.B.A., of the firm of Thorp and Foggitt, of 84 Albion Street, Leeds, has retired, and the practice will be carried on in the future by Mr. George Herbert Foggitt, A.R.I.B.A., at the same address.

### *"Trade Rings."*

Newcastle City Council have adopted a resolution from the Manchester Corporation urging the Government to take immediate steps to combat the effect of trade rings existing in the building material trade.

### *R.I.B.A. Intermediate Examination.*

The centres for this examination will be London and Leeds. At both centres the examination will be held from June 1 to June 5, 1923, inclusive. At the London centre the oral examination will be held on June 7; at the Leeds centre on June 6.

### *Bromley Town-planning Scheme.*

The Bromley Rural District Council has resolved to town plan the whole of its district, which comprises an area of approximately 26,000 acres. The preparation of the scheme has been entrusted to Messrs. Ernest G. Allen and Partners.

### *Memorial to Women.*

Out of the £3,000 required for the restoration of the Five Sisters' Window in York Minster, £2,000 has already been subscribed. The restoration of the window is to form a memorial to the women of England who lost their lives serving their country during the war.

### *Electric Bells for Notre Dame.*

The bells of the Cathedral of Notre Dame are in future to be worked by means of electric mechanism. The last bell-ringer, whose work will be brought to an end, is Mme. Herbette, who closes a long line of ringers, which includes Victor Hugo's "Quasimodo."

### *Guildford Town-planning Scheme.*

Opposition was raised at the Ministry of Health's inquiry into the preliminary scheme for town planning at Guildford by two or three bodies. The Town Council's proposal to permit up to twenty houses to the acre in the industrial area was contested by Labour, who suggeste twelve. A demand was also made for recreation ground at Stoughton.

### *The Home of Annie Laurie.*

The estate of Craigdarroch, the home c Annie Laurie of the ballad, has bee placed in the market. A relic of her tast is preserved in the Georgian garden i the rear of the house. She marrie Alexander Fergusson, of Craigdarrocl and died in 1761 at the age of seventy nine.

### *Prizes for Shop-front Designs.*

The prizes given each year before th war by the City of Paris for the shop front designs best calculated to add to th architectural beauty of the capital ar to be revived. All the frontages cor structed from 1914 to the end of 1922 wi be admitted to the competition.

### *Architects' Names on Buildings.*

That 99 per cent. of the educate people of Liverpool did not know th name of the architect of St. George Hall was the argument advanced at meeting of the Liverpool Architectur Society for the inscription of the arch tect's name, Harvey Lonsdale Elmes, c a tablet in the building. The propos was not adopted.

### *Greater Bournemouth.*

The proposal of the Bournemout Corporation to borrow £53,500 for buil ing another half-mile of sea wall an promenade from Boscombe Pier eastwar towards Southbourne was the subje of a Ministry of Health inquiry. Th proposal is part of the general schem along 3¼ miles of sea front. The existir drives and promenades cover over tw miles.

### *Dunwich Church Tower.*

The remaining portion of Dunwi church tower—all that remains of th ancient city of Dunwich—has been tak down and removed to a place of safe for re-erection in the churchyard of th modern church of St. James, Southwol This step has been taken to save the tow from the encroachment of the sea, whi has swallowed up the whole of the city Dunwich.

### *£100,000 Tower.*

A new London landmark is to be t Wembley "fly-wheel" tower, the chi feature of the amusement section the British Empire Exhibition. It w be a concrete cylinder 600 ft. high 900 ft. above sea level. Visitors will ma a spiral ascent in a huge cage. The tow is to cost £100,000. Four hundred peop at a time can make the seven-minu ascent in the glass-screened cage.

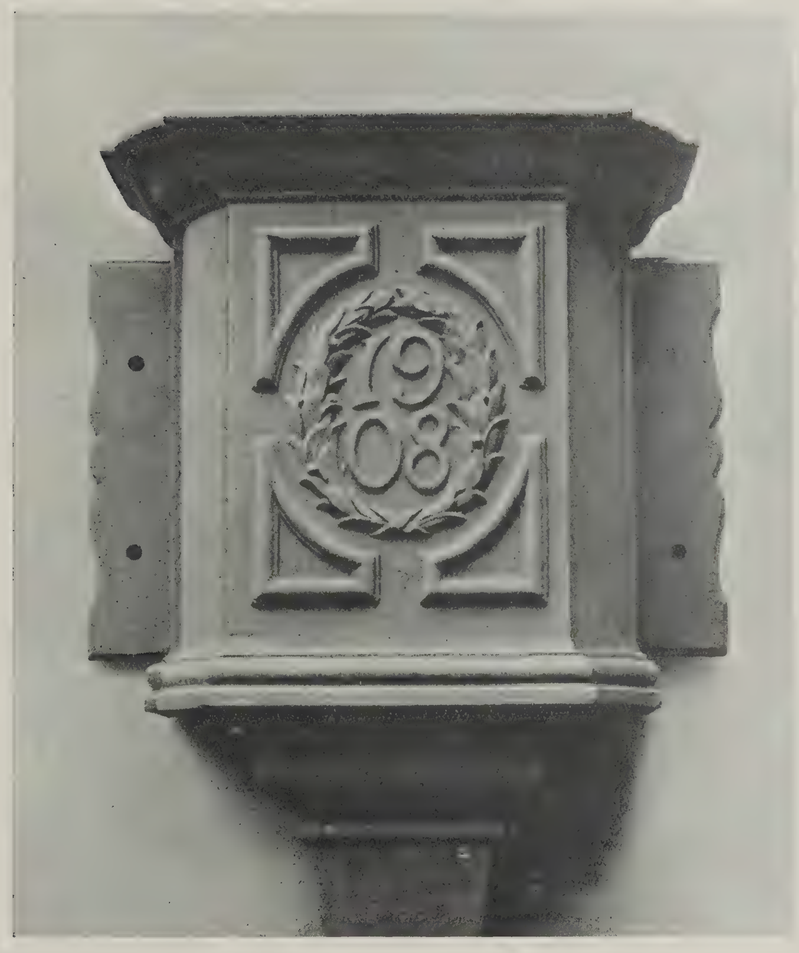
### *Inigo Jones House to be Razed.*

An Inigo Jones house known as Ribt Hall, on the banks of the Derwent, Camerton, near Workington, built in t Renaissance style in the reign Charles II, which has for a century be used as a farmhouse, is to be pulled do shortly. Lord Lonsdale, the owner, h come to the conclusion that it is stru turally unsafe and cannot be repaire It contains some charming oak a chestnut panelling.

ednesday, April 25, 1923 Vol. LVII. No. 1477

# THE ARCHITECTS' JOURNAL & Architectural Engineer

*With which is incorporated "The Builders' Journal."*



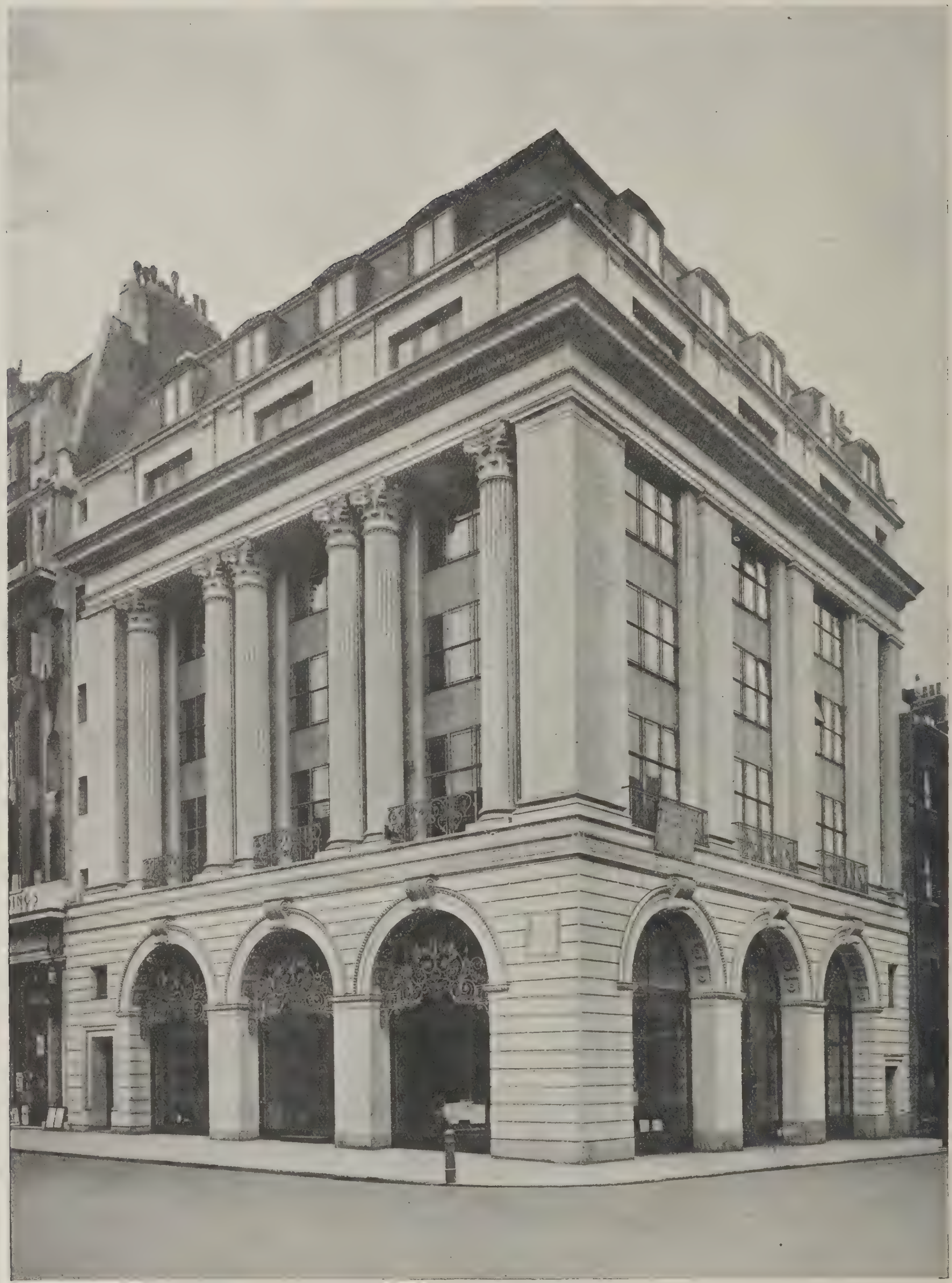
A RAIN-WATER HEAD.

*Designed by Basil Oliver, F.R.I.B.A.*

27-29 Tothill Street, Westminster, S.W.1.

# The Best Building of the Year : "Wolseley House," Piccadilly

W. Curtis Green, F.R.I.B.A., Architect



The Jury appointed by the Royal Institute of British Architects to award a medal to the Architect who has designed the best street frontage completed during the year 1922 within a radius of four miles from Charing Cross has just completed its task. After careful examination of drawings and photographs of all the buildings which were nominated for the honour, and after a tour of inspection of the actual buildings, the Jury has given its Award in favour of "Wolseley House," designed by Mr. W. Curtis Green, F.R.I.B.A. The Jury consists of: The Earl of Crawford & Balcarres, Hon. F.R.I.B.A. (Chairman), Sir Aston Webb, President of the Royal Academy, Mr. Paul Waterhouse, P.R.I.B.A., Sir Reginald Blomfield, R.A., PP.R.I.B.A., Mr. E. Guy Dawber, F.R.I.B.A.

THE
ARCHITECTS' JOURNAL
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# The New Housing Bill

THE new Housing Bill is wider in its scope than was generally anticipated. It should therefore afford satisfaction to those who had thought to find no provision made to assist private enterprise. The provisions of the Bill, indeed, fall into two groups: those designed to help municipalities and public utility societies, and those designed to help private enterprise. The former had already been made public by the Minister of Health. Half the annual loss, which is estimated at £6, is to be paid by the State, the remaining deficiency is to be made good by the local authority. It must not be forgotten, however, that this payment is only for twenty years, whereas loan charges will continue for sixty years. A thrifty authority will therefore set aside a proportion of this sum each year to meet a possible deficiency after the withdrawal of the State assistance, so that if the sum of £12 is correct the actual annual contribution of the local authority will exceed £6.

In making provision to help private enterprise the Bill shifts the financial burden entirely on to the shoulders of the local authorities; a procedure which has been rather frequent of late. The Bill empowers local authorities to assist, under certain prescribed conditions, private builders of small houses, by means of lump sum grants, by means of a remission of the rates, or by periodical payments. Finally, the Small Dwellings Acquisition Act of 1899 is again to be amended so as to include houses upon which advances can be made up to a value of £1,200. It was increased from £400 to £800 by the 1919 Act. The houses must, with certain qualifications, be completed by October 1, 1925.

Regarded frankly as a measure of idealistic statesmanship we do not consider that this Bill equals its predecessor of 1919. The latter failed owing to faulty administration and industrial troubles; nevertheless, we think that this Bill will be productive of houses, and houses of a kind for which there is the greatest demand. The terms "parlour" and "non-parlour" do not appear in the Bill; instead there are limits of superficial area to which the subsidy applies, a minimum of 620 ft. and a maximum of 820 ft. super.

Much will depend upon the exact wording of the regulations governing the method of measurement; thus, whether the superficial area is measured within or without the containing walls, whether outbuildings are included or excluded, and the like, will make a very great difference in the amount of accommodation which can be planned. But the kind of house which these limits suggest is one having a kitchen-scullery, with, perhaps, a small washhouse adjacent, in which the work of the house will be done, a larder, fuel storage, a closet, a good-sized living-room, which will be the main room of the house, three bedrooms, and a bathroom. This, we contend, is a type of house for which there is a great demand. It is certainly the smallest house compatible with decent living, but with really skilful planning, with proper equipment and fittings, so that the occupiers can dispense with as much bulky furniture as is possible, and good workmanship, such a house is no perpetuation of slum conditions as has been insinuated, but an asset to the nation. The Minister has very wisely refrained from specifying the exact accommodation which these houses are to comprise. Some may, perhaps, contain a small parlour, kitchen, and scullery, and two bedrooms, others three bedrooms, or even four. Mankind, both in its occupation and its tastes, is too diverse to be ordered into uniformly arranged houses. The Bill has been rightly criticized because it does not help the middle classes, but it must be remembered that the acutest need is to ease housing for the very poorest, and this we think the Bill will do. A more serious criticism is that the provisions of the Bill place too heavy a burden on local authorities. The taxpayer is saved at the expense of the ratepayer.

It will be noted that no standards of lay-out or design are indicated. Indeed, the control that is to be exercised over the eligible houses appears to be almost negligible. That this is possible is a very real tribute to the preceding Act of 1919. To pass such an act four years ago would have been impossible; as it is there is a very grave risk that many of the houses, even those built by local authorities, will be badly designed and badly disposed. But generally speaking we think that the lessons inculcated by those administering the last Act will not be forgotten. Thanks to that much-abused Act the nation's whole attitude towards housing has been changed. Every local authority, every housing committee, and every surveyor has had an opportunity of benefiting from the knowledge of persons who had made housing a life's study.

The nation, in fact, may be said to have undergone an intensive course of instruction in housing. It remains to be seen whether it has learnt its lesson, and is now able to act alone. We cannot help thinking that subsequent generations will not deem the cost of housing commissioners, headquarters staffs, and the like, the flagrant waste of public money that it is still considered by many. However, all such expenses will be spared in the administration of the proposed Bill, and this fact will reconcile many who are opposed to State interference in any form. Unfortunately, we feel less sanguine about houses that may be built by private enterprise. The Additional Powers Act showed us how bad these can be, and there is no reason to expect an improvement.

Other important enactments of the Bill include an undertaking, under certain circumstances, on the part of the Minister to make contributions, up to half the estimated annual loss, towards clearance and re-housing work, under Parts I and II of the principal Act (the Act of 1890), and provision for further by-law relaxation where such are likely unnecessarily to interfere with or add to the cost of the provision of small houses.

It seems that no attempt is to be made in any way to control the supply of materials. One of the causes which led to disaster in 1921 was the absolute mismanagement of the D.B.M.S., and the present Government is one which favours the minimum amount of State intervention. But although in the past inquiries that have been set up have not elicited any cases of profiteering, we think that the public has on occasions been exploited in the matter of high prices for certain building materials. The Minister will, therefore, be well advised to set up a permanent committee that shall watch and report the prices of building materials. It is unlikely, however, that a similar rise in prices will occur as a result of this Bill such as took place during 1919 and 1920. The fact that the subsidy is fixed will constitute an automatic check, for so soon as it ceases to be an inducement, building will slacken.

On the whole we think the measure will be productive of houses, both municipally and privately, houses of the kind for which there is the greatest need, and at no exorbitant cost. Our only anxiety is as to the design of the houses and their lay-out.

### Whitgift Hospital

When the Croydon Corporation Bill came up in the House of Lords last week for its second reading, the House, without dissent, gave an instruction to the Committee on the Bill to strike out all the powers for compulsory acquisition of the Whitgift Hospital. This means, of course, that the hospital is saved. The arguments for and against its destruction are too familiar to need recapitulation here. All that need be said is that the thanks of the nation (and especially of the burgesses of Croydon, as they will perhaps come to realize in course of time) are due to the House of Lords, and to the various learned and artistic societies that formally protested against the Bill, for the action they have taken in this matter. The Whitgift Hospital is more than a local relic; it is a national possession of rare architectural beauty and historic interest. To allow it to be swept away to make a small improvement of very doubtful utilitarian value would be to sell our birthright for a mess of pottage.

### "The Best Building of the Year"

Our congratulations to Mr. Curtis Green, whose Wolseley Building, in Piccadilly, has just gained the distinction of being selected as the first "Best Building of the Year." The choice is an excellent one; we do not think that the medal could have been better bestowed, though there are undoubtedly many recent buildings in London that run it very close. The Wolseley Building achieves its effect by simple means. There is nothing unusual about its main elements—the well-proportioned arcade, the great order, the mansard roof; it is the assembly and general handling of these elements that give the building its unusual air of distinction. The only unconventional note—at least, so far as this country is concerned—is the filling of the arches on the principal front with very beautiful wrought-ironwork. The public now, for the first time, have the opportunity of looking upon a building that has been definitely pointed out as a fine work by a competent jury of assessors. The Wolseley Building, by example, should help considerably in the work of improving public taste.

### Lord Montagu and the London Traffic Problem

London's traffic problem is admittedly serious enough, but we cannot believe that the time has yet arrived for the heroic measures advocated by Lord Montagu of Beaulieu, who has lately communicated his ideas to "The Evening News." Lord Montagu rightly points out that it is not feasible to widen a series of existing streets, because of the very high value of shop and house frontages; and that to construct great lengths of subways is equally impracticable, owing to the enormous cost involved. His lordship's remedy is to build overhead trunk roads, at least 50 ft. wide, above the existing streets—one from the Marble Arch to the London Docks, and another, on the south side of the Thames, between Clapham Junction and the Surrey Docks. Sir Reginald Blomfield puts the case against such roadways very clearly—both from the practical and the æsthetic point of view. His criticisms, summarized, are that if the roads were low they would have to "bore their way through the serried ranks of houses running north and south," and if they were high overhead they would have to be carried on trestles sufficiently high to clear the houses, that is to say, at least 80 ft. "The claims for compensation in the one case, and for the purchase of the ground in the other, might alone render either scheme impracticable," says Sir Reginald, adding: "Speaking merely as an artist, I look upon the idea of a high overhead roadway, 50 ft. wide, carried on enormous trestles, and extending over four to five miles, as a nightmare." For our own part, we feel that these elevated roadways have little chance of materializing—in any case, not until alternative and less costly methods have been tried. Many critics of the existing system overlook the root cause of traffic delays, namely, congestion at cross-roads. So long as one stream of traffic continues to be held up while another stream cuts at right-angles across it, so long will there be delay and confusion. The remedy is to keep both lines of traffic moving. This can only be done by building viaducts at the intersections of the main thoroughfares. The system is already in being in a number of important cities in the United States, and we have no doubt that it could be successfully adapted to the peculiar conditions of London.

### The Late Mr. Edwin T. Hall

Mr. Waterhouse's comprehensive appreciation of the late Mr. Edwin T. Hall leaves little for others to say. That the profession is much the poorer for his loss goes without saying, for no man, within recent years, had achieved greater distinction as a specialist. On his own subject of hospital design Mr. Hall was the oracle of our time. Yet his outlook was by no means limited to one class of work, as witness his design for Liberty's new building in Regent Street. His very considerable record of work accomplished stamps him with the hall-mark of success and rounds off a full and useful life. Mr. Waterhouse does full justice to the many sides of his career—his abilities as an architect, his strength as a counsellor, his charm as a man. In all respects he will be sadly missed. To his relatives in their bereavement we offer our sincere sympathy.

### Names and Numbers

There is wisdom in the proposal to tax "named" houses; not that we think that such a tax would produce much of a yield, for the residents at *Mon Abri*, *Chez Moi*, and *The Laurels* would speedily have their name-plates off the door—which is a consummation devoutly to be wished. No more effective method of creating confusion has ever been devised than this of naming houses. We do not refer, of course, to large or isolated houses in remote districts, where consecutive numbering is impracticable; but in business thoroughfares and in suburban streets every building should have its distinguishing number. There is much virtue in the American system of numbering streets as well, but it is doubtful if we shall ever rise to such heights of mathematical efficiency in this country. No. 1 First Avenue, 29th Street, may not have so romantic a flavour as Empire House, Eastcheap, but at least it provides the traveller with a sure direction to his destination. In a new world these romantic values may be very properly disregarded, but even New York has its Broadway, its Bowery, and its Riverside Drive.

### Our Special Supplement

With this issue we include a special supplement containing reproductions in colour of two of Mr. William Walcot's restorations of ancient temples, now on view in the galleries of the R.I.B.A. Monochrome reproductions of colour subjects, even with the use of the iso-chromatic negative, can never convey a true impression of the original work. These colour reproductions, however, are a reasonably close approximation to the actual paintings, and suggest very vividly the chromatic splendour of Mr. Walcot's palette.

# The Late Edwin Thomas Hall, F.R.I.B.A.

## By PAUL WATERHOUSE, President of the R.I.B.A.

IT is a special, though melancholy, pleasure to me to be allowed to offer some homage to the life of an old friend by contributing a brief biography of one whose death (on April 15) has fallen very suddenly upon us; and I come forward with these notes upon his life, qualified chiefly by the fact that there are few who have enjoyed more personal memories of his career of usefulness to his brother architects.

Hall came of architectural parentage, for his father, George Hall, who practised in Victoria Street, was known in his time as the designer of buildings in several parts of the country as well as in London. Two of Hall's brothers became constructional engineers.

His birth took place at Lowestoft in 1851, and it was at an early age that his choice of architecture as a future profession was made. This choice was fostered by some early opportunities of foreign study, for at the age of fifteen and sixteen he began a series of continental wanderings which, starting with Belgium and Northern France, continued at intervals throughout his life and at least down to 1909. Paris, Brittany, the South of France, Switzerland, Italy, the Baltic, Germany, Norway, and even India were all in their turn visited or revisited, and in all architecture and its study were the subjects of his attention and interest.

At some date in the 'sixties Hall spent two years at the South Kensington School of Art as an architectural student, and his regular office training was obtained under Joseph Fogerty, F.R.I.B.A., M.Inst.C.E., with whom he remained until he started practice on his own account.

Probably the engineering side of his master's occupation contributed not a little to the constructional and scientific abilities of the pupil's after-career.

A year before Hall left Fogerty's office he initiated, by arrangement with his master, the beginnings of a personal practice; and in 1875 we find him installed in the city office which he subsequently abandoned for the office at the south-east corner of Bedford Square, which he occupied to the last days of his life.

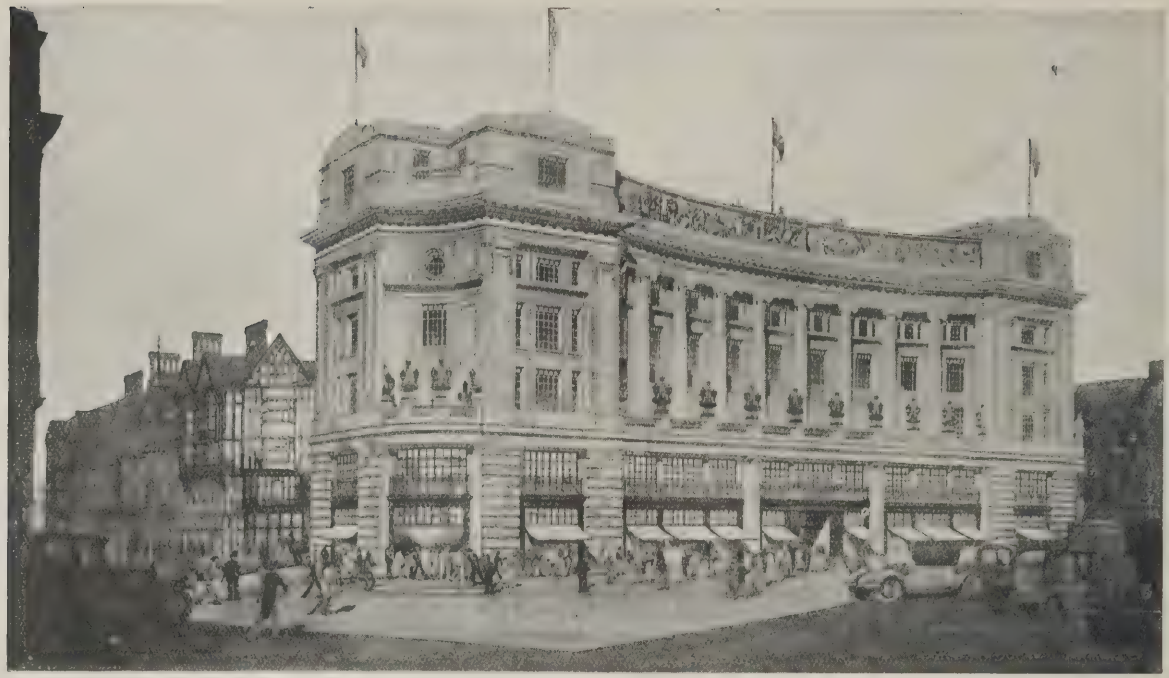
His work may be divided into domestic commissions, factories and warehouses, offices, hospitals and sanatoria, and shops. To mention the last first it is well known that he was engaged on the rebuilding of Messrs. Liberty's vast building at the angle of Regent Street and Argyll Place. This great site has a frontage of over 200 ft. in Regent Street and extends eastward as far as Great Marlborough Street. It will be recalled that though a stone treatment is to prevail on the western façade of the design, the frontage in Argyll Place is of a half-timber type, Hall having, with characteristic persuasion, won his way with the County Council as to the legitimacy of timber framing as a fire-resisting material for an external wall. London awaits with interest the result of this bold experiment, the completion of which, as no doubt most of Hall's work, is in the capable hands of his son and partner, Mr. E. Stanley Hall.

It is, perhaps, as a hospital designer that Hall was most appreciated by his many clients. During the war he carried out—I believe in an entirely honorary capacity—the vast work of transforming H.M. Stationery building near Waterloo Station into a hospital for nearly 2,000 beds, as well as the Welsh War Hospital at Netley, remarkable for having been constructed in eight weeks from the date of receiving instructions to the moment of occupation, his son being his collaborator in both of these efforts.

The Manchester Royal Infirmary, though competed for and carried out in conjunction with Mr. John Brooke, of

Photo: Lafayette.

THE LATE MR. EDWIN T. HALL, F.R.I.B.A.



LIBERTY'S NEW BUILDING, EAST INDIA HOUSE, IN REGENT STREET.
THE LATE EDWIN T. HALL AND E. STANLEY HALL, FF.R.I.B.A., ARCHITECTS.

Manchester, stands out as Hall's best-known achievement. It cost nearly £400,000, and is a monument of his special skill in the achievement of those essential and intricate elements in a building of hygienic purpose which are not always classed as architecture. Every problem connected with drainage, heating, ventilation, and general sanitary efficiency received from Hall an almost loving interest which placed him in the forefront of practical schemers, and made him in many departments of domestic engineering a forerunner and pioneer. His success in winning (in 1894) the competition for the large hospital at Hither Green brought him much other work of like nature. Two hospitals were erected for the City of Leeds, where treacherous foundations were successfully combated by Hall's favourite system of "raft" foundation. Camberwell Infirmary, Plaistow Hospital, the extension of St. George's Infirmary, the Barnato-Joel Cancer Research block at the Middlesex Hospital, special wards and a Nurses' Home at the Caterham Asylum, the Home at Brompton Hospital, and the Sir Henry Tyler wing of the Homœpathic Hospital in Queen Square, are other conspicuous examples of his work.

For other hospitals he carried out only initial instalments; for example, the Out-Patients' Department for the Jewish Hospital at Stepney, and the same for the Battersea Hospital.

In designing the Frimley Sanatorium for the Brompton Hospital, Hall won a victory over some opponents on the Board, and convinced them, after they had ordered a remodelled design, to return to his original intentions. The completed design won a prize at the Washington Congress.

His determined, and then original, designs in Sanatoria found further exemplification in the South Wales Sanatorium at Pontywal, near Talgarth, the Lenham Sanatorium for the County of Kent, and that at Godalming, though all these differ in their distinct characteristics, the differences being due to site and to requirements.

Hall was often employed as consulting architect in work of this class; and at Streatham he completed with amendment of his own the British Home for Incurables which the untimely death of Arthur Cawston in 1894 left without an architect.

Hall's factory practice was also important. Of this class of buildings it will be sufficient to give typical examples, so I content myself with mentioning those executed for Messrs. Epps & Co., at Blackfriars, and Messrs. Causton and Sons, in Clapham Road.

As early as 1875 Hall was engaged on several large office blocks or warehouses, and between that date and 1915 his work was to be found in Basinghall Street, Finsbury Pavement, Threadneedle Street, New Broad Street, Bishopsgate, St. Dunstan's Hill, Laurence Pountney Lane, Birchin Lane, Parliament Street, and Cannon Row.

He built the National Press Agency building and the head offices of the Metropolitan Asylums Board. He remodelled the London Joint Stock Bank in Lothbury, and built the same bank's branch at Peckham. He also remodelled the old Baltic premises in Threadneedle Street, since demolished.

Hall was not without church work, though this did not constitute any large proportion of his activities.

Of domestic work both large and small he had a good share. He designed Sloane Mansions in Sloane Square, and several houses in Cadogan Square and Pont Street. The Broad Street Station Dwellings in Finsbury, St. George's Home for Children at Chelsea, and all the houses on the Beech Hill Park at Hadley Wood were from his designs. A very large work of his was the block containing many hundreds of rooms known as St. Ermin's, near St. James's Park Station, Westminster. A large ballroom at Tangier Park, Basingstoke, is by him, as are also houses at Eltham, Sevenoaks, Ivy Hatch (near Ightham Mote), Reigate, Crowborough, Edenbridge, Chobham, Harrow, Basingstoke, Beulah Hill, Gibson's Hill, and Gipsy Hill.

But with all this professional work, Hall laid himself out to put his eminently practical and logical mind at the service of his fellow men in unarchitectural as well as in architectural quarters. His life at Dulwich was one round of public duty very cheerfully undertaken and very carefully performed. Not only was he, for the last twenty-two years, a driving force among the Estates Governors of Alleyn's College of God's Gift, during three years of which he was their chairman, a College Governor for nearly as long a period, and a Trustee for the Charity Commissioners of Dulwich College Chapel, he was also respected and valued for thirty years as Vicar's Warden of Emmanuel Church, and I doubt whether there were many public enterprises of any kind in that district to which he did not offer his sympathy and practical help. Whether his membership of Dulwich Golf Club took the form of play or patronage I do not know, but he knew his way about a croquet lawn, and was fond of this recreation.

His family life was a singularly happy one. He married, in 1878, Florence, the eldest daughter of the ate Julian Byrne, of the Madras Railway, and he leaves esides his widow three sons and four daughters, three f whom are married, one to the Vicar of St. Stephen's, ulwich.

As a young man he was fond of choral singing and pracised with the little private society that met at Mrs. John icksee's in Fitzroy Square. He was also a member of the 'Anonymous Society," a group of young men, mostly rtists, among whom were some famous names.

Masons will recall him as a Past Master of the No. 5 odge and a Past Grand Steward of Grand Lodge.

As a vice-president of the London Society he took a vital nterest in London improvements, and was the author of a esign (in 1915) for an Imperial Memorial, which included he destruction of Charing Cross Bridge, the removal of haring Cross Station to the Surrey side, and the erection f a road bridge in place of the railway bridge.

He won two gold medals at the Milan Exhibition for his rchitectural exhibits.

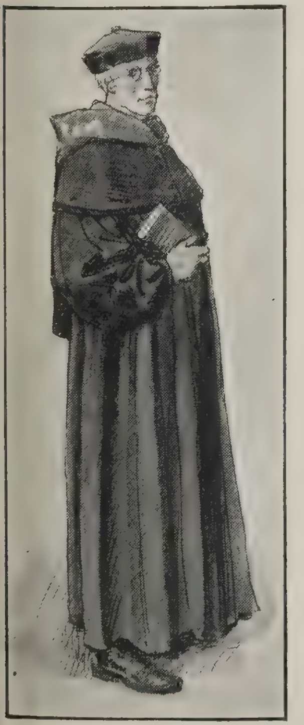
I have left to the close his work at and for the Royal nstitute of British Architects, work which among his rchitect friends, is perhaps a more intimate memorial than is work as a designer. He achieved the position of vice-resident, but to say this only is to belittle the strength and he great variety of his services. Even if I add that he was most industrious secondary of the Practice Standing ommittee and eventually one of the very best chairmen, s well as a member of several others, I have given no idea f his self-sacrificing work for the Institute.

If we sometimes in jest called him "By-law Hall," it was n affectionate jest, and implied a great deal of reverence or his astonishing power of keeping us all right on the legal nd semi-legal aspects of our constitution. That he should now our by-laws and charter within and without was not o be wondered at, for in company with his old friend and ny old friend, Mr. John Slater, he did most of the drafting f the Charter in 1887. But to *know* these things was not nough. To *express* them was the need, and his power of ourteously and logically explaining the most complicated spects of some particular point at issue was quite unqualled. How many times since his retirement from the ouncil have I felt the need of his illumination at the ouncil table ?

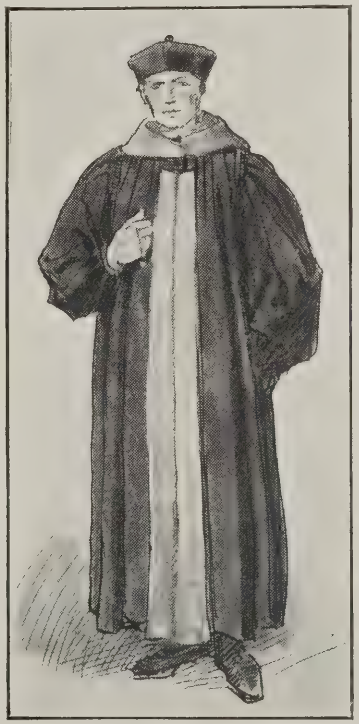
Again, if there were any work to be done in which a clear and lawyer-like mind coupled with endless industry was wanted, Hall was the man for the work. Notably was this the case when the reform of the London Building Act was on foot. Not only did Hall study and collate the building legislation of London and many provincial and foreign cities, but he actually drafted a model Act to supersede that of 1857, and when the London County Council took up the task of amendment, Hall was retained by the City of London and drafted their amendments to about a hundred clauses. Further, when the London County Council promoted their Bill, it was Hall who, in the absence of Cates through illness, stepped into the breach at the urgent request of his colleagues, and by his infinite research among the records of Parliament established, what was thought to be a forlorn hope, the right of the Institute to a *locus standi* before the House. It was, I believe, by his own almost unaided efforts that he won his point, and thereby won also a great victory for the Institute's future position and prestige. To give details of the many ways in which he steered the Institute through many knotty problems and legal intricacies would be useless here, but it remains a fact most gratefully remembered that for perspicacity and clear-headed insight, placed ungrudgingly at his confrères' service, he never had an equal among his colleagues.

There are many classes of mind in this world, and it is sometimes by the prevalence of unreasonable mentalities that we appreciate what the truly orderly mind might be. Hall's was the orderly mind; problems set themselves out in his sight in a logical disposition; he enjoyed tidiness in words and argument. For such a mind there are two calamities possible. The one is that the engine of thought may be used maliciously; the other that the same engine may before life is ended fail its owner. From both of these calamities Hall was spared; from the first by his kindly nature, from the second by a continuance of health to which his own personal pluck was no doubt largely contributory. It is a happiness to his friends to know that clear thought was his possession to almost the last hour, and to realize that a man to whom life was work was enabled to lay down his tasks without that interval of disordered twilight which would have been to him, if not intolerable, at least a very grievous burden.

## The R.I.B.A.'s Proposals for an Academic Dress



FOR FELLOWS.



FOR ASSOCIATES.
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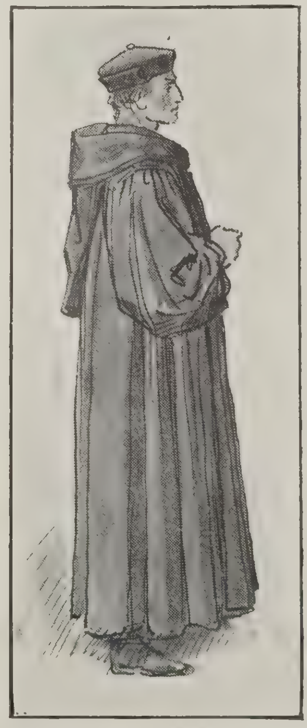


FOR LICENTIATES.

# The Business of an Architect

## 4.—The Office and Its Furnishing

### By C. MURRAY HENNELL, F.S.I.

WHATEVER schemes one may have in one's mind for an ideal office, it seldom falls to the lot of an architect to plan the rooms in which he will spend the greater part of his life. He has, therefore, to adapt himself to such accommodation as is available at the price he can afford. Really suitable quarters for an architect are very difficult to find, for there are so many desirabilities verging on essentials. Light and space are the primary necessities, but if possible the offices should be all on one floor, as stairs add to the labour of any business to as great an extent as in domestic life.

Unless the building contains a passenger lift, clients will call more readily on an architect who inhabits the ground or first floor than on the one who lives at the top, but many of us are driven to the clouds on account of the less prohibitive rentals that usually obtain there. However, if we are high up we have the advantage of light, and even if our more asthmatic and weak-hearted clients prefer to meet us in their own homes, or somewhere else nearer mother earth, the height is also inclined to discourage the procession of travellers who have not made appointments.

The architect needs not only plenty of space for his immediate requirements, but additional room for expansion as his practice grows. Changes of address are not helpful either to one's pocket or to the establishment of a name, so there is a good deal to be said for taking a lease of more accommodation than is at first required and to sub-let part of the premises on short terms. This, of course, needs careful thought, as there is nothing more hampering than a heavy rental for a long period, especially if one can neither use nor let all the space that one is paying for.

The arrangement of the office must of necessity be dictated by circumstances, but the following may be taken as a good basis for the lay-out of most architects' premises.

1. *Entrance lobby or landing.*
2. *Outer office*, where enquiries are made, postage is handled, and from which parcels, letters, drawings, etc., are issued.
3. *Waiting room.*
4. *Clerks' office*, where typewriting, book-keeping and other clerical work are done.

NOTE.—In smaller practices 2, 3 and 4 will be condensed into one room, though a separate waiting room, if possible, is desirable.

5. *Drawing office or offices*, which should be well lighted and large, the windows, if possible, being on the long side of the room. A 60′ 0″ by 20′ 0″ Army hut makes an excellent drawing office, but this is a far greater size than can usually be expected.
6. *Private room or rooms* for the principals of the firm. It is most desirable that each member of the firm should have a room which he is able to regard as his own. Where this is not possible, the private office should be kept for interviews, but will for the most part be used by the partner who conducts the business of the firm. The partner who deals mostly with the artistic side of the practice will inevitably find that he spends much of his time in the drawing office. If he can have a room to himself leading out of the drawing office so much the better. In any case, both or all partners should be stationed near the drawing office.
7. *Stores*, for drawings, correspondence and documents no longer in constant use, also for samples, stationery and general supplies.

It will be realized that this lay-out is capable of expansion to any extent to suit the needs and growth of the practice, and various rooms to provide for the fads and fancies of the partners can be added to the list as the excheque will allow.

It is best for all rooms, and especially the drawing office, to be centrally heated. Coal fires are more home-like but they do not heat the rooms evenly, and they creat dirt which is a nuisance to any draughtsman. Daylight is what we were intended to work by, and the les artificial lighting used the better.

Furnishing requires much more care than is usuall given to it by professional men in England, and it i interesting to notice the furniture of others—from th Victorian pieces of some of the older architects to th modern arrangements of some recently established office of the style as yet more prevalent in America than over here, and although there is much to be said in it favour, it possibly creates a sense of commercialism which does not give the impression of any art being carried on in such surroundings.

The office furniture should first and foremost meet it utilitarian needs, but if it is artistic, though not "arty," so much the better. In furnishing, as in other things the architect should always bear in mind the nature o his profession, which embodies art, science and business His place of work is not a bank or an insurance office nor is it simply a studio. A prospective client's first impressions account for a great deal, and although on the one hand it is desirable to make him feel that the office belongs to a man of good taste and artistic tendencies, he should also sense order, method and those other portrayals o business acumen which inspire confidence.

These remarks apply, of course, principally to those rooms which clients will see; drawing offices, being really the workshops, are not as a rule on view.

It is desirable to have as much as possible of the furniture of the kind which will enable papers, files, books, etc. to be kept under cover. It is quite a mistaken idea that a room littered with papers and plans is indicative of the busy man; this is more often than not the sign of a disorderly mind. There should be a place for everything in the office, and everything ought to be, as it seldom is kept in its place. Bookcases are meant for books, files for correspondence, and filing cabinets or cupboards for files. Letters which have been dealt with should go away at once, and not be left about on tables where they are only in the way until eventually they are lost. The same remark applies to drawings, which one often sees lying about for weeks, but the filing of these, as well as of letters will be dealt with in a future chapter.

It seems unnecessary to suggest, even in outline, the items of furniture required in an architects' office, but the following few remarks about some of the pieces may prove useful.

The draughting tables should be so placed that the windows are either directly in front of the draughtsman or at his left hand. In placing these it should be remembered that an architectural draughtsman requires plenty of elbow room. The tables can very well be of deal and of the trestle type, but should be substantial and well strutted. Each should have a drawer for instruments note-books, time sheets, etc.

At least one full-sizing table is a necessity in an office where work of any magnitude or importance is to be done. This should be sturdy enough to take a man's weight without wobbling, it being necessary sometimes to lie full length on it. The larger this table can be, according of course, to the size of the room, the better.

Writing tables or desks in principals' rooms are preferable with flat tops, so that drawings can be laid out on them.

The most suitable floor covering for all offices is that which can be easily washed or polished, such as linoleum, which should be inlaid and not printed. The extra cost is well worth while. To save expense the boarded floors of drawing offices can quite well be left bare or can be stained. Carpets or rugs are best confined to the principals' and waiting rooms, and these should be easily removable for shaking or beating. Fitted carpets in offices seldom get taken up and harbour dirt and vermin.

Pictures, especially photographs and perspectives of works executed, are a great help in furnishing an architect's office, and they stimulate the interest of clients. They should always be framed and hung at a convenient height. Unframed drawings and photographs, pinned to the walls, soon become dirty and ragged and give a poverty-stricken ppearance.

Under the heading of furnishing may well be placed 'Telephones" and "Bells." There still remain a few rofessional men who refuse to have a telephone in their ffices, and there are others, well-known architects among hem, whose telephone numbers are not published but re only known to a select few. There is much to be said n favour of this, but until one's practice is substantial nd well established it is better to put up with all the nnoyances caused by being on telephonic tap to every om, Dick and Harry, than to be out of reach of the ossible client who wants to ring one up. First enquiries are frequently made on the telephone, and the expenses of an installation, heavy though they be, are paid for over and over again by the convenience afforded and time saved.

The main instrument or "exchange" had better be in the enquiry or clerks' office, where wrong numbers, "Sorry you have been troubled" and "One moment, please" can be sorted out, and each private room should have an extension line. An instrument in the drawing office is generally more of a nuisance than a convenience.

Wherever there is an instrument there should also be a telephone call book, and every call made should be entered, not only for the purpose of checking the Post Office accounts approximately, but also for the purpose of costing jobs and charging up those expenses which are rightly payable by the clients. This matter will, however, be dealt with later on.

Some means of communication between rooms is very desirable, and electric bells answer most purposes. However, inter-office telephones give much greater scope than bells, save a lot of running to and fro, and two presses on the button can soon be understood to mean "Come into Mr. Brown's room," three presses "Mr. Robinson wants you," and so on until a recognized code of signals is made up.

(*The previous articles of this series appeared in our issues for April 4th and 11th.*)

# The New Architecture in New York

PROFESSOR C. H. REILLY, in the course of an article in "The Manchester Guardian," says: New York is developing a new kind of architecture— perhaps even a world style—efore our eyes. Like all true styles, it has grown out f the necessities of the case. The need for greater ccommodation in a limited area has meant high uildings, and the elementary need that human beings, ven in New York, still have for light and air has meant at these buildings have had to be restricted. Hence the ew York Zoning Law, already copied in other trans-tlantic cities, and hence the new architecture.

Briefly, this law amounts to dividing the city up into rtain zones and districts, and restricting the height of uildings on the street face within each zone to some ultiple of the width of the street. In the down-town istrict, for instance, the permissible height is two and half times the width of the street; in the up-town—the est-end district—one and a half times. This by itself, owever, would not make new architecture. It is what llows after the prescribed height had been built on the reet face. Then the building may go up again, but it ust be set back one foot horizontally for each five feet vertical height. This means that stories of, say, ten feet height could be set back in steps of two feet till the hole lot was used up. In practice, however, it is more onomical to set back stories in twos or threes. In any se, however, an effect of stepped pyramids is reached, d a very striking effect it is. The first buildings that have nformed to the new law have a Babylonian-like grandeur d romance which no simple rectangular piles could hieve. As economic pressure increases, too, all buildings ill grow to their full limit of height in the street plane. ew York will, therefore, gradually lose its most unpleasant aracteristic, the serrated line of its streets against the y. At present, even Fifth Avenue is like a set of badly own teeth, with buildings of all heights jostling one other. The level horizontal lines which should determine e perspective of a street, at its base and against the sky, they did in old Regent Street and still do where any nsistent design holds, as at Bath, will be regained. In ldition, however—and this is the exciting thing—on the p of the street blocks, and with them as pedestals, will appear in all directions, to be seen from the upper stories or across open spaces, a vast series of rich pyramidical buildings, almost cathedral-like in shape, for the blocks are generally much longer than they are wide. Already one or two such are in being, and they are the most striking things in the town. The Fiske Building, and that now being erected for the Standard Oil Company, No. 1 Broadway, by Mr. Thomas Hastings and his associates, are the most notable. The latter is enhanced by a great rectangular tower, for the Zoning Law allows one-quarter of the area to be given to a tower of unlimited height. The restriction to a quarter means that towers will only be erected on large sites, and will not in future choke one another as they have done in the past. Allowing for New York's crystal atmosphere, there will be ample space between them.

The skyline, then, of the new New York which is forming now will be unlike that of any other city in the world. It will be more romantic than that of any other city, if it is not so already. The combination possible of stepped building and tower is proving, as in the Standard Oil structure, that an outline more interesting even than that of the Woolworth Building can be obtained on any city site that is large enough. This particular building, standing as it does at the end of the island and with the possibility of no other building blocking it from the river, will in future be the landmark all arriving in the bay will see when this marvellous city of the clouds first rises for them from the waters and mist. It is highly appropriate, therefore, that the first great example of the new Assyrian type of stepped building—Tower of Babel if you will—which will shortly (for no building here lasts more than 30 years) conquer the whole town should be placed where it is. Its serene statuesque beauty will in a few months become almost as great a symbol of America as the Statue of Liberty itself.

Under the Russell-Sage foundation architects are considering all the problems connected with the irrepressible and alarming growth of the town. Among the most urgent of these problems is the traffic one in the central districts. Mr. Corbett has evolved a scheme of raising the footways and so in appearance sinking the wheeled traffic into canals, with docks for unloading under the buildings.

# Modern Craftsmanship. 3.—Fresco Painting

By J. D. BATTEN

TO any essay on fresco it is still necessary to preface the statement that painting *in fresco* is painting on lime plaster while it is fresh (laid the same day), and that it differs from any kind of painting *in secco* fundamentally in this, that the raw pigment mixed with water only is used as paint and that the addition of no organic substance is needed in order to make it adhere.*

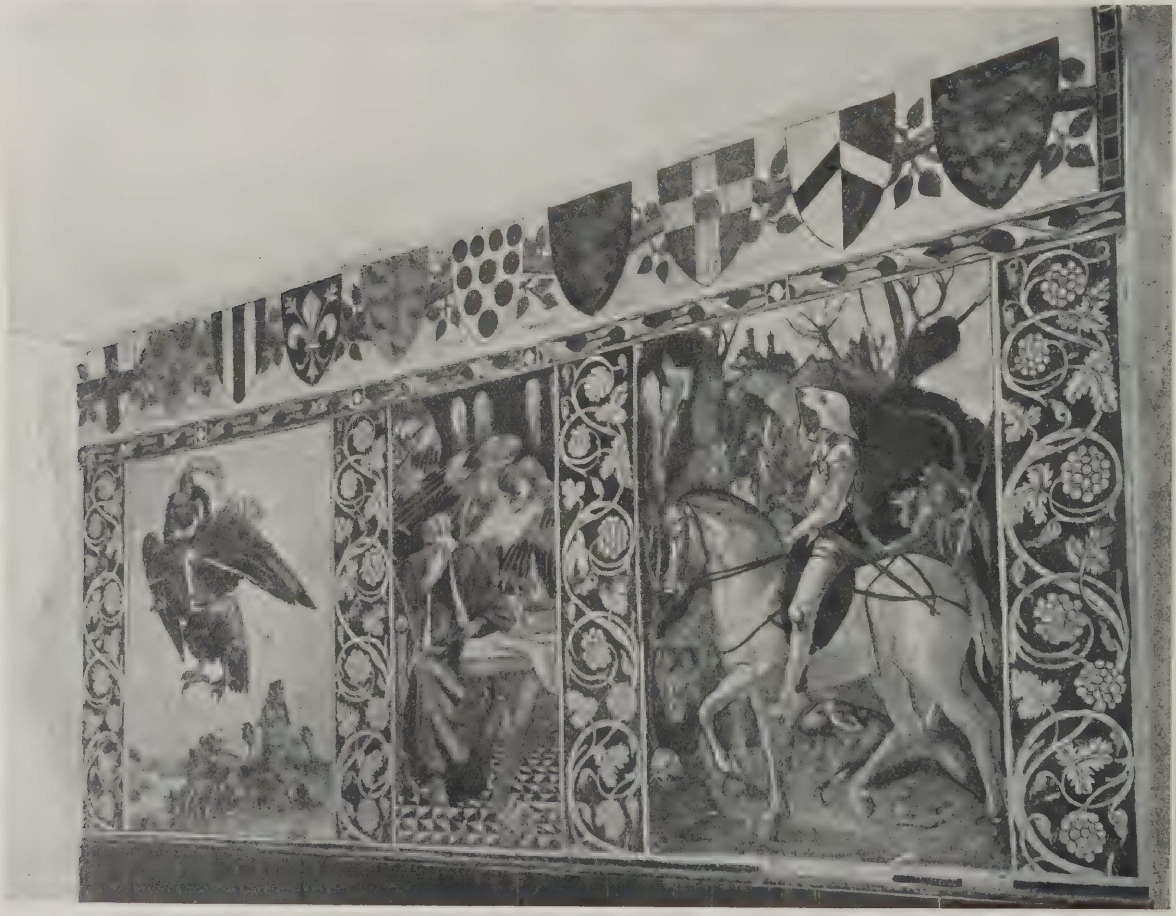
The great new fact with regard to fresco is its extreme antiquity. Until recently fresco was supposed to be a comparatively modern method of painting.

When Professor Church, in his "Chemistry of Paints and Painting," asserted that true fresco was not practised till near the end of the fourteenth century, he was merely repeating the opinion commonly accepted in his time. The view had been put forward that fresco was a post-Byzantine invention for the purpose of giving the appearance of mosaic cheaply. Sir Charles Eastlake, in his "Materials for a History of Oil Painting," had said, "The earliest work in *buon fresco* is probably that painted by Pietro d'Orvieto in the Campo Santa at Pisa about 1390." It would seem that the evidence of Vitruvius had been disregarded or misunderstood.

Sir Arthur Evans's discoveries at Knossos, supplemented by Mr. Noel Heaton's chemical examination of the mural paintings there, throw the date of fresco back a further 3,000 years. I suppose this to be the greatest revolution of opinion in technical matters of art that has ever occurred. It is this most ancient practice of fresco painting which bears immediately on the problem of fresco painting England to-day. For Crete, like England, is an islan and boasts a climate notorious for tempests.

The frequently expressed opinion that fresco is suite to the Italian but not to the English climate requir reconsideration. It is usually based on an estimate of t climate of Italy, which is not confirmed by those w have wintered in Florence. Much depends on whether not under the term "climate" you include sulphur acid. This acid, the presence of which in the atmosphe arises mainly from the combustion of coal and gas, concentrated in certain localities, and until it can eliminated (we hope and believe that it will be) it will wise to avoid such localities for the use of fresco. B generally over the length and breadth of England the a is clean. The fact that the air is frequently laden wit moisture, and that sudden alternations of cold and warmt cause this moisture to condense copiously on walls as we as other things, has no terror for fresco. This moisture condensation is injurious to almost every other kind painting. Oils, glues, gums, resins, all organic substanc added to the pigment in order to convert it into an adhesiv paint, suffer if frequently drenched with water. Fresc enjoys it. It assists in the complete carbonization of th lime, which is the ultimate setting of the plaster. Thi I say, assuming that the water is clean. If, on the othe hand, it be saturated with acid and laden with soot (th condition of a London fog) it enables those enemies of a to do their work far more swiftly and efficaciously tha they could hope to do in the dry.

If, then, fresco be pre-eminently the right thing for th normal climatic conditions of England, what has hindere what still hinders, its general use ?—many misconception



FRESCO PAINTING BY J. D. BATTEN, ON THE STABLE WALL, THE HALSTEADS, EAST SHEEN.

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* A short time ago an artist of reputation and experience cited Lord Leighton's paintings in the Victoria and Albert Museum, "The Arts of War" and "The Arts of Peace," as evidence for, or against, the durability of fresco in an English climate. These paintings are executed *in secco* by a method perfected by Mr. Gambier Parry and (by the counsel of Satan) christened "Spirit Fresco," to the deceiving of all who should come afterwards.

"MOTHER AND CHILD." FRESCO BY J. D. BATTEN.

ıd mistakes. On these it would be unprofitable to dwell, :cept with a view to ascertaining what may yet be done › establish in England this noblest form of the noblest art.

As preliminary to such inquiry we should take note of hat has already been done within cent years. Rutland is the least 'all the counties of England, and akham is no great city, yet here Mrs. Sargant Florence's fres- ›es for the school-house * may sought and found the clearest 'idence of the vitality of this art England, and a happy recovery ɔm the mistakes of the Palace Westminster.

In fresco painting this fact must :ver be forgotten: *The colours e held by the setting of the lime aster.* The preparation of the ne plaster can never be disasso- ated from the painting, it must ways be the first concern of the esco painter, and if a school of esco painters is ever to be unded in England, the slaking lime must be its first lesson.

In ancient Rome there was law (so says Pliny) † that ne was not to be used for plaster ıtil it had been slaked for three years, and there is plenty of other evidence that the slaking of lime for even longer periods has been held to give some kind of excellence to the resulting "lime putty."

The bare statement that this lengthy slaking ensures the complete hydration of the lime seems insufficient when applied to the only kind of slaking which I have myself watched (I do not forget that there are other ways of slaking). In slaking, as I have seen it, quicklime (the purest obtainable) was mixed with water till it "boiled" (they call it "boiling") and then poured like a milk through a fine copper-wire sieve. I should suppose that this operation immediately ensures a complete hydration of the lime, but I understand that beyond the simple hydration a super-hydration occurs, as to the nature of which there is room for further inquiry and which the microscope may elucidate. In any case, a further change of a remarkable kind takes place. The lime milk sets to the consistency of a cheese. In the case under my observation the lime was run into a pit with cemented bottom and walls measuring about 10 ft. by 6 ft. by 3 ft. deep. The top was covered with matched-board and corrugated iron. After a few weeks I found that the "putty" (for that is its accepted name) had sunk about 3 inches and had parted from the wall about 1 inch.

After fifteen months I took some of the putty out, cutting it straight down as one might a cheese, leaving the remainder standing like a cliff. That was before the war. Last year I uncovered the pit, and found the cliff standing unchanged, with every mark of the spade and trowel with which it had been cut more than seven years ago sharp and clear. (With a pressure of tons behind it why had it not flowed down like a glacier?) Under a crust which seemed to be only $\frac{1}{8}$-inch thick the putty was like cream cheese, and it seemed to be of the same moisture at the top of the cliff as at the bottom. I cut out as much as I could carry from the top edge of the cliff, pressed it down into a pail, and took it by train six stations on the District Railway. At the end of that journey this stuff, which for seven years had stood like Dover Cliff, had

"ATALANTA AND MILANION." A PAINTING IN FRESCO BY JOHN D. BATTEN.

Shown at the first Exhibition of Mural Decorative Art held at the Royal Academy in January.

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: "The Old School," built in the time of ward VI. The frescoes fill up the wall spaces ween the windows, and are each about 11 ft. 9 ft. They were begun in 1903 and finished 1910. The amazing cartoons for some of se frescoes will be remembered from the Arts l Crafts Exhibition of 1910. The subject of series is "The Life of Gareth," from the liæval (not the Tennysonian) version of the lort d'Arthur."

Pliny's "Natural History," xxxvi, ch. 55 :—

Intrita quoque, quo vestior eo melior,
In antiquarum aedium legibus invenitur,
ne recentiore trima uteretur redemptor.
Ideo nulla tectoria eorum rimæ foedavere.

*ntrita* is translated by Lewis and Short as ıste or mash of lime."

HENRY PAYNE'S PAINTING IN SECCO (TEMPERA-YOLK OF EGG) ON A LIME-PLASTERED CHAPEL AT MADRESFIELD.

(*Reproduced by permission of the Countess Beauchamp.*)

become so liquid that I could poke a stick to the bottom of the pail and stir it round as if it had been cream or milk. Is there any other substance which behaves in this remarkable manner? After being left alone for a few days it set into cheese again, and I poured off about $1\frac{1}{2}$ inches of water which lay at the top. I have since used it mixed with sand for plaster, and have found it excellent. I tell all this because I wish to suggest that the setting of the lime plaster is to a large extent a physical process, the reversal of the liquefaction caused by agitation—" knocking up," as the plasterers call it.

The books describe the setting of lime plaster as a process of carbonization, and they do not seem to contemplate that the phenomenon calls for any further explanation. Certainly the almost instantaneous setting of the surface of the plaster is carbonization; it is the pellicle of carbonate of calcium so formed which binds the pigments in fresco painting, and it is the rapidity of this carbonization which makes it necessary to finish each portion of work on the same day on which the plaster is laid, and again the *ultimate* setting of the whole body of the plaster is carbonization; but the firmness acquired by the bulk of the plaster in the meantime (and the meantime may be centuries) must surely be attributable to some other process. The rate of carbonization of a lime surface exposed to the air has been estimated at about $\frac{1}{8}$-inch for the first year and less and less for each succeeding year.*

It would certainly be unwise to disregard the testimony of antiquity as to the merit of matured lime putty, or as to the necessity for a vigorous " knocking up " of the plaster before it is laid. Vitruvius † tells us that the Greek plasterers, who in his time were the exponents of this craft, after a mortar pit (*mortarium*) had been constructed and the li
and sand poured into it, got together a squad of m
(*decuria hominum*) and set them to beat it with wood
staves, and that they used the plaster immediately aft
it had been subjected to this game (*certamen*, contest).
is evident that the " Greeks " of Vitruvius utilized to t
full that property of lime putty which is known to mode
science as plasticity. The lime putty must have be
stiff stuff if the knocking of it up by a gang of fellows cou
be described as *certamen*. A present-day football mat
would be *certamen*.

It was the practice within the memory of living wor-
men for each plasterer to have a " boy " to knock up t
plaster for him. Now the boy has been taken away. It
impossible for a plasterer efficiently to knock up the st
and plaster his allotted portion of wall at the same tim
He therefore adds a little water to the lime and sand, a
it scarcely needs to be knocked up at all—he can stir it
with a trowel. It goes on well and easily, but as it dries t
plaster surface is reticulated with little cracks, and we hi
it up with distemper or with wallpaper as soon as may

What, then, are the practical steps necessary in order
establish in England the art of fresco painting? The fir
thing to be done is to run slaked lime into a pit or oth
receptacle and leave it there. I know beforehand the ki
of objection that will be raised: " That was all very w
in the leisurely times of Ancient Rome, but in the twentie
century, in an age of motor-cars and aeroplanes and wir-
less, we have to go a bit faster than that. We can't affo
to spend three years slaking our lime." No one asks y
to spend three years slaking lime. You are asked to spe
one day slaking lime and the rest of the three years leavi
it alone and doing something else. As to the space, a
cellar or back garden will do. My own lime pit is in
obscure corner of a garden where nothing will grow.

(*To be concluded.*)

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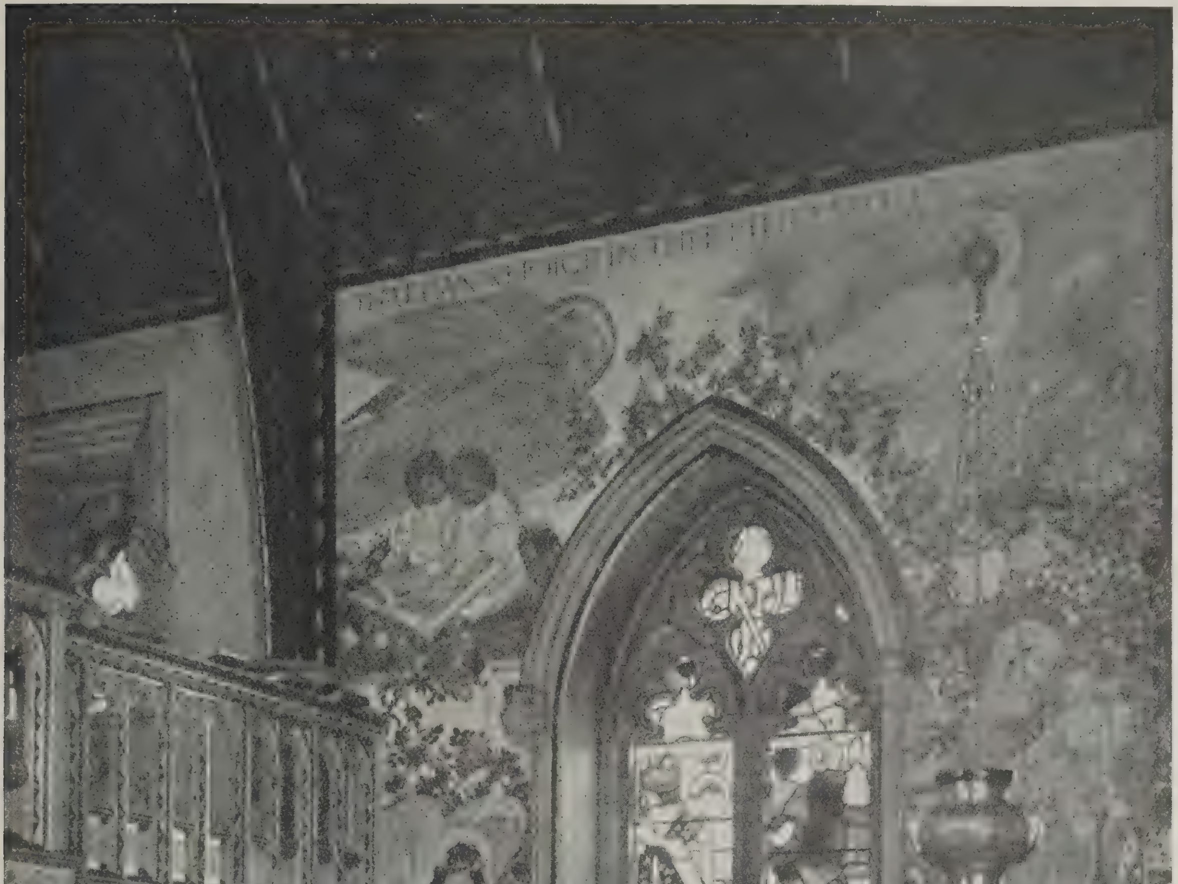
* If this be so, the precautions which have been advocated for the exclusion of air from the putty pit, lest the stuff should deteriorate by carbonization, seem to be unnecessary.

† Vitruvius, Book vii, chap. 3. (*See* Vitruve, Latin and French [Auguste Choisy] Paris, 1909.)

# Details of Craftsmanship. 18.—A Painting in Secco by Henry Payne



This painting in secco (tempera-yolk of egg) by Henry Payne is on a lime-plastered wall of the private chapel at Madresfield. It is reproduced by kind permission of the Countess Beauchamp.

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# xtension of the Dunfermline Central Library

## JAMES SHEARER, Architect

THIS week we illustrate the extensions which have been made to the Central Library at Dunfermline—the first public library to be founded by the late Mr. Andrew Carnegie, of New York and ittsburgh. He was born in Dunfermline, and spent his oyhood days there. Dunfermline Library was com- eted in 1883, from the designs of the late Mr. J. C. Walker, Edinburgh. It was a two-story building containing two ading rooms, a lending library with a small enclosure iled off for reference, a recreation room, and a librarian's ouse. To clear part of the site for the extension, a wing ntaining the two last-named departments was removed.

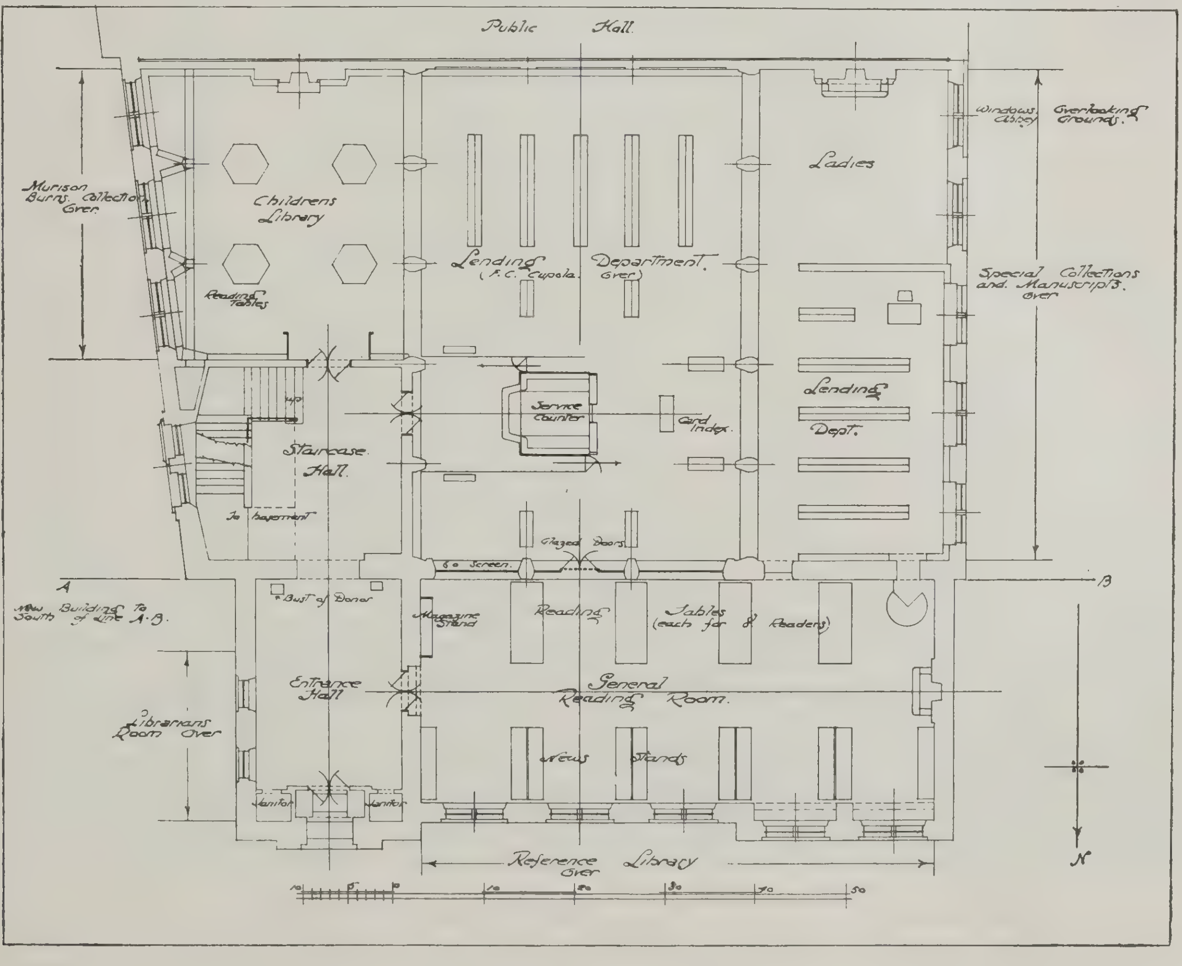
The accommodation originally provided has now been ore than doubled, and several new departments have en added. They include a special library for children, a w reference department, and rooms for the housing of veral important bequest collections. The lending library, rmerly on the first floor, has been moved to a central osition on the ground floor. It is planned for open access. he cost of the extension was borne by the Carnegie Dun- rmline Trust.

The building occupies a corner site towards the centre of e town, and the street along which the new frontage extends very narrow. For this reason the mouldings and other etails are low in relief, and the tower is built up in planes at slightly recede as they rise. The illusion of an over- ang, so frequently experienced in narrow streets, is thus ounteracted. The armorial carvings on the staircase indow are references to local history. The arms are those f Queen Margaret and King Robert the Bruce.

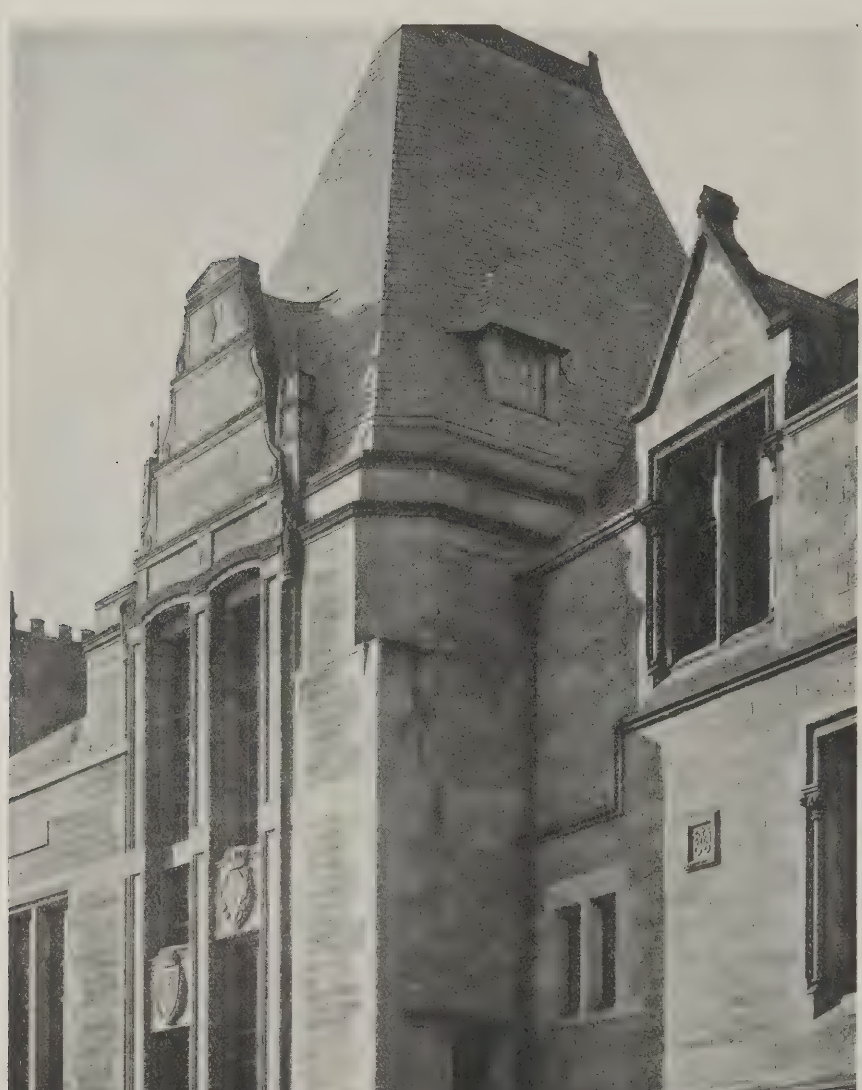
In general treatment the style of the new building has en determined by, although it does not pretend to follow osely, the style of the original building—an example of the sham Gothic architecture fashionable in the seventies and eighties of last century. While the architect for the new building has avoided any abrupt transition from the old to the new, he has endeavoured to bring the new detail into at least some degree of conformity with the building traditions of a mediæval Scottish town. He has also, in so far as a subject already conditioned provided a limited opportunity, made a definite effort to reconcile some contemporary methods of construction with the first principle of architecture—the identification of structure and design. Artificially constructed features are therefore avoided.

The floors throughout the building, and the barrel vault and roof over the new lending department (which are of reinforced-concrete), have been worked out in consultation with the engineers, so that the concrete construction supplies the actual basis of the finished design. The panels of the flat ceilings, for example, are those that result naturally from the sizes and spacing of the concrete beams, and the arches and sub-divisions and coffers of the barrel vault (35 ft. clear span), all are indispensable elements in the structure, and nothing superfluous has been added.

The plaster mouldings and modelled ornaments are light enough in weight for application direct to the rough concrete surfaces, and although some of these details are now seen to be rather small for the scale of certain departments, the method of approach is one our contributor would like to see more fully explored, for it seems that in this direction a more architectural use of reinforced-concrete than is usually practised might be reasonably sought. Reinforced-concrete is adaptable almost infinitely, and it may be possible, by experiment, to cast it with a surface texture that would not—at least for some classes of work—require further treatment. Whether this may be possible or not,



CROUND FLOOR PLAN.

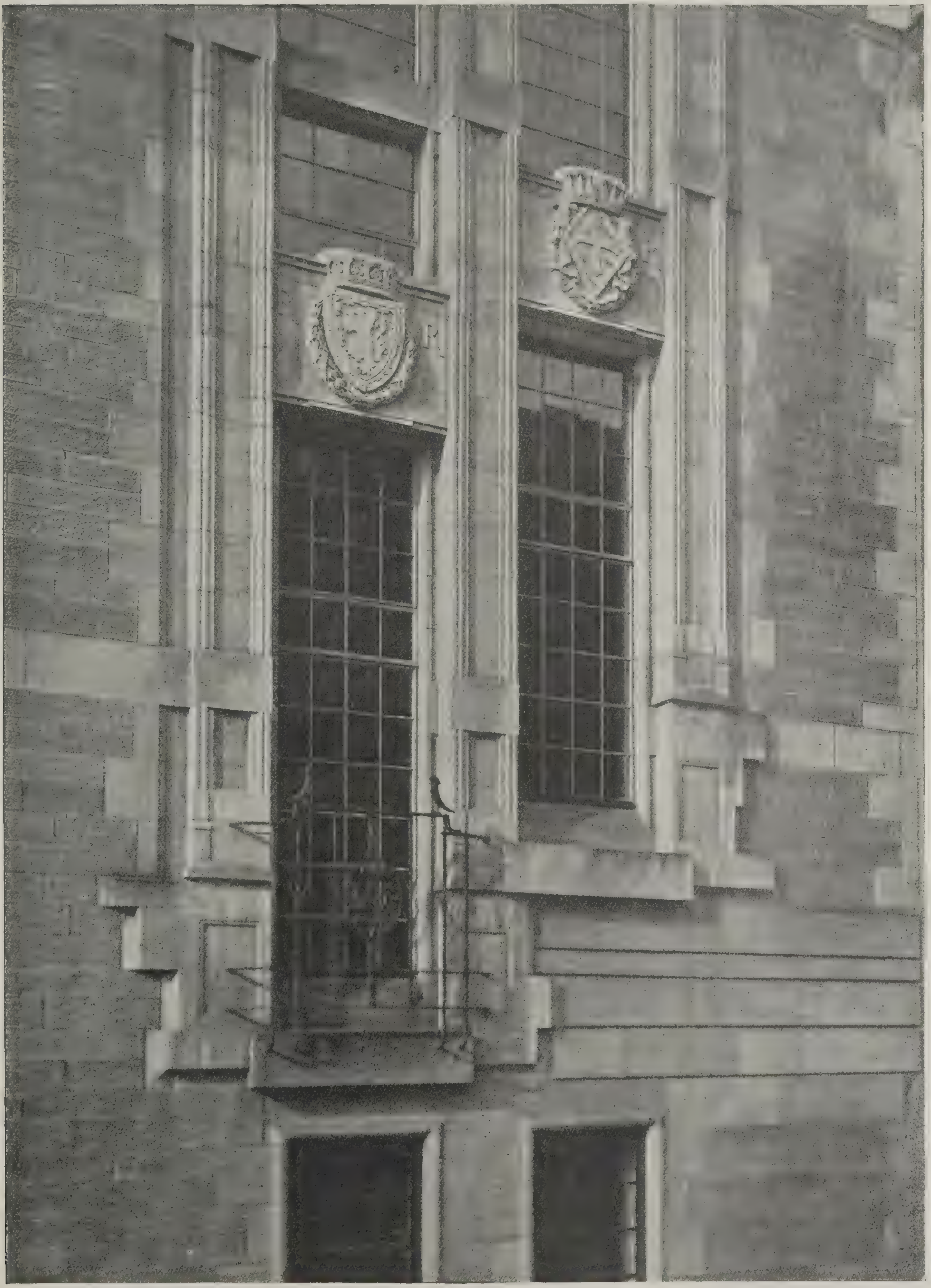


THE CENTRAL LIBRARY, DUNFERMLINE: STAIRCASE TOWER ON NEW FRONTAGE.

The original building terminates in the internal angle made by the new tower.

# Current Architecture. 173.—Extension of the Dunfermline Central Library

James Shearer, Architect



Detail of Staircase Tower, showing the arms of King Robert the Bruce and Queen Margaret.

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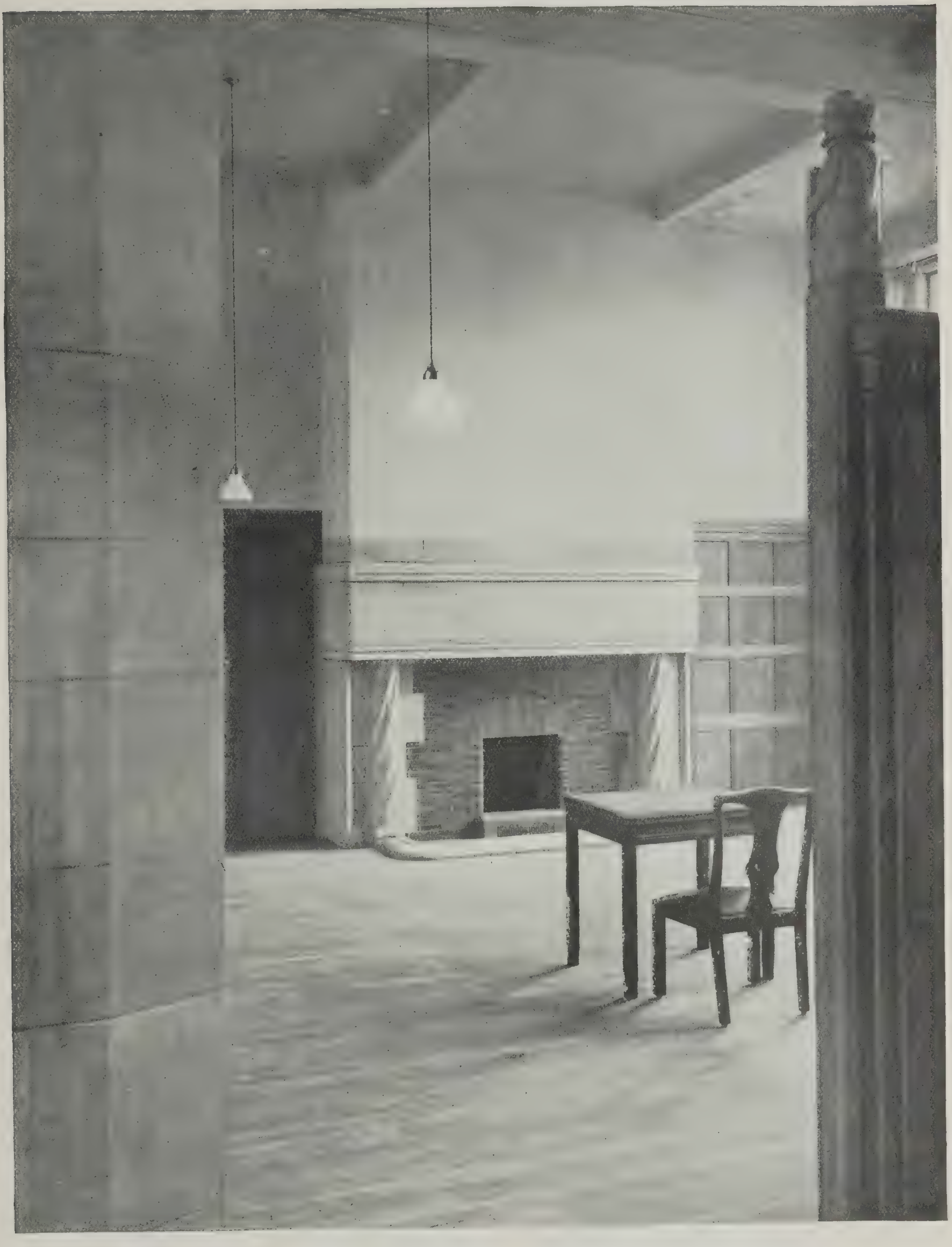
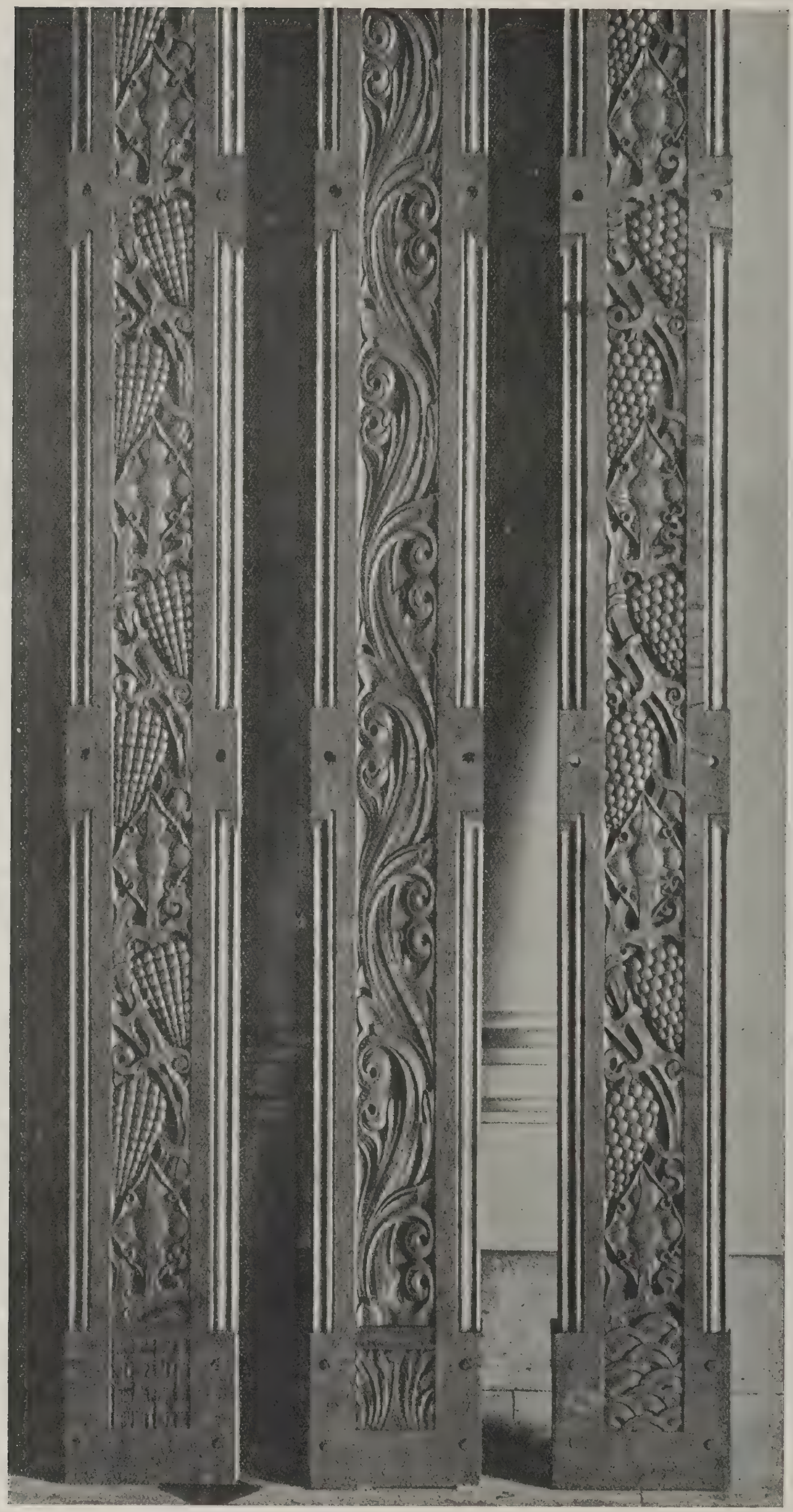


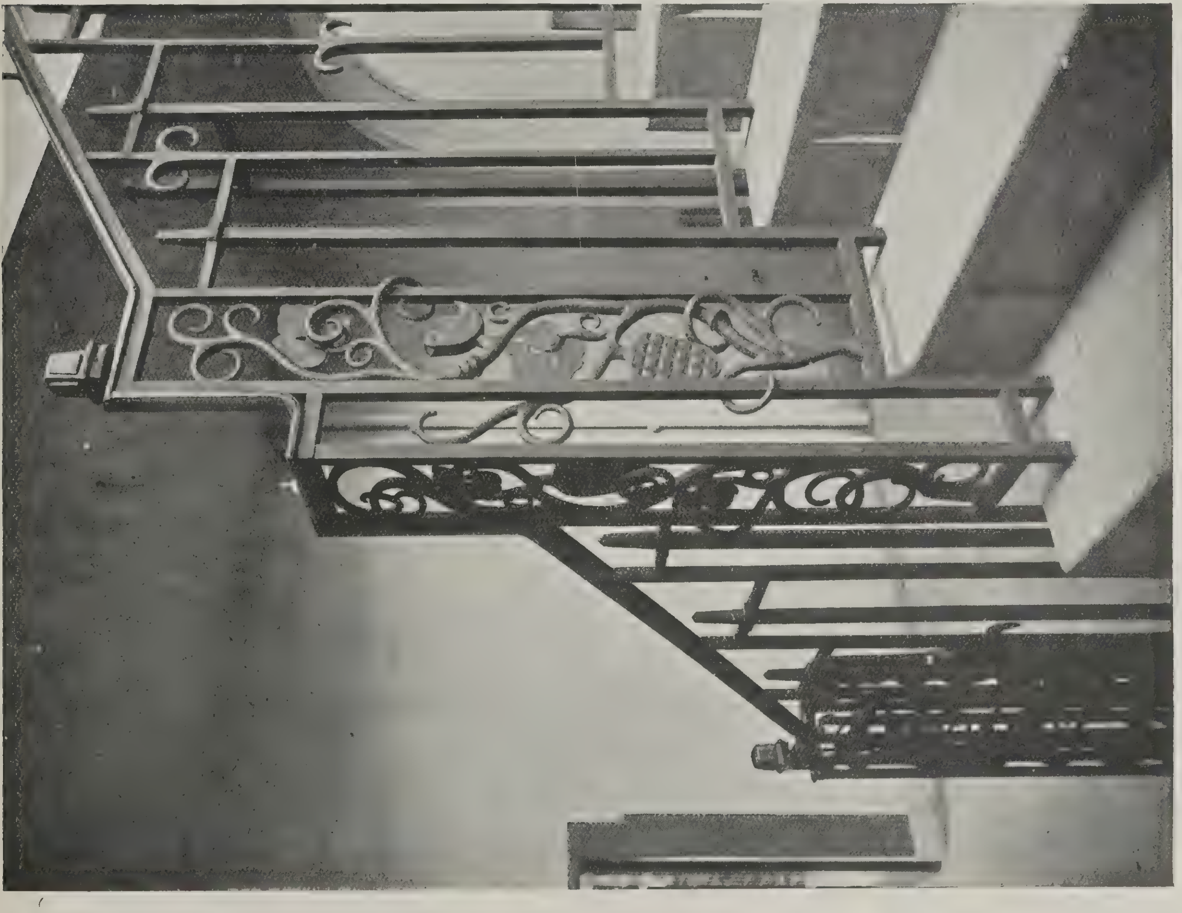
THE CENTRAL LIBRARY, DUNFERMLINE: STONE FIREPLACE IN RECESS OF LENDING DEPARTMENT.

JAMES SHEARER, ARCHITECT.

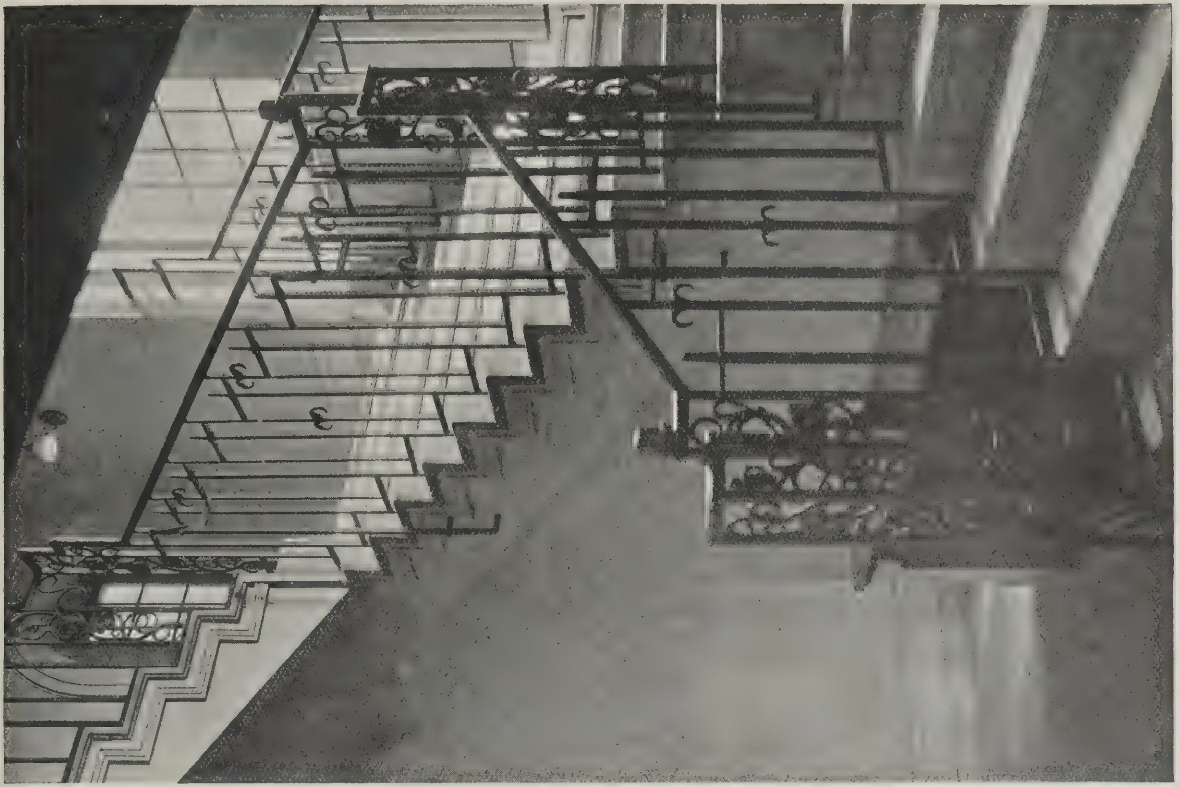


THE CENTRAL LIBRARY, DUNFERMLINE: EXAMPLES OF CARVED ENRICHMENT FROM THE OAK PANELLING.

JAMES SHEARER, ARCHITECT.



DETAIL OF ANGLE: BALUSTRADE STAIR.



MAIN STAIRCASE: FLIGHTS TO FIRST FLOOR LANDING.

THE CENTRAL LIBRARY, DUNFERMLINE. JAMES SHEARER, ARCHITECT.

he thinks it certainly seems desirable, both from the point of view of structure and good design, to try to dispense with the elaborate arrangements of wood bracketing, iron bolts, hung ceilings, mock pilasters, etc., by which it is the custom to conceal the true lines of structure.

Upon the same reasoning, instead of using the ubiquitous column of lath and plaster, or wood, or marble veneer, with steel core, the architect has here adopted for the main vertical supports simple piers of Northumberland sandstone, bevelled for light, and calculated to bear the loads imposed. In the design of the fireplace for the recess of the lending department a parallel problem is treated from the same point of view. This design aims at combining the scale of a mediæval fireplace with the advantages in heating power, fuel economy, and cleanliness of a modern grate.

The service counter screen is a further expression of the same point of view. The light protection of plate glass and bronze is thoroughly modern in idea, and strictly utilitarian in its purpose, but it does not, so far as can be judged, impair the appearance of the counter, nor is it at variance with the traditional detail of the woodwork below it.

The floorings, furnishings, bookcases, and movable furniture are of oak throughout. The building is treated as a single unit, and the colour scheme is derived from the natural colours of the materials, so that a section taken through the building at any point would not disclose anomalies of scale, colour, or furnishing. Every detail of the library equipment has been brought up to date, worked out in a severely practical spirit, and thus introduced as a note in the general scheme.

Particular care has been taken to express by each detail the quality of the material in which it is wrought. Our contributor points out that: "It must be admitted that the indiscriminate use of Renaissance and Neo-Classic detail, however brilliant it may sometimes be, has tended to deprive our building materials of much of their natural significance—e.g., a considerable amount of forced construction, or waste of material is the frequent result of transferring, say, a cornice originally designed for marble to wood or plaster. Yet good taste itself suggests that, both in modelling and in design, ornament intended for one material should differ essentially from modelling intended for another. There is, of course, nothing novel in these propositions. They are generally accepted in theory, and—in so far as good modern ecclesiastical and domestic work are concerned—in practice, but it is curious to notice how very slightly they influence many of the best of our modern public and commercial buildings, at least on this side of the Atlantic. Why this should be so is an interesting subject for speculation. A possible explanation is, that, in all essentials, we are still guided in our ecclesiastical and domestic work by a strong national tradition, and that for our public buildings we seek inspiration in Classic and Renaissance models, that we can only very rarely afford to build with structural integrity. In the former works, broadly speaking, we design from the means to the end. In the latter from the end to the means."

The wrought-iron balustrade of the main staircase is the result of a close collaboration between designer and craftsman. This work was carried out to the architect's designs by Mr. Thos. Hadden, blacksmith, Edinburgh. The concentration of the ornament at the angles of the staircase, instead of in panels at intervals along the flights and landings, is an unusual treatment. It gives strength and weight to the angles, and does not seem to accentuate the bareness of the plain intervening balustrade. The inter-spaces of the latter are alternately large and small, and the corresponding changes in the weight of balusters also tend to avoid monotony in the flights. Full-size details of the ornament were first prepared in tentative form. A single repeat was then worked out in metal to confirm the weights of the stem work, etc., the construction of the ornament, and the most natural forms for welding. The full-size working drawings were then completed for three panels, and the smith was then left free to interchange the repeats at his discretion, so that no two panels would be alike.

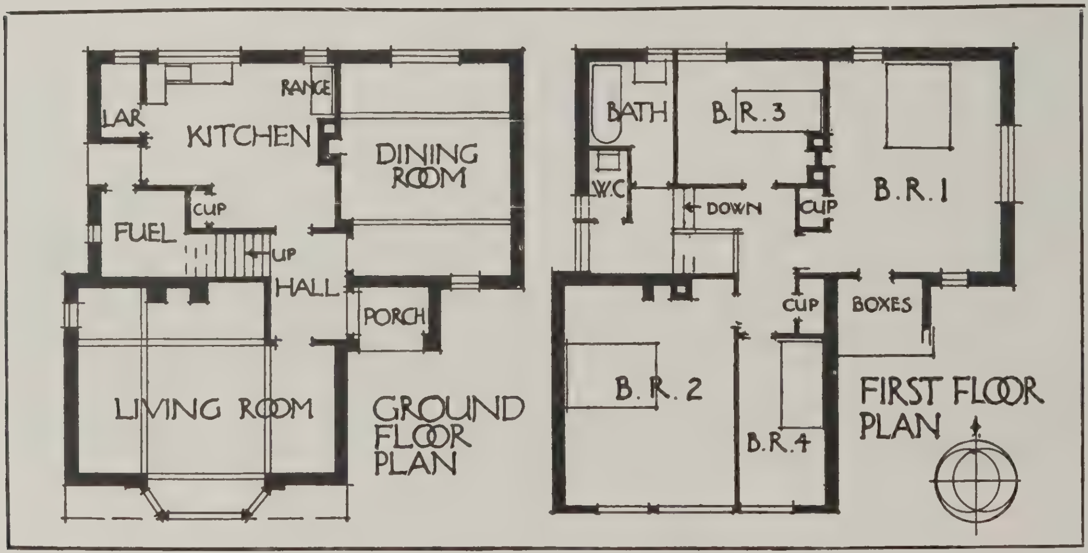
The stone treads and risers and the floors of the hall and the landings are of Hopton wood stone.

The funds at the disposal of the architect did not permit of any lavish expenditure on detail, but what could be afforded for ornament has been spent on genuine craftsmanship.

Messrs. John Baxter and Sons, of Dunfermline, were the builders, the other craftsmen connected with the building being as follows:—James Westwood and Son, of Dunfermline (joiners); Alex. Thomson & Co., of Dunfermline (plumbers); John Robertson, of Dunfermline (slater); G. and R. Wemyss, of Glasgow (plasterers); Hodson and Son, of Nottingham (marble work); A. Fraser, of Kirkcaldy, for Mouchel and Partners, of Westminster (reinforced concrete); Oliver, Melville Robb and Scott, of Dunfermline (electric lighting); Scott Morton and Tynecastle, Ltd., of Edinburgh (wood carving); Thos. Beattie, of Edinburgh (modelling); Thos. Hadden, of Edinburgh (wrought iron work).

# South Cottage, Ruislip

EDWIN GUNN, A.R.I.B.A., Architect

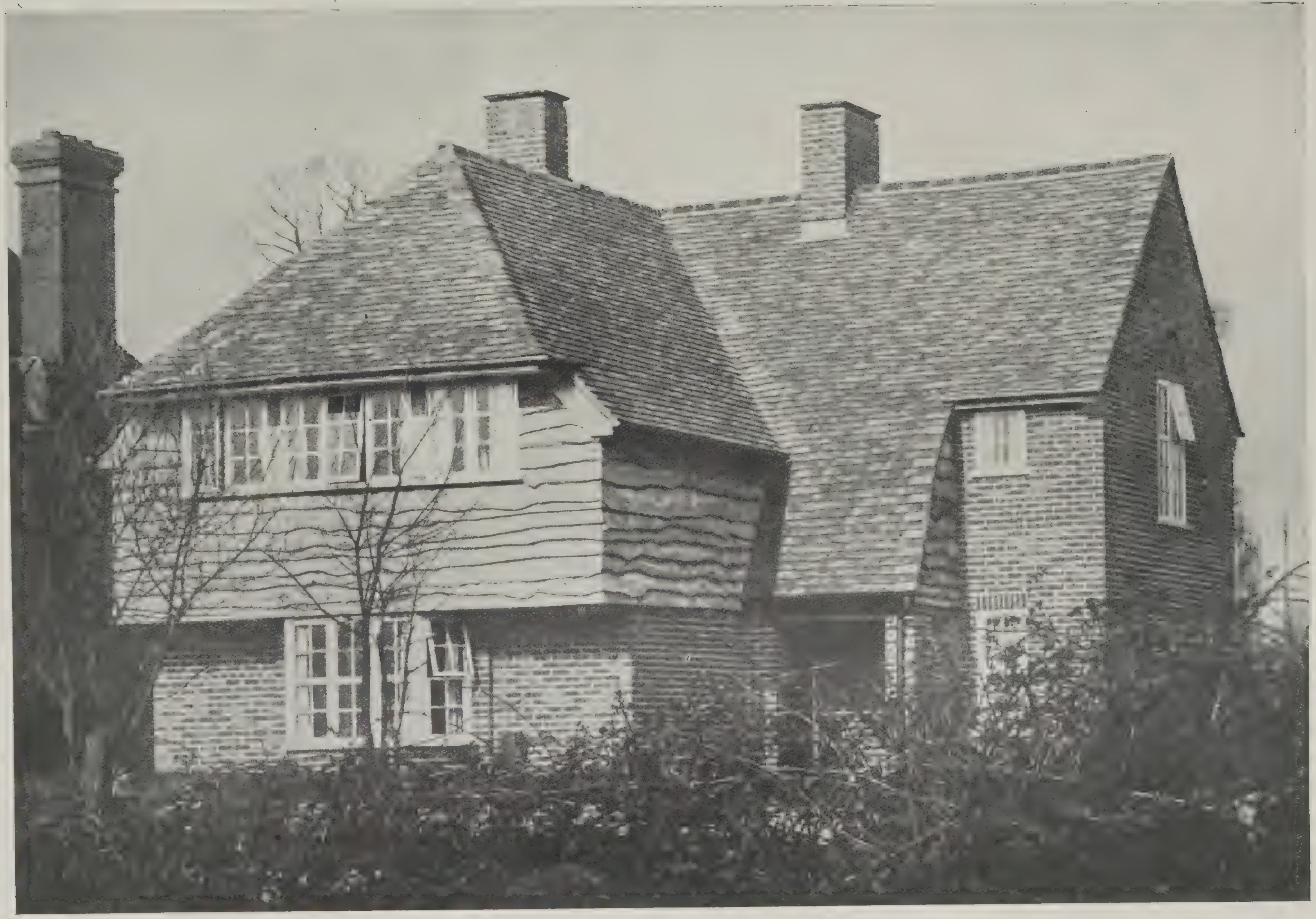


GROUND AND FIRST FLOOR PLANS

*(See opposite page.)*

# Modern Domestic Architecture. 50.—South Cottage, Ruislip

## Edwin Gunn, A.R.I.B.A., Architect



This was a subsidy house. The conditions governing the design were that sun should enter as many rooms as possible, and no living-room windows should face the east. It was designed to be a servantless house, and though there is an open fire in the living-room, the other rooms are heated by gas.

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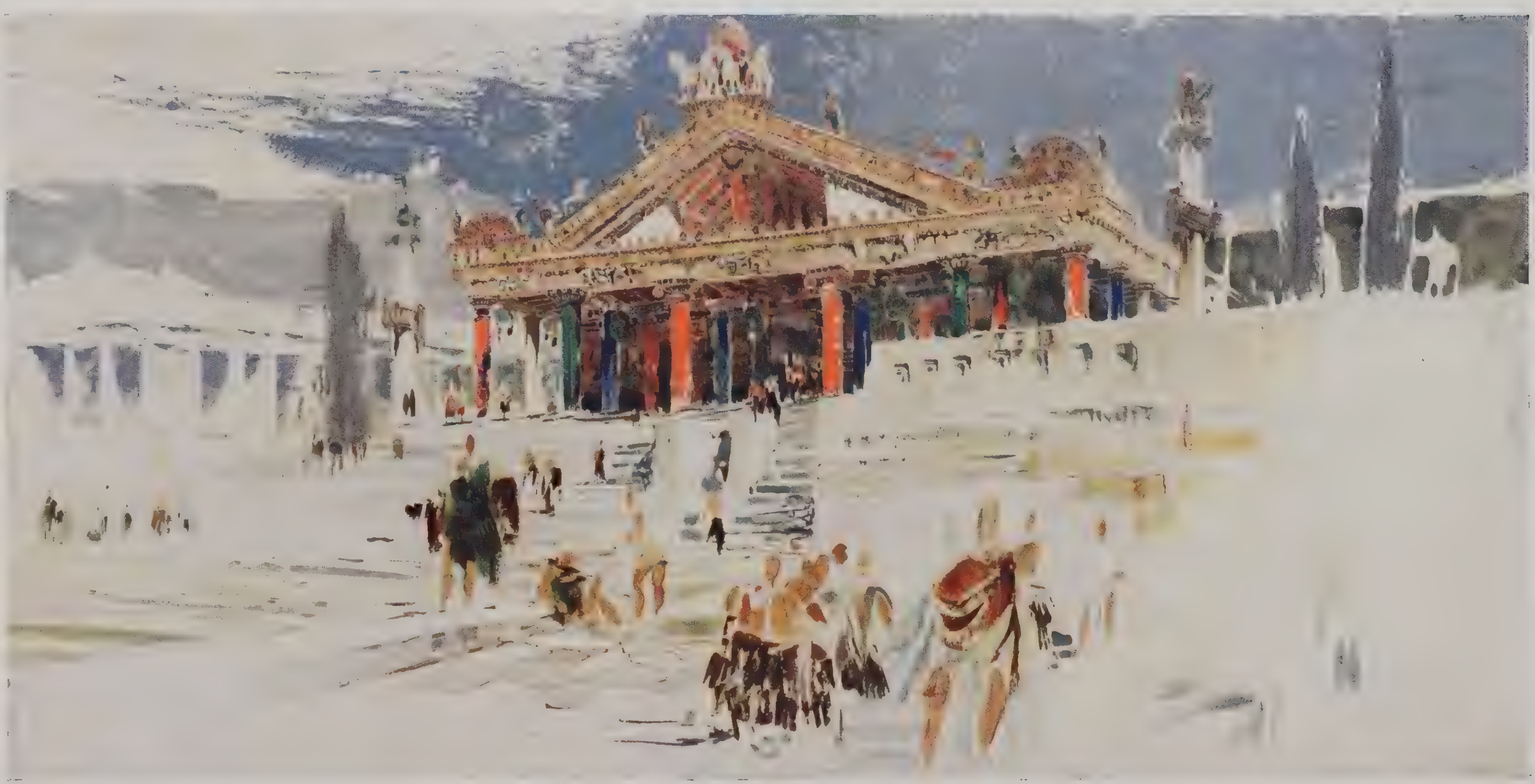
*Supplement to* THE ARCHITECTS' JOURNAL, *April* 25, 1923

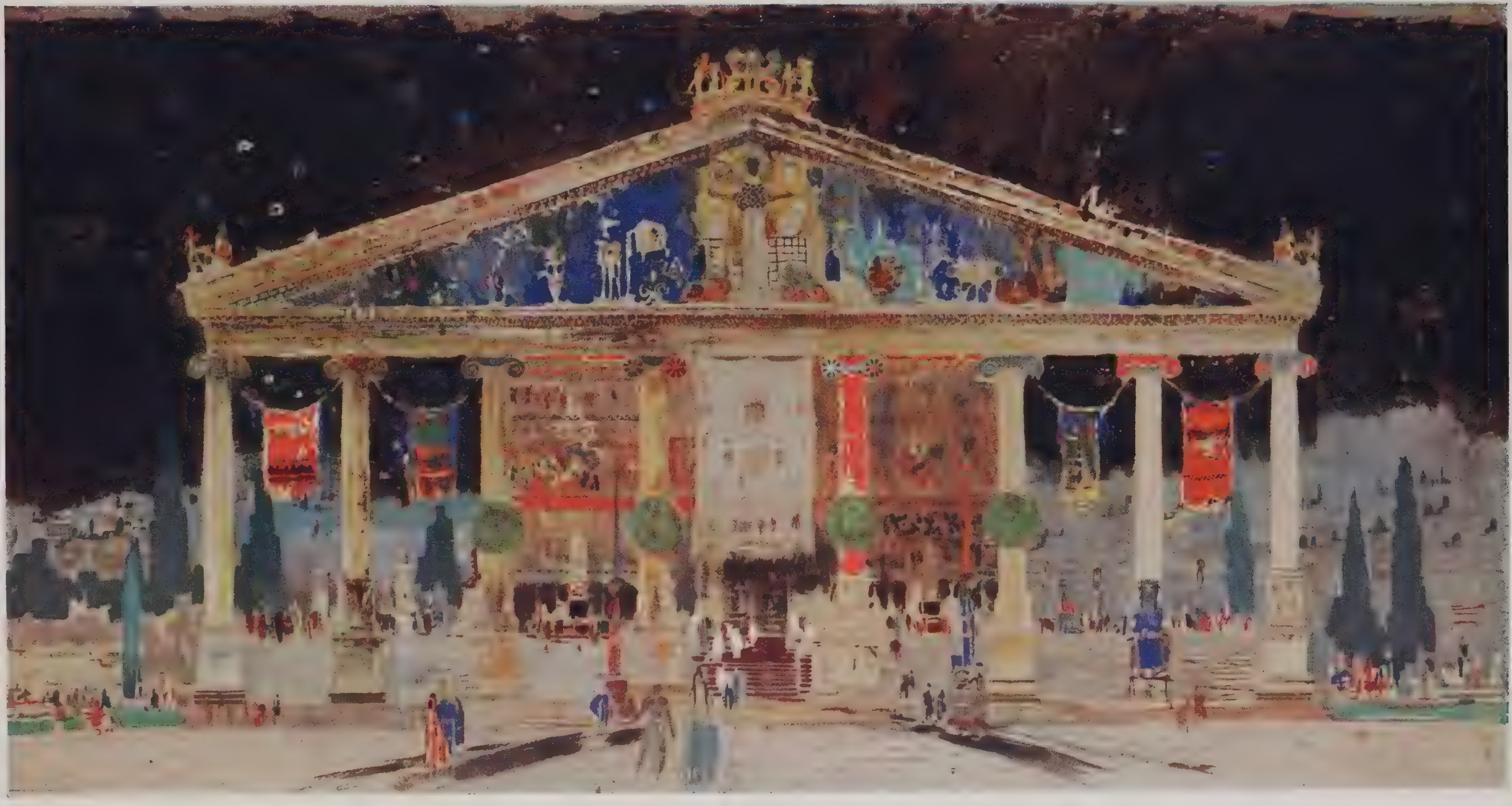
# The Etruscan Temple of Jupiter Capitolinus : A Scene upon the Tarpeian Rock at Rome



*From a Painting by William Walcot.*

The Temple of Jupiter Capitolinus stood upon the Tarpeian Rock. Consecrated by Horatius about 509 B.C., and burnt in 83 B.C., it was followed by three more temples, the last being built by Domitian in A.D. 80, The Temple illustrated above was about 45 ft. wide.

# The Temple of Diana at Ephesus : The Seventh and Last Wooden Archaic Temple



*From a Painting by William Walcot*

This, the last of the wooden Temples of Diana at Ephesus, was burnt by the fanatic Herostratus the night on which Alexander the Great was born in 356 B.C. The stone columns, however, were left standing. Its total width was probably about 220 ft., its length 425 ft., and the height of its columns 52 ft.

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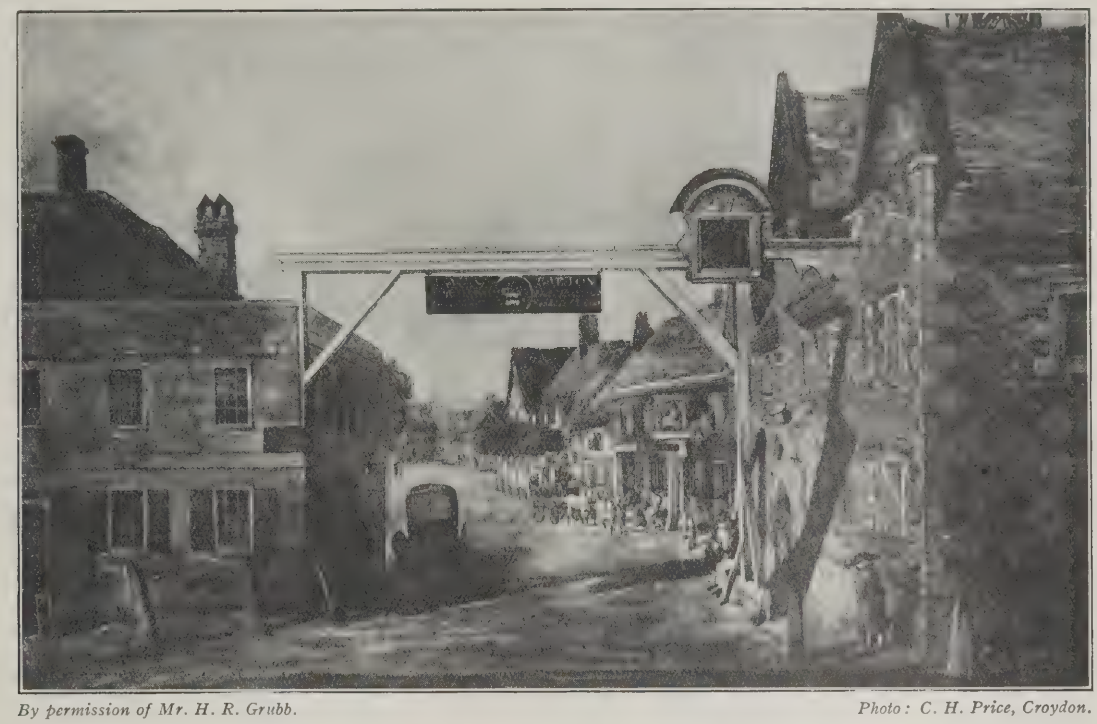
# Whitgift Hospital, Croydon

## Measured and Drawn by Ll. E. WILLIAMS, A.R.I.B.A.

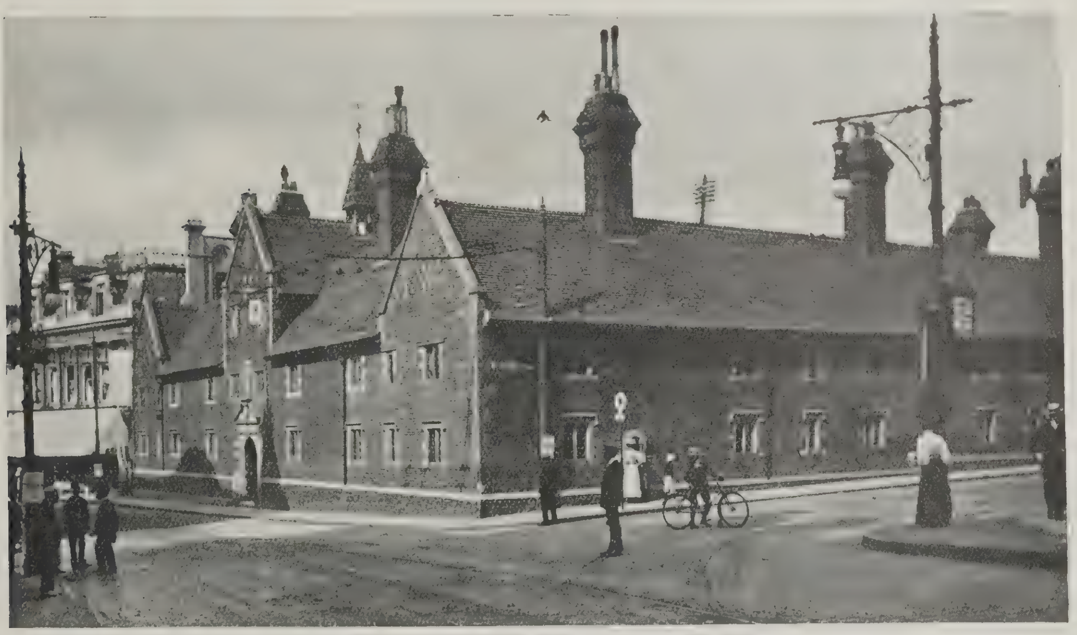
THE measured drawings which appear on page 735 (details of which will be published in our next issue) of the Whitgift Hospital are of unusual interest in view of the deci-ion of the House of Lords to save the building from emolition. The Croydon Corporation, in spite of strong rotests, promoted a Bill in Parliament to demolish e hospital and widen the High Street, the street which faces. On Wednesday last, when the Bill was read in the ouse of Lords for the second time, the Earl of Crawford oved: "That it be an instruction to the committee to rike out of the Bill all powers relating to the com-ulsory acquisition of the Hospital of the Holy Trinity therwise known as the Whitgift Hospital) in Croydon with its chapel and offices." This motion was agreed to by the House, with no dissent.

Foremost in activity to preserve this historical and beautiful building was the influential Society for the Protection of Ancient Buildings, although the R.I.B.A., the Royal Academy, the Society of Antiquaries, the London Society, the Town Planning Institute, the Royal Society of Arts, the British Archæological Association, the London Survey Committee, the Civic Arts Association, the Croydon Natural History and Scientific Society, the Whitgift Foundation, the Whitgift Hospital Preservation Committee—to mention only a few of those who raised their voices angrily against the project—all banded together in this their common good.



*By permission of Mr. H. R. Grubb.* *Photo: C. H. Price, Croydon.*

NORTH END IN THE LATE EIGHTEENTH CENTURY, FROM A PAINTING BY PYNE NOW IN THE HOSPITAL. THE HOSPITAL IS SEEN ON THE RIGHT



THE HOSPITAL, SHOWING GEORGE STREET OPENING INTO NORTH END.

The generosity of two Archbishops of Canterbury endowed Surrey with two Elizabethan almshouses, each justly famous—Archbishop Abbot's stately foundation at Guildford, and Whitgift's Hospital in Croydon. The former still retains something of the quiet dignity of its original setting on the steep hill of Guildford High Street, while the latter is now hemmed in by suburban building in the very heart of Croydon.

The foundation-stone of Whitgift's Hospital was laid on January 17, 1596, and the building was completed in just under four years, on September 29, 1599. The hospital is of red bricks, and surrounds on four sides an inner quadrangle which is laid out with turf and flower beds. The rooms of the brethren and sisters are grouped around the quadrangle on two floors, each pair of rooms having a separate porch and staircase.

In the main gable fronting the High Street the initials I. W. in vitreous bricks are still clearly visible. Over the pediment of the entrance gateway are the arms of Whitgift, quartered with those of Canterbury, and the motto: "Qui dat pauperi non indigebit." The chapel at the north-east corner of the quadrangle contains the original panelling, and the backless benches with carved heads to the bench ends of the original fittings.

Among other portraits is one of the founder painted on a panel and inscribed below—

> "Has Triadi Sanctæ primo qui struxerat ædes
> Illius en veram Præsuli effigam."

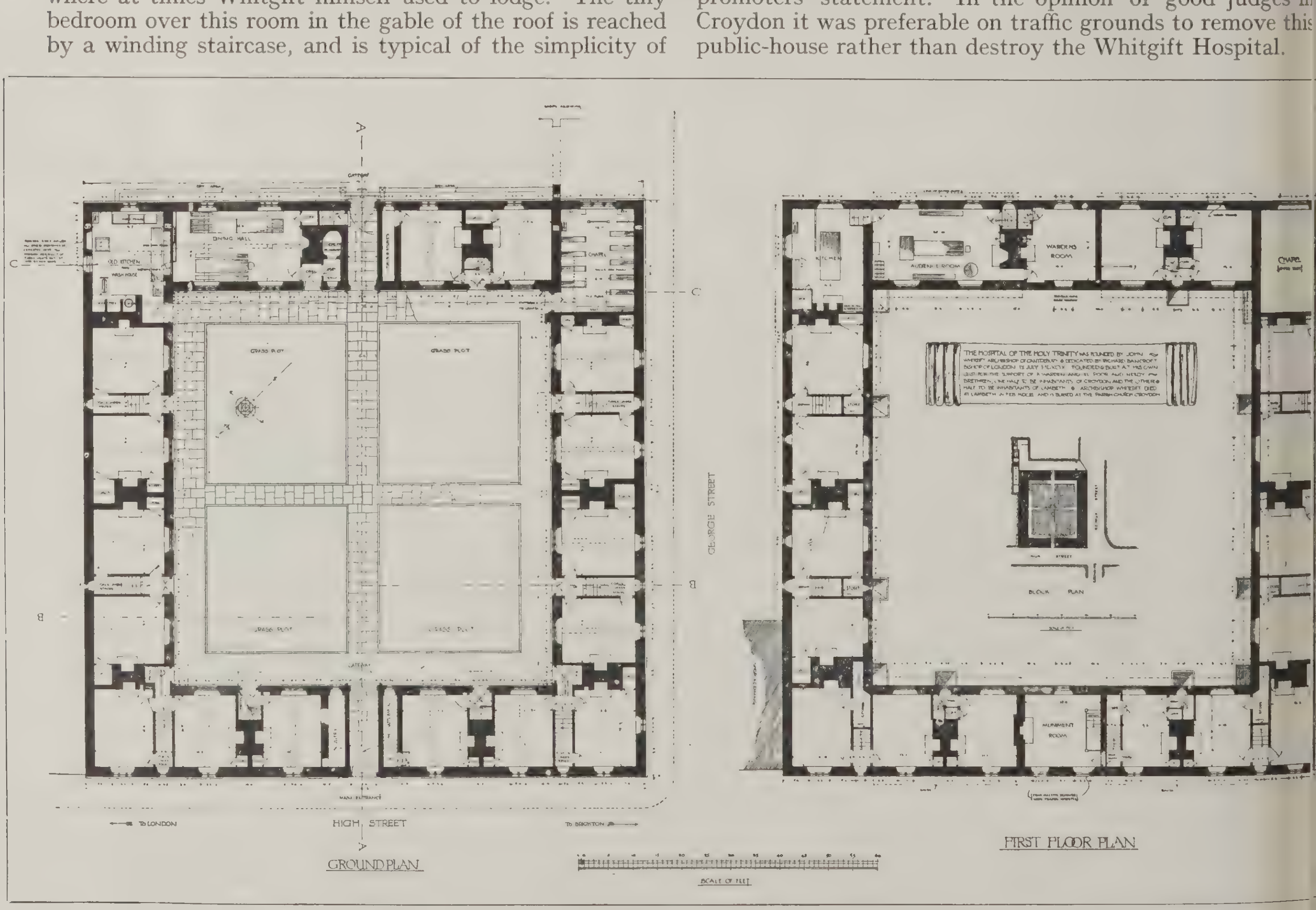
of which the following is the common translation:—

> "The Primates breathing image here you see
> Who built this structure to the Holy Three."

The buildings on the north front contain the dining-room, now disused, and in the north-west corner the entrance to the old kitchens. Over the dining-room is the panelled audience chamber, with a richly carved fireplace, and above the archway is the little room, now occupied by the warden, where at times Whitgift himself used to lodge. The tiny bedroom over this room in the gable of the roof is reached by a winding staircase, and is typical of the simplicity of the prelate of whom Izaak Walton wrote: "whensoever the Queen decended to that lowliness to dine with him at his Palace at Lambeth, he would usually the next day shew his lowliness to those poor Brothers and Sisters at Croydon and dine with them at his Hospital."

The original foundation was endowed for a warden, schoolmaster, and twenty-eight men and women, or as many more up to the number of forty as the revenues would permit. Whitgift also built a school house near the hospital, but some years ago the old building was pulled down when the present school was erected. No protest saved this relic of a type of Elizabethan building now very rare.

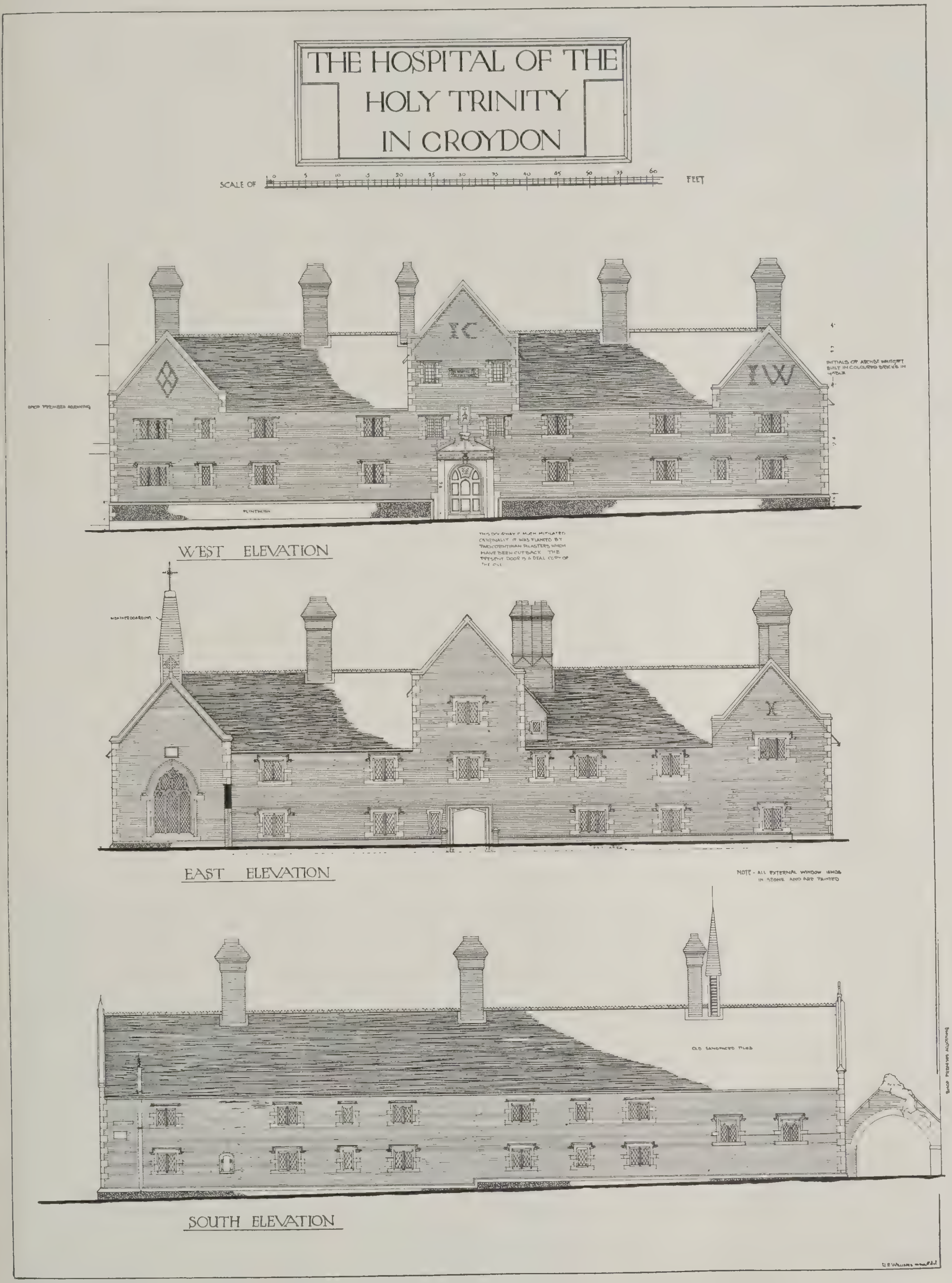
The Earl of Crawford, in the House of Lords, in support of the motion, said that the problem was simple. There was a congestion of traffic at the cross-roads in the centre of Croydon caused by the confluence of local and through traffic. How should this congestion be relieved? Much of the difficulty caused by the through traffic between London and the south had already been provided for by means of a by-pass road, which was now being constructed, and which would be open to the public in a very few months' time. Sir E. Geddes, when Minister of Transport, stated officially that so far as through traffic was concerned there was no case for demolishing the Whitgift Hospital. When he (Lord Crawford) was Minister of Transport he repeated that statement officially. The elimination of through traffic from the town would unquestionably ease the congestion in relation to the local traffic. A good deal of the congestion of the local traffic was caused by tram lines on narrow roads. In such a place tram lines were an obsolescent means of traffic, and they were bound to disappear in the course of time. It was also possible to provide a by-pass road for the local traffic. Was there any alternative to this scheme for destroying the Whitgift Hospital? Immediately facing the hospital there was a public-house and he was frankly amazed that the alternative scheme of removing that monster was not seriously mentioned in the promoters' statement. In the opinion of good judges in Croydon it was preferable on traffic grounds to remove this public-house rather than destroy the Whitgift Hospital.



THE WHITGIFT HOSPITAL, CROYDON: GROUND AND SECOND FLOOR PLANS.

# Measured Drawings. 27.—The Whitgift Hospital, Croydon

### Measured and Drawn by Ll. E. Williams, A.R.I.B.A.


THE HOSPITAL OF THE
HOLY TRINITY
IN CROYDON
SCALE OF
0 5 10 15 20 25 30 35 40 45 50 55 60
FEET
IC
IW
INITIALS OF ARCHBP WHITGIFT BUILT IN COLOURED BRICKS IN GABLE
SHOP PREMISES ADJOINING
PLINTH
WEST ELEVATION
THIS DOORWAY IS MUCH MUTILATED ORIGINALLY IT WAS FLANKED BY TWO CORINTHIAN PILASTERS WHICH HAVE BEEN CUT BACK THE PRESENT DOOR IS A DEAL COPY OF THE OLD
WEATHERBOARDING
EAST ELEVATION
NOTE - ALL EXTERNAL WINDOW JAMBS IN STONE AND ARE PAINTED
OLD SANDFACED TILES
SHOP PREMISES ADJOINING
SOUTH ELEVATION

The House of Lords have rendered signal service to the nation in saving the Whitgift Hospital from destruction. The Croydon Corporation proposed to demolish the hospital to enable the street which it faces to be widened, and for that purpose promoted a Bill in Parliament. The Bill was strongly opposed by architectural and other societies, and the House of Lords decided to instruct the committee to strike out all powers relating to the compulsory acquisition of the building. Large scale details of the Whitgift Hospital will be published in our next issue.

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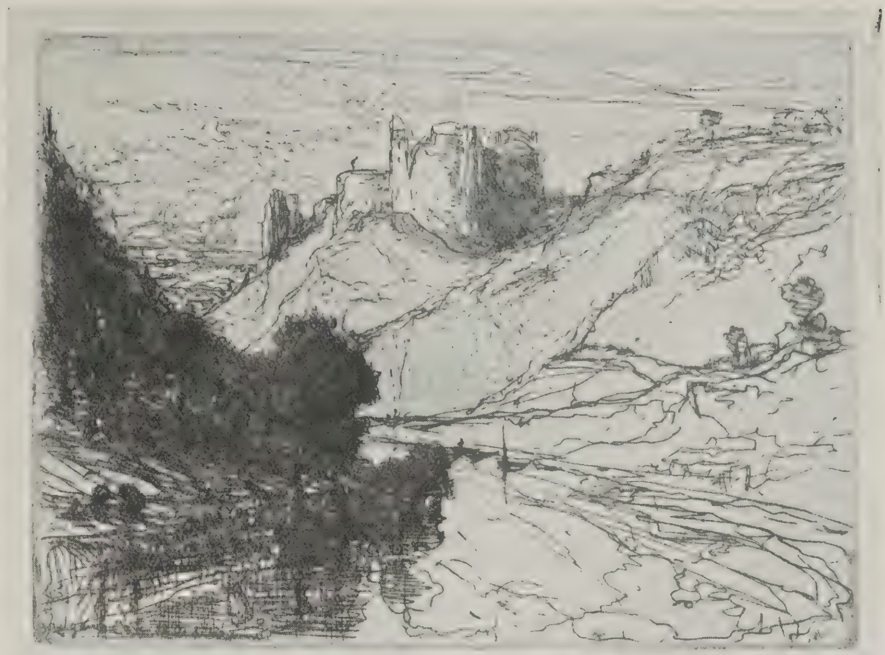
# Book Reviews

## "Etching Craft"

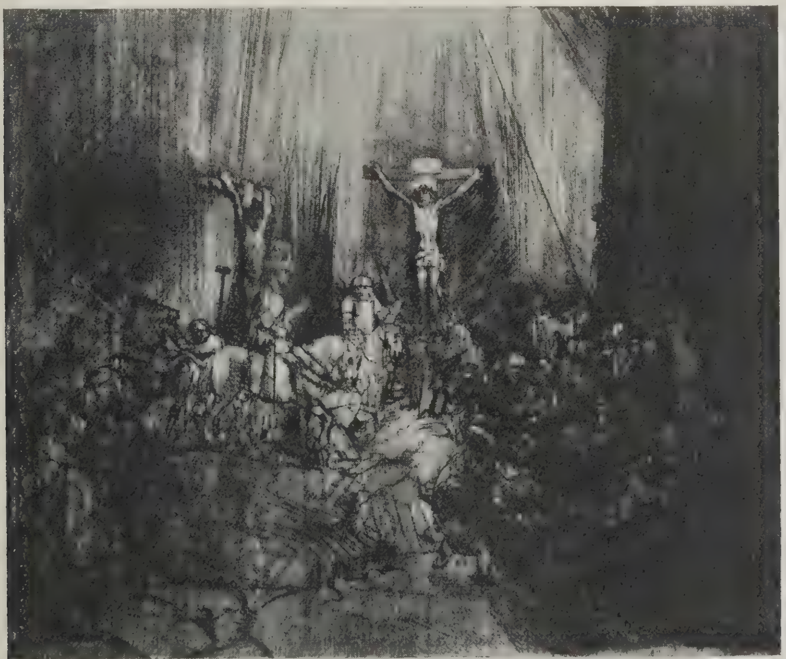


SIR F. SEYMOUR HADEN: ETCHING: "KILGAREN CASTLE."
*(From a print in the collection of Mr. Martin Hardie, R.E.)*

The architect's faculty for reading be-
een the lines of a drawing makes his
preciation of fine prints almost in-
itable; and certain it is that all forms
line reproduction are rapidly becoming
re thoroughly understood. Etchings
d engravings have always been of the
atest service to architectural study,
d most of us hanker after a sufficient
owledge of the processes to allow of
equate comparison of the varying
alities.

Mr. Robins' "Etching Craft" supplies
s information in a very thorough, yet
ncise form. There are but few such
oks which leave their reader with such
leep sense of satisfaction and of know-
ge acquired; certainly few on the
afts which do other than deal with the
finitely technical points. In this
ssay" we have a craftsman's guide of
mean value, and one that can be read
sily and with that absorption that only
ne interest brings. The author has
at easy manner of explanation which
akes the rough suddenly smooth, the
seen visible, and the imperfectly com-
ehended recognized. Perhaps the in-
oduction of such a good collection of
planatory prints goes far to make the
ader enthusiastic, and though these
ustrations must inevitably lose that
lliant tone and quality of the real
nt, they make their purpose very
arly understood.

'A brief outline of the development of
hing" introduces us to the practical
e, which contains many valuable hints
even the mature craftsman, and the
owledge thus gained is exemplified in a
apter on the great etchers and their
rk. This contains references to and
amples of most of our great past and
esent etchers and is distinctly valuable.
. Robins' appreciation of Rembrandt
e master of all etching) is illuminating.
study of the master's work acts like
onic to the reader's system and leaves him a humbler and a wiser man. "In a Study of Rembrandt's etching it is pre-eminently necessary to consider the evolution of his technique, which was to set the standard for the long series of etchers succeeding him even down to the living craftsman. The earlier work is distinguished by its care, thoroughness, and purity of line." The obvious conclusion arrived at after noting the illustrations, e.g., "The Three Crosses," is that the tone values are as strong as any modern man's work, while they omit that slimy darkness that pervades and ruins so many modern prints. Rembrandt's darkness is luminous and open, and his most beautiful velvet black can always bear inspection and the line always be observed. Let the would-be connoisseur become acquainted with this and defend himself from association with the printers' art alone when dealing with such an obvious line process. "An inky proof is the devil's own visiting card." Seymour Haden's "Kilgaren Castle," Sir Frank Short's "The Street, Whitstable," Muirhead Bone's "Ayr Prison," are but three beautiful examples of most satisfactory translations with a point, and many others are given in support of them.



REMBRANDT: DRYPOINT: "THE THREE CROSSES."
*(From a print in the Victoria and Albert Museum.)*

The last sections on the various allied processes, care of prints, etc., are also read with great enjoyment, and I can but refer the enthusiastic to such excellent collections as those in the British Museum Print Room and the V. and A. Museum. Strangely enough, these are for the public use and guidance, and contain the most modern, as well as the earliest, samples of the work of our master artist-craftsman; work which is sadly neglected, but which contains many happy and delicious reveries, apart from such a "vulgar" thing as intrinsic value!

A thoroughly sound and informative essay.

WALTER M. KEESEY, A.R.E.

"Etching Craft." By W. P. Robins, R.E. Published by The Bookman's Journal & Print Collector. Price 21s.

## The Legacy of Greece

The collection of essays grouped under this well-chosen title is of peculiar value and interest, alike for the authority and distinction of its authors, and for the unconventional presentment in consecutive chapters of their individual impressions of the splendid heritage owed, and eternally to be owed, to Greece, that wonderful little nation whose force, audacity, and sure instinct

SIR FRANK SHORT: ETCHING: "THE STREET, WHITSTABLE."
(*From a print in the possession of W. P. Robins, R.E.*)

for supreme refinement established, some twenty-five centuries ago, the crystal standards in intellectual and artistic achievement that still form the accepted basis of comparison to a civilization struggling amid the welter of its material complexities.

It is possible to criticize the selected order but, as a preamble to the specialized essays that follow, nothing could be better than Professor Gilbert Murray's on "The Value of Greece to the Future of the World." It is at once a preface and an introduction; the simple lucidity of language and homely force of statement make it a most attractive opening, even to readers possessing little initiation.

A singularly apt and convincing illustration of the Greek sense of beauty in structure, in proportion, line and surface, is the charming comparison of the modern yacht, "swift, lithe, and plain, with a lumbering, heavily gilded sixteenth-century galleon, or even with a Chinese State junk." We must not overlook, however, the well-known fact that to their finest buildings and sculpture, the Greeks constantly and habitually applied colour and gilding. Full of passages of convincing force, full of frank modernity and humorous colloquialism, this charming little essay is a genial tribute to the scholar and a kindly courtesy to the humble unlearned.

In the next essay upon "Religion," Dean Inge boldly attributes much of the cult and form of Christian theology, and the primitive Christian Church, to Hellenism, to the philosophic religion of Greece. "The early Church," he says, "spoke in Greek and thought in Greek." He traces back to Plato, and so to Greece, the religion and the political philosophy of the Christian Church, and the Christian type of mysticism. "The Christian Church was the last great creative achievement of the classical culture. It is neither Asiatic nor mediæval in its essential character." These, and many other positive statements by the Dean, are well supported by scholarly argument throughout a singularly interesting chapter.

"Religion" is aptly followed by "Philosophy," under which heading Professor Burnet, in a most lucid and readable essay, seems—whilst explaining the philosophic theories of successive schools, and the individual views of successive philosophers—to ascribe the origin of philosophy entirely to Greece. "The word 'philosophy,'" he writes, "is Greek, and so is the thing it denotes. Unless we are to use the term in so wide a sense as to empty it of all special meaning, there is no evidence that philosophy has ever come into existence anywhere except under Greek influences."

Greek philosophy, as he shows—and in doing so supports Dean Inge—is not only the basis of modern philosophy, but the basis of much of modern religion. "Above all," he says, "we can learn from Greek philosophy the paramount importance of what we call the personality and they called the soul."

The next essay, "Mathematics and Astronomy," by Sir T. L. Heath, is naturally of a less speculative and more historical character, but, like its predecessors, it emphasizes the immensity of our intellectual debt to Greece. All architects, and all men to whom the geometrical sense is important, must cherish the name of our old friend Euclid, of fourth form memory, still blessed, though now a little discredited, and we may be very sure that that greatest of scientific artists—Wren, held in high honour the author of the "Elements," with Democritus, Archimedes, Pythagoras, Apollonius, and their numerous precursors, contemporaries, and successors in the great sciences of mathematics and astronomy.

The order of the essays is evidently as deliberately careful as the choice of their authors, and if, at first sight, artists and students of art may be perhaps a little startled or disturbed by the relegation to the end of the book of what they naturally regard as the most splendid portion of the legacy of Greece, her Fine Arts, they may find comfort in the reflection that the splendour is cumulative, and that it is fitting that the visual outcome of a magnificent period of intellectual activity should be reserved for the end. Personally, however, we should like to make one transposition and place "Literature" after "Political Thought," and, therefore, immediately before "The Lamps of Greek Art."

The essay upon "Literature," by Mr Livingstone, the editor of the volume emphasizes the superb clarity of vision directness of aim, and sure instinct fo form in the literature of Greece. Professor Gardner, in "The Lamps of Greek Art," and Sir Reginald Blomfield, in "Architecture," emphasize, in their different ways, the same qualities in dealing with her art, and both recognize not only the immense value of the Greek heritage but the sheer necessity of its acceptance as the corrective of chaotic tendencies "And but for the continued influence o Greek Art," says the former, "that o Europe would continually be in danger of drifting into chaotic extravagance.' "Yet the Greek ideal remains," says the latter. "In our fitful fever of honest intention and wrong judgment, high endeavour and point - blank commercialism, Greek art, the art of Pheidias and Ictinus, is still the wise Mother to whom we must return." Though fully endorsing the truth of these sayings, we think that while thankfully accepting and patiently studying the spirit and science of Greek art, and while striving, as best we may towards its patient perfections and noble simplicities, those of us, at any rate, who are architects must beware of sheer imitation of form. Greek architectura forms grew from the use of Greek materials under the clear and brilliant ligh of Greek skies. The acceptation and perfection of the trabeated manner of architecture in Greece were the direc outcome of the use of a superb material obtainable in great dimensions and of great strength.

Minute and accurate refinements o detail are as possible in fine marble as they are impossible in the finest freestone As Sir Reginald says, "We can never hope to revive Greek Architecture, nor should we attempt to do so." To this we say "Amen."

Nothing can be less Greek in form than thirteenth-century Gothic buildings, yet in the best examples of that manner in France and England one feels a near approach to the Greek spirit, in shee cleanness of line, studied proportion sparsity of refined ornament, direct and powerful construction, and high perfection of workmanship. Chartres Cathedra is infinitely nearer in spirit to Greek architecture than are such imitative efforts as the British Museum or the Church of La Madeleine.

This collection of essays presents a book of extraordinary interest, and while displaying very remarkable erudition, is of the greater value in that it i nevertheless perfectly comprehensible to the ordinarily educated mind. It contains over thirty illustrations, mostly photographic and mostly adequate, whil some are of unusual charm and interest like the botanical illustrations of a fifth century manuscript volume of Dioscorides, in "Biology."

Professor Percy Gardner, in "The Lamp of Greek Art," has followed the interesting and amusing course of giving photographs of Greek Art side by side with those of modern prototypes.

Taken as a whole, this is a very remarkable volume, whose appeal should be wide, and whose modest price seems to suggest that it is largely a labour of lov —for Ancient Greece.

EDWARD WARREN, F.S.A., F.R.I.B.A.

"The Legacy of Greece." Oxford: The Universit Press.

## "Site Planning"

t is opportune that this book should ear just as a fresh start is about to be de in dealing with the housing prob- ., for the subject is dealt with more damentally than the title suggests. of the first axioms of the author is t all housing proposals must form part a comprehensive policy of town de- opment. The same principle per- ates the report of the Unhealthy Areas nmittee, but has far too often been sight of in the controversies regard- whose duty it is to provide houses how far the State ought to assist, n a search for cheap sites, etc. As the hor points out, every town ought to e mapped out its own course and have lefinite objective of development—in er words, a town plan in the largest se—and any housing proposals should form to that plan.

Merely to add odd bits to a town as it lessly straggles on and on into the ntry-side is a hopeless business in- ving waste in every form—waste of rgy in unnecessary travelling, waste efficiency in elongated dead-end service ins, waste of natural resources, waste time and money through congestion at centre, waste of opportunity by lizing sites without regard to the use y are best fitted for, etc.

A town policy not founded on fact would worse than no policy at all, and therefore author lays emphasis on the need for reliminary survey. Often much of the a for this survey exists and only needs be collated and put in graphic form so t the inter-play of forces and condi- ns may be understood and the prob- n may be seen as a whole. This need olve no material delay.

After the survey should follow the eral plan and policy, and then actual using sites can be selected. So much using and rehousing remains to be done t where this programme has not yet n adopted it can still be framed con- rently with meeting the most pressing ds, so that even the most zealous devo- s of expediency need have no quarrel h such a programme. It is quite cer- n that piece-meal methods must result unnecessary waste.

On the choice of sites and laying them to the best advantage on the most nomical lines, having regard to the t that the community has many needs addition to house-room, the author much to say. This part of the book profusely illustrated and the technical ormation is of considerable value. e author was, of course, in a peculiarly vantageous position to obtain practical perience of all the various methods of velopment that were tried in all parts the country after the War. Therefore views as to lay-out, design and con- uction of roads, water supply and inage, open spaces and allotments, dis- sition of buildings, etc., are worth dying.

Some interesting tables are given sum- rizing from the census returns the erage number of existing buildings of rious kinds per 100,000 of population , say, per 22,000 dwelling-houses); m which one deduces, for example, it at present there is in towns, on an erage, about one shop for each twelve elling-houses. This strikes one as a h proportion and is, perhaps, an ex- nation of the number of unprosperous-looking shops that one notices in some suburbs, some of which shops possibly owe their existence to the desire of certain estate developers to create shop site values.

We notice that in dealing with arterial roads the old unit of 8 ft. per line of vehicles is adopted; 9 ft. is now more usual, and the Ministry of Transport generally advocate 10 ft. With reference to the sections of arterial roads that are illustrated, those narrower than 120 ft. hardly provide sufficiently wide footpaths to accommodate the duplicated sewers and service mains that would be necessary. Some investigations carried out at Leeds indicated that 20 ft. was the minimum width that should be allocated for the purpose to each footway and margin.

The chapters dealing with the lay-out of sites and comparing costs of development, which incidentally confirm the view that there is "nothing gained by overcrowding," are particularly interesting, and the diagrams are excellent. An illustration on page 182 shows an apt arrangement of an open space, by which back land is principally used, thus saving road frontage, but adequate and neatly framed openings are left so that the picturesque value of the open space is not lost to the passer-by nor confined solely to the houses that back on to it; the whole making an attractive, but economical, composition.

After reading the book one is impressed afresh by the number of factors that have to be taken into account and that must be dealt with scientifically if economical and satisfactory results are to be obtained.

Everyone now agrees that an effort must be made to meet the housing shortage and to replace unfit houses; "Site Planning in Practice" is on many points a useful guide as to how that effort may be directed so as to achieve the most efficient, attractive, and economical results.

"Site Planning in Practice." By Longstreth Thompson, B.Sc. 16s. net. Frowde, Hodder and Stoughton.

## Town Planning Procedure

As to precisely how much is essential of the immense amount of formal routine work and procedure that is entailed through the administration of the Town Planning Acts we are not prepared to say. We know, however, that many municipal officials are harassed and overwhelmed by the complications of the procedure. To all such—and many others—we recommend Mr. Jenkinson's book. Mr. Jenkinson is himself an engineer to one of the large Yorkshire municipalities, and he writes primarily for his colleagues. By means of a chart he divides the whole work into three stages: the Resolution, the Preliminary Statement, and the Final Stage. These then have their appropriate sub-divisions: the documentary work including legal and valuing, the technical work, and the advertising. The whole process is followed systematically, and order is brought out of chaos.

However complicated the present procedure is it must be remembered with thankfulness that it has been considerably simplified since the Act of 1909. That Act required that a local authority desiring to prepare a scheme must first obtain the consent of the Local Government Board. In order to do this it was necessary to prepare a case and to take evidence, a procedure in itself entailing almost as much work as the preparation of the plan; now it is necessary for a local authority only to pass a resolution which must be advertised in order to prepare a scheme for lands wholly within its boundaries. For lands which extend outside the authority's boundary it is still necessary to obtain the consent of the Minister of Health. Another important simplification occurs in connection with the diversion of roads. Hitherto it has been necessary to make an application to Quarter Sessions for the diversion of a right of way. This procedure is now obviated.

At the end of the book is a series of diagrams, most of which will be found of assistance, particularly the schedule of streets in connection with by-law relaxation, and the details of notation. The diagram showing the suggested arrangement of roads is interesting. The Continental system of multiple roadways is at last being adopted, and the decorative value of grass and tree is being appreciated. We do not think that the 150 ft. roadway has been laid out to the best advantage, and a 40 ft. carriageway for fast traffic seems unnecessarily wide. Carriageway width is required where there is a great divergence of speed amongst vehicles so that they can pass each other. Uniform speed does not require width. Where, therefore, the traffic is regulated into separate carriageways for slow- and fast-moving traffic the surface can be reduced, since passing is less frequent, and in this 150 ft. roadway more width might have been given to the promenade. The Continental practice of running the trams on a wide grass strip might sometimes be adopted with advantage.

In the plans of suggested road crossings and junctions there is insufficient attempt at axial treatment, or at aligning the roads on terminal points of interest, neither do we think that the practice of breaking a cross road—so much favoured by the German town-planners—is a good one. Every extra turn increases the traffic danger and causes a loss of time, and adds to the difficulty of traffic control. These, however, are matters of opinion.

Professor Patrick Abercrombie furnishes an introduction to the volume in which he outlines the growth of the modern town-planning movement in England, and stresses the necessity for its general adoption. "Town planning in a word means economy and good business as well as health and amenity. It is sometimes asked what a scheme will cost? It is, perhaps, more sensible to ask what will it cost in traffic stoppage, industrial stagnation, expensive road widening, loss of human physical energy, increase of discontent and unrest, if town planning is omitted?"

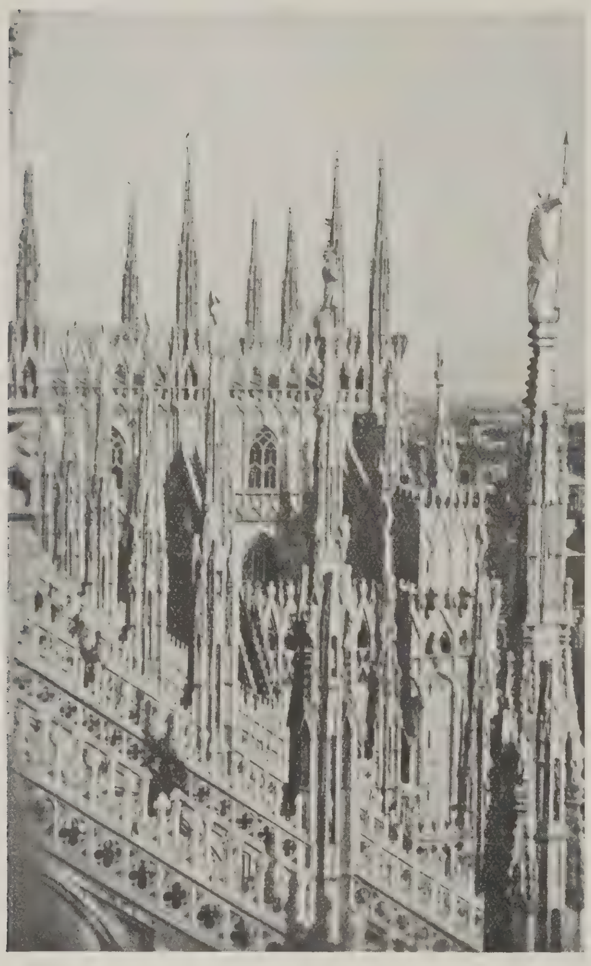
We feel sure that this book will be welcomed by the town clerk, the engineer, and the surveyor of every municipality at present struggling with the mass of documents which the preparation of a town-planning scheme involves. Mr. Jenkinson has conferred a favour on his own colleagues and on the cause of town planning, for which he is such an earnest advocate, by publishing the careful methods which he has himself adopted for his own city.

"A Practical Guide of Procedure in the Preparation of a Town Planning Scheme," by Herbert J. Jenkinson, A.M.T.P.I., M.Inst.M. and C.E. Manchester: A. G. Thornton, Ltd.

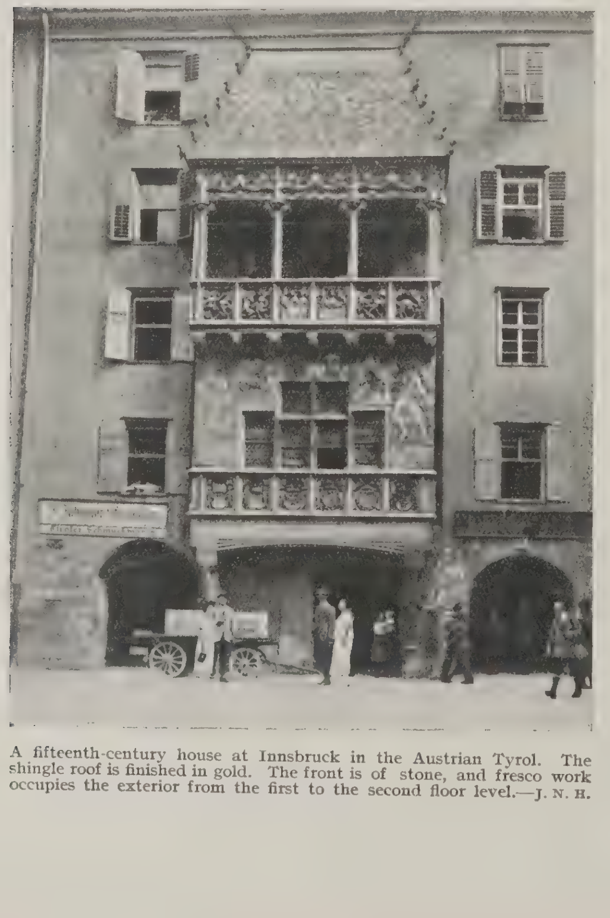
# A Pictorial Review

## Illustrations of Topical, Practical, or Curious Interest

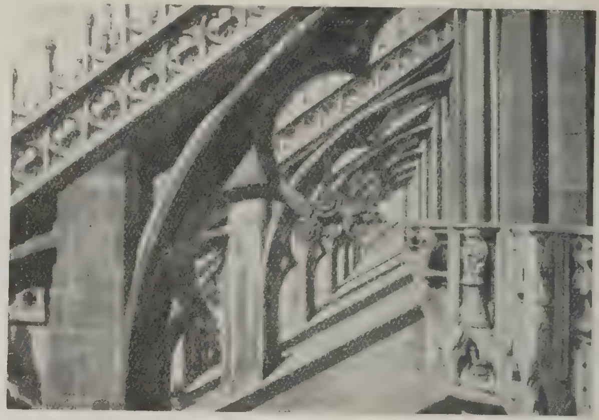
*Readers are invited to send in sketches and photographs for publication in these pages. A fee of 2s. 6d. will be paid for each illustration accepted. Contributions should be accompanied by short explanatory notes.*



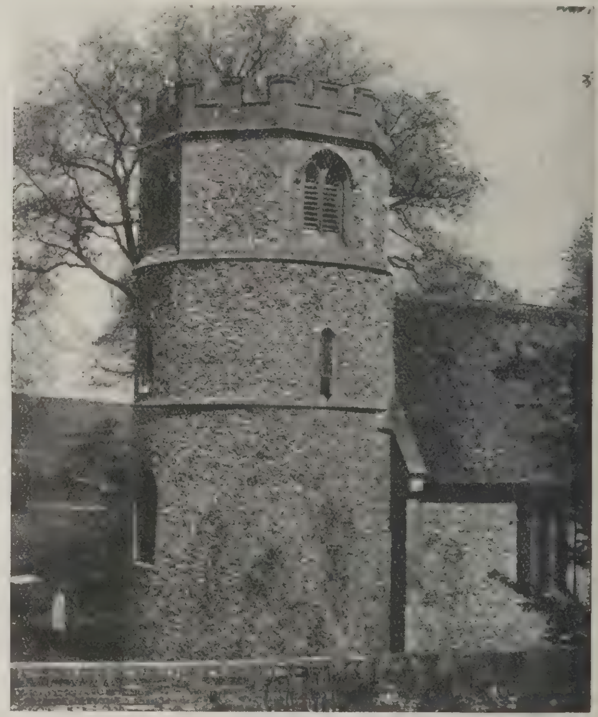
A small portion of the roof of Milan Cathedral.—D. S. M.



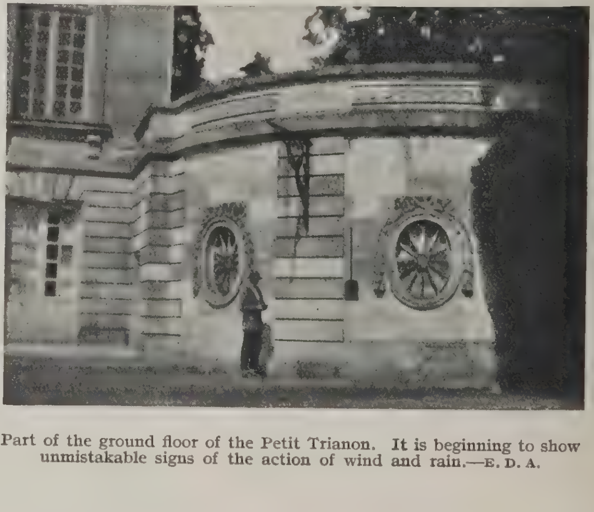
A fifteenth-century house at Innsbruck in the Austrian Tyrol. The shingle roof is finished in gold. The front is of stone, and fresco work occupies the exterior from the first to the second floor level.—J. N. H.



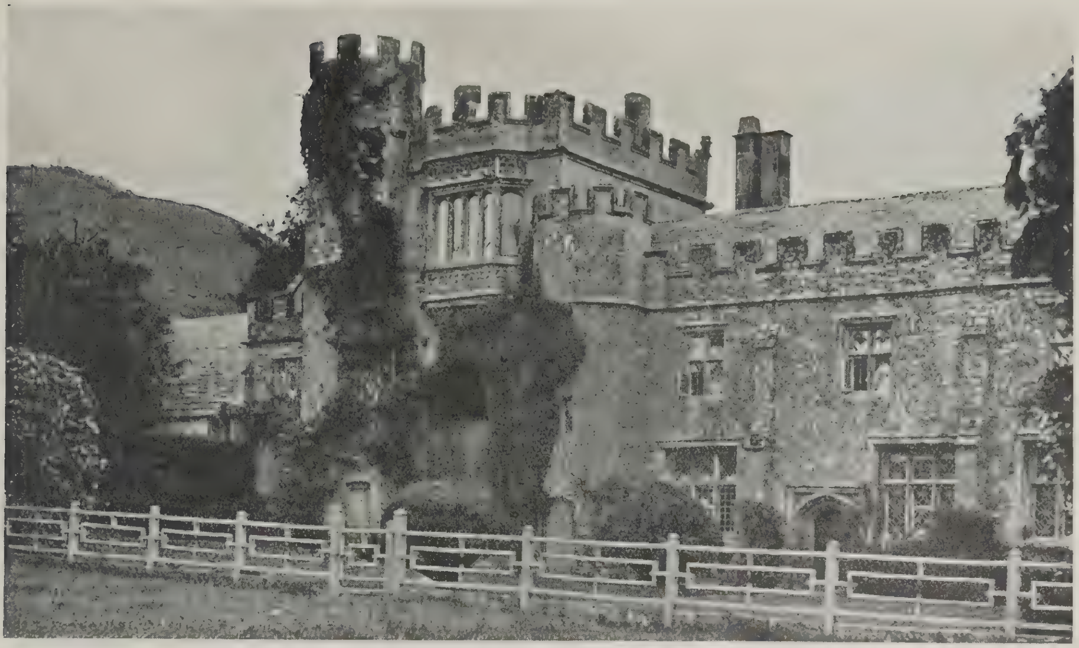
An unusual view of Milan Cathedral—looking through the flying buttresses.—S. I. B.



Great Shefford Church in the Lambourn Valley, Berks. It has a round tower, a rare feature in this part of England. Antiquaries surmise that it was so built owing to the difficulty of obtaining stones for quoins. This may account for the round-towered churches in the Ouse Valley, Sussex.—J. B. T.

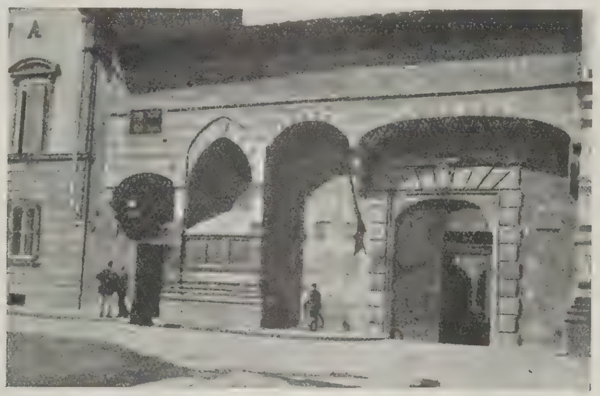


Part of the ground floor of the Petit Trianon. It is beginning to show unmistakable signs of the action of wind and rain.—E. D. A.

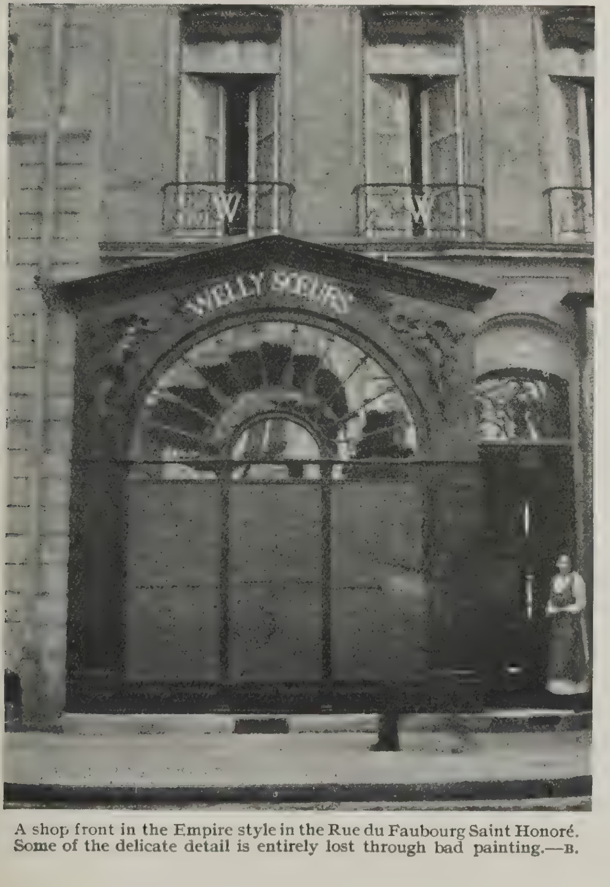


The south front of the gateway to Montacute Priory, Somerset. The splendours of Montacute House have rather eclipsed the other features of interest in the village, of which the gateway to the former priory is not unworthy to take a high place as an example of Tudor architecture. The gateway was presumably erected shortly before the Priory was dissolved, since the initials of the last Prior are carved on the battlement.—E. M. H.

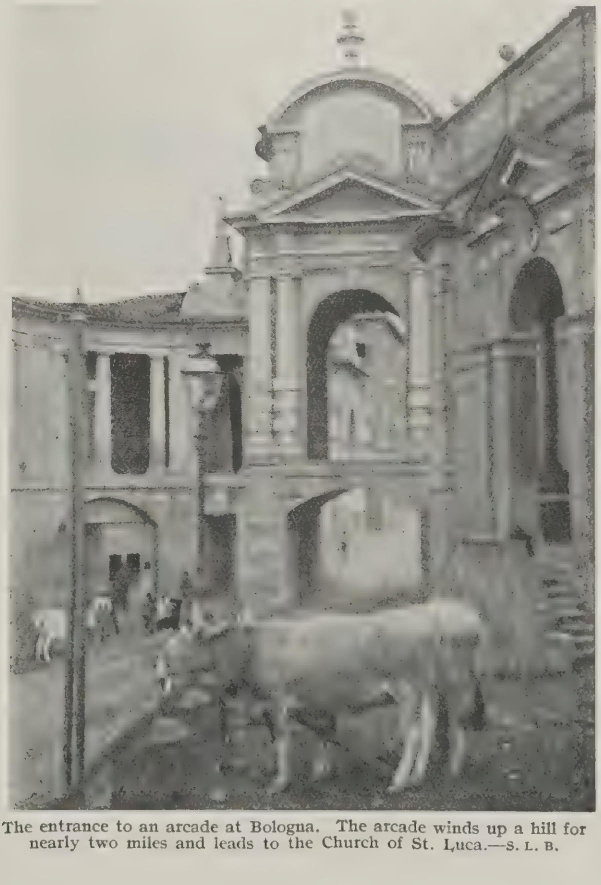
This marble hemicycle and statue of Aristæus, by Gatteaux, is situated in the wooded centre portion of the Tuileries Gardens, Paris.—B.



The entrance to the cloisters of Santa Maria Novella. It forms an interesting and symmetrical composition.—R. E. E.



A shop front in the Empire style in the Rue du Faubourg Saint Honoré. Some of the delicate detail is entirely lost through bad painting.—B.



The entrance to an arcade at Bologna. The arcade winds up a hill for nearly two miles and leads to the Church of St. Luca.—S. L. B.

# The Institution of Structural Engineers

## Mr. Fiander Etchells's Presidential Address

ON Thursday of last week Mr. E. Fiander Etchells, A.M.Inst.C.E., A.M.I.Mech.E., etc., delivered his presidential address to the Institution of Structural Engineers. It was the first presidential address to be delivered under the new title of the Institution.

Mr. Fiander Etchells took for his subject the "Evolution of Engineering Institutions." Dealing with the Egyptian Period, he said: Trade Guilds, technical institutions, professional associations and learned societies appear to have existed in some form or other through all the changing periods of recorded history.

To show unbroken continuity of any such human institution is not possible, but the whole course of history shows that institutions and societies arise perpetually and spontaneously whenever groups of men have felt their kinship, or realized that they had interests in common with each other—interests which could be furthered by association.

Churchward in "Signs and Symbols of Primordial Man" states that in ancient Egypt the blacksmith men, who knew how to smelt iron ore and forge the metal into weapons, formed themselves into the "big" clan of blacksmiths." These men came up from the south of Egypt in pre-dynastic times, and established themselves at Edfu (probably earlier than 4000 B.C.). Horus was their deified god, and, as Edfu became their centre, he was referred to as "The Great Master Blacksmith and Lord of the Forge City." These followers of Horus afterwards became known as Mesniti, and the temple they built to "The Lord of the Forge City" was known as Mesnet.

In Egypt, during dynastic times, however, it would appear that iron, with its great liability to rust, was held in abhorrence. The religion of that period which laid such great stress upon the doctrine of immortality would prevent them from holding in honour a metal which could almost be used as a symbol for decay.

The Egyptian records contain numerous references to co-ordinated technical knowledge and organizations of workers, both freemen and slaves.

A fresco at Thebes, executed long before the Mosaic period, shows us Asiatic prisoners making bricks for a temple to Amen.

There are reasons for believing that this fresco was executed about 1950 B.C. In addition to showing the process of brick-making, it shows the slaking of lime and the digging of sand.

The fresco also shows hod-carriers transporting the mortar. The painting, although it makes no attempt at perspective or shading, is, nevertheless, wonderfully life-like; and even shows the mortar adhering to the feet of the workers. Egyptian bricks were made of clay mixed with chopped straw and a little sand. They were dried by exposure to the sun. The straw apparently acted as reinforcement to prevent the cracking of the clay, and the gluten in the straw probably increased the tenacity of the combined materials. Reinforced brickwork, therefore, is not such a novelty after all.

Architecture was the principal art in Egypt, all other arts being more or less accessory or subsidiary thereto. It is, therefore, natural that the architects should be honoured along with kings and priests. For a considerable time they even appear to have had a "Superintending Architect of Egyptian Buildings," and at times this office appears to have been hereditary. The title c the office can be translated as "Th Superintending Architect of all th Structures in Upper and Lower Egypt.

W. W. Rouse Ball, in "A Sho History of Mathematics," states: "W have reason to believe that some tim before the year 2000 B.C. the followin method of obtaining a right angle wa used in laying out the ground plan certain buildings. The Egyptians wer we know, very particular about th exact Orientation of their temples; an they had, therefore, to obtain wit accuracy a north and south line, an also an east and west line. By observin the points on the horizon where a sta rose and set, and taking a plane midwa between them, they could obtain a nort and south line.

"To get an east and west line, whic had to be drawn at right angles to thi certain professional 'rope-fastener were employed, who stretched a rop round three pegs (the two of them whic were nearest together being fixed alon the north and south line), so that th sides of the triangle formed were in th ratio of 3 : 4 : 5; the angle opposite th longest side would then be a right angle.

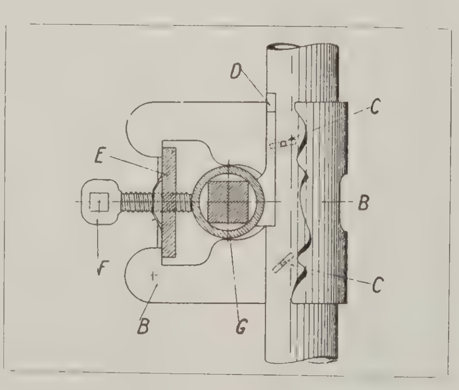
In the Rhind collection at the Britis Museum there lies a manuscript whic was written by a priest named Ahme somewhere between the years 1700 B. and 1100 B.C. The work is called "Direc tions for knowing all dark things." It i believed to be a copy, with emendation of an older treatise of about 3400 B.C and consists of a collection of problem in arithmetic, algebra and geometry, an was probably a summary of informatio for the use of the priests about the perio at which it was written, viz., betwee 1700 B.C. and 1100 B.C.

# The Spectators' Stands for the Royal Wedding

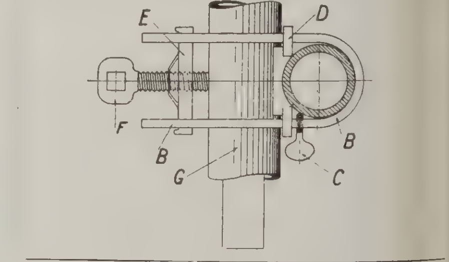
THE stands from which spectators will view to-morrow's Royal wedding are practically finished. Several of them are of wood, and are constructed in the usual manner. Two of the largest however (accommodating 1,300 people), those standing immediately north of the Abbey, are of tubular scaffolding. These stands (of which we give an illustration on the facing page) are particularly interesting in view of the ingenious method by which they have been erected. Tubular scaffolding consists of steel tubes of great strength connected by couplers of simple construction. This coupler is placed in position quickly and a turn of the screw at once joins the tubes rigidly.

Briefly, the method of fixing the scaffolding is as follows: The base plates are placed in the desired positions, with convenient lengths of tube for uprights. Coupler band B is then fixed on the vertical tube by means of two thumbscrews CC, and the chair D is placed against the vertical tube. The horizontal tube is then lifted into position, the screw-plate E is made to slide sideways behind the lugs of the coupler-band, care being taken that the edge ridge of the screw-plate rides clear of the lugs on the coupler-band. Screw-eye bolt F is then screwed as tightly as possible with a "tommy" bar. Any necessary bracings are fixed to the horizontal tubes. It is estimated that 40,000 ft. of tube and 14,000 couplers have bee used by Messrs. Scaffolding (Grea Britain), Ltd., of Lansdowne Road, Stock well, London, S.W., in connection wit the erection of the stand.

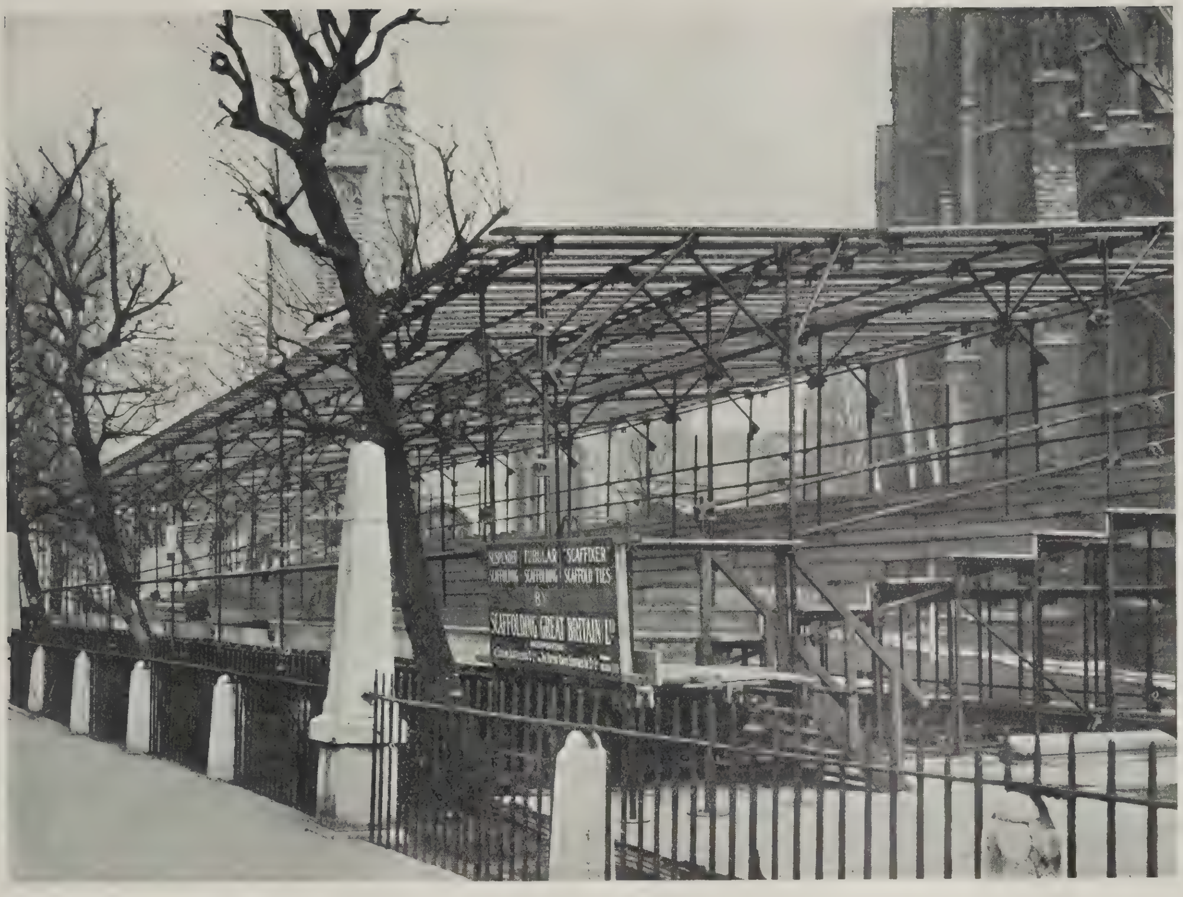
For the wedding of Princess Mary spectators' stand was erected in a simila manner. The greatest use to whic tubular scaffolding is put is, of course, i connection with the erection of all kind of buildings. For this purpose it is i daily use by the foremost builders.



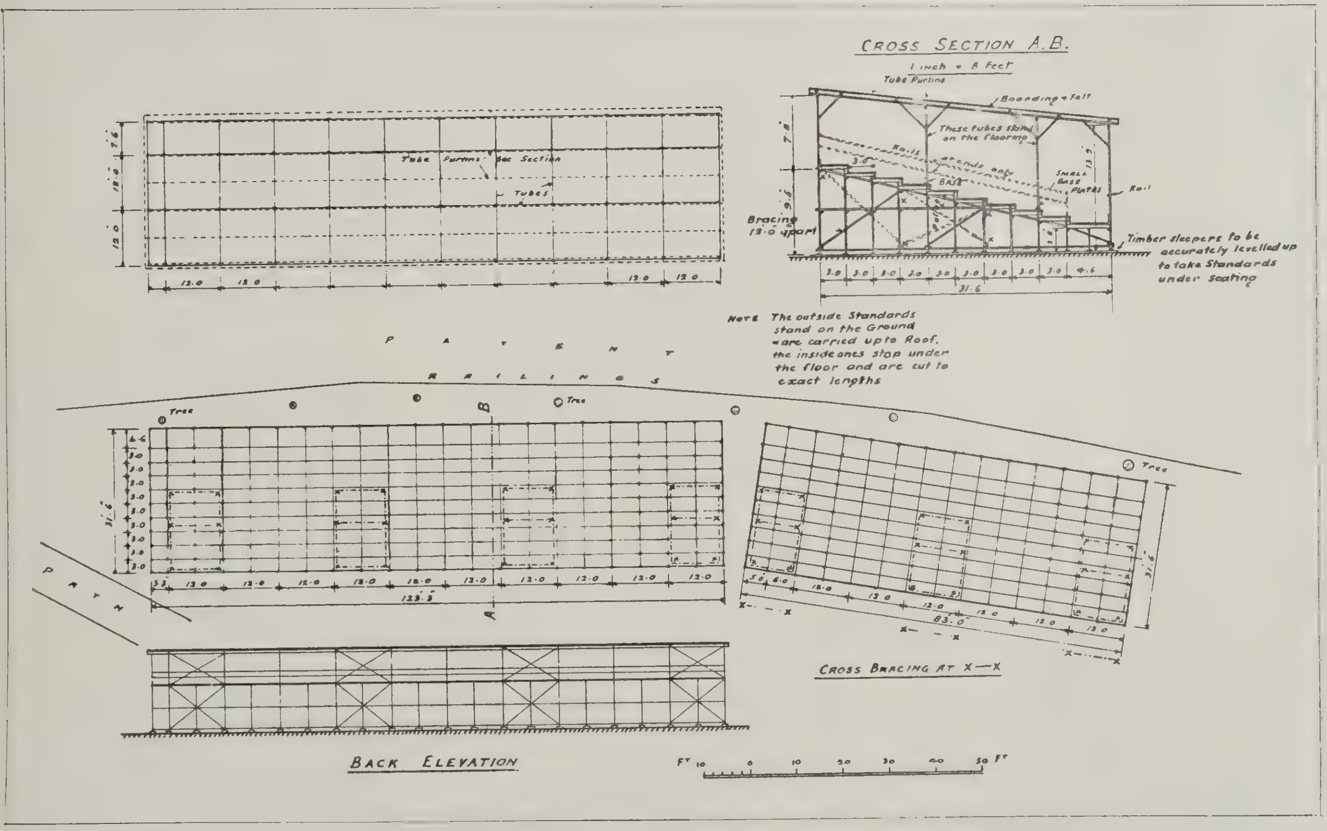
SIDE ELEVATION.



PLAN.


SUSPENDED SCAFFOLDING
TUBULAR SCAFFOLDING
"SCAFFIXER" SCAFFOLD TIES
BY
SCAFFOLDING GREAT BRITAIN L<sup>td</sup>

A GENERAL VIEW.


CROSS SECTION A.B.
1 inch = 8 Feet
Tube Purlins
Boarding + Felt
These tubes stand on the flooring
Rails
ends only
BASE
SMALL BASE PLATES
Rail
Bracing 13·0 apart
Timber sleepers to be accurately levelled up to take Standards under seating
3·0
31·6
Note The outside Standards stand on the Ground & are carried up to Roof, the inside ones stop under the floor and are cut to exact lengths
Tube Purlins Box Section
Tubes
PATENT RAILINGS
Tree
PATH
123·3
83·0
CROSS BRACING AT X—X
BACK ELEVATION
FT 10 0 10 20 30 40 50 FT

THE SPECTATORS' STANDS FOR THE ROYAL WEDDING.

# Correspondence

## The R.I.B.A. Elections

*To the Editors of* THE ARCHITECTS' JOURNAL.

SIRS,—I read Professor Adshead's letter with much interest. The list of candidates for the Council to which he refers was shown me a few days ago.

The political controversy to which he refers was started by the late Council, and their proposal to strike at the fundamental principle of admittance by examination to the Institute by "the bringing of all the architects of the United Kingdom into membership of the R.I.B.A." This proposal was viewed with the greatest alarm by many members of the R.I.B.A., and in defence of the Institute they combined to oppose it.

The views "for" and "against" Unification were submitted to all the members of the R.I.B.A. by the late Council before the last election, there was practically a Referendum, and the result was that the Institute clearly showed it was strongly opposed to such a scheme, and returned 25, out of 28 Fellows and Associates, who were pledged to oppose it. But did that convince our Unification friends ? Not a bit of it ! They started immediately after the last election to work for the advocates of Unification; hence the list complained of by Professor Adshead, and I do hope that all men who wish to maintain our great Institute in the unique position it has gained, principally in consequence of compulsory examinations, will follow Professor Adshead's advice, as far as it concerns that list, and put it in the waste-paper basket.

SYDNEY PERKS.

## Building Trade Dispute

*To the Editors of* THE ARCHITECTS' JOURNAL.

SIRS,—Is there a phase of the recent settlement in the above matter which is in danger of being overlooked ? The general public has been good enough to interest itself in the dispute which recently divided the two parties mainly concerned, viz., the employers and the operatives. No doubt it was justified in this. But the general public is proverbially short minded. And in this present instance it may too readily forget that settlements of this nature, undertaken on behalf of the whole community, involve sacrifice.

The welfare of any industry affects the welfare of the community; and to that extent everyone is involved; and a stoppage, especially at the present, in building operations could not fail to be utterly disastrous. Such a realization it was that enabled a settlement to be come to at the eleventh hour of the dispute; and the general public was no doubt exceedingly relieved thereat.

But what may not be so fully realized, is the fact that this settlement was only effected by sacrifices on the part of both parties mainly concerned. Both the employers and the operatives have made considerable sacrifices in order to avoid a stoppage and particularly with a view of enabling the community's great need for buildings to be supplied.

Now that these sacrifices have been made, is there not something due from that third party, the general public ? Or is the investor still to continue to wait for yet another reduction in costs before he sets free the building work which he has in contemplation ?

H. BRYANT NEWBOLD.

Editor, "The National Builder" The Official Organ of the National Federation of Building Trades Employers of Great Britain and Ireland.

# Contemporary Art

*Grosvenor Gallery.*

The one-man show of Glyn Philpot's works brings out two dominant strains: a desire for quality and an intellectual prepossession. The former asserts itself in the mastery of the "Head of a Negro," "Roland Hayes Singing," and "Lord Balcarres." There is no doubt as to the perfection of the technical equipment any more than of psychological insight, which have gone to the making of these portraits. The intellectuality of "Under the Sea," "Melampus and the Centaur," and a "Saint in Ecstasy" does not bear the strain. The full, sumptuous modelling of the bronze Torso (No. 24) is satisfactory, because it has no reason for existence beyond the expression of beauty; the "Mask of Vivian Forbes, Esq." in lead, and that of a Negro in bronze have similarly their *raison d'être*, as have also the garden statues (37 and 40). The "Man in Black and White" has an exquisite flesh-quality and soft air of actuality.

There are some unexpected and delightful portraits in the two rooms containing the David Muirhead exhibition of seventy pictures and drawings which maintain a light and pleasing level throughout. They are not merely delightful because of their subjects, but also on account of their unaffected treatment. The water-colour drawings are varied in subject and locale, and in fact the geography of the show is extensive. The largest picture, and in some respects the best, is "Chepstow Castle" (No. 64), a harmony in blue-greys with a restful absence of detail; as restful, indeed, as the low-toned water-colours that have the look of making any room homely where they happen to find a hanging.

*The Leicester Galleries.*

There are more than forty water-colour drawings by Ambrose McEvoy, and, as they are all of the same formula, it is astonishing that there is no monotony in the show. The reason is not far to seek: McEvoy can spot character. The result may be fortuitous; it is in most cases fortunate; in any case it is charming and interesting. Every one in London now knows the formula; many try to imitate it and fail dismally, but the composition of the formula is still the painter's secret. He invented and introduced a new thing into portrait-painting; an exquisitely dainty quality that is the despair of all would-be imitators, and yet it looks so simple, and indeed it is simple—to McEvoy; to him, because he happens to be the inventor. It is a secret not only of execution but of observation; no one before saw like this artist sees, no one before recorded as he records, and he possesses the faculty of charm. If you have that, in art as in life, what else can you pray for, what else hope for ?

On the threshold of the gallery containing the work of Oliver Hall, his pictures, oils and water-colours look the same colour. You have been seeing colour in the street; in the shop windows; you have to adjust things. There the whole charm of the work takes possession of you, and you find that in this one colour there is an infinite variety of shade and a modulation of tone of which you never dreamed. This quality is less apparent in a general exhibition where, you now realize, it is largely lost, but here, where forty examples are gathered together, you get at the heart of it. You start by thinking that to possess just one example perhaps would be best, but by the time you have seen them all and successively examined them, you want the lot, or most of them.

*The Redfern Gallery.*

It is pleasant to chronicle an exhibition of so well-known an artist as Alfred Priest at so well-known an establishment as Redferns, 27 Bond Street. The water-colours that Priest displays are mostly of Scottish scenes, and are accomplished little works. Associated with them are drawings by Mrs. Radcliffe and Mrs. Algernon Earle and some excellent jewellery by Edith Linnell.

*The Brook Street Gallery.*

A strange, crowded, pleasing exhibition, presumably by members of a single family, includes "Sunny Scenes of England," "Old English Gardens" and "English Moons," by, respectively, H. Sylvester Stannard, Theresa Stannard and Ivy Stannard. The Devonshire, as well as the Derbyshire, moons are treated, and some pleasant spots in the Home Counties dealt with.

KINETON PARKES.

# Architecture in the Lay Press

## Oxford Circus

At Oxford Circus are to be observed the hitects' efforts to obtain a unified eme of treatment on town-planning nciples. Three segments of the circus ve already been built, and the design l shortly be consummated by the new ldings which are now being constructed Messrs. Jay's. The final result may described as a triumph for all conned with this majestic addition to et architecture. Here an outstanding mple is set alike to London and the vinces which it is sincerely hoped will emulated. Comprehensive designs his nature are very desirable, and pret that chaotic result which is a deplore fact in some famous streets. The wn authorities very wisely enforce reations on the prospective designs of ldings in this locality, and although tereotyped result is not sought, some ndard of architectural uniformity is sted upon. Oxford Circus is partly result of these regulations, but the ual design is that of Messrs. Henry ner, the architects who won a comition about ten years ago for the eral design of the circus.—A Special respondent in "The Daily Telegraph."

## ndon's New Palace of Business

ven in its very undressed state the de of Bush House gives practical mise of a magnificence belonging to aces. A lofty marble hall, for instance, which a couple of motor-cars could ve side by side; in this staggering tibule, to be reached from Kingsway, a beautiful fountain would seem ting to make an unknowing stranger k he had slipped into a twentieth-tury Arabian Nights' setting instead a throbbing centre of big business. wever unlike a temple the central k of Bush House may look from with- there seems to be every reason for aking of it as a temple—a temple to god Business. The towering Aldwych tico, when it is finished and stripped its scaffolding, will give colour to the ; it is to be remembered, when con-ring this very imposing Aldwych ance, that it will be flanked eventually further structures on the site of which the centre. Its grandeur, dimensions, fine workmanship recalled at close rters the dignity of some Egyptian ples.—W. C. S. in "The Evening vs."

## A "Record" in Foolishness

Ve gave a photograph yesterday of a characteristic piece of Russian archi-ure—the Orthodox Cathedral at War-. On May 3 the Poles, or some of n, mean to begin pulling it down, use its style is not Polish, but Rus-, and Poles hate Russia as an old der and conqueror. This is as if n England had tried to show what boys he bull-dog breed we are by pulling n those Frenchified pieces of building, naves of Ely and Carlisle Cathedrals, transepts of Winchester and the crypt anterbury, during or after the Napo-ic Wars. One of the most wonderful beautiful sets of documents with ch the surface of Europe is inscribed hat part of its architecture in which l, unhappy, far-off things, and battles long ago" are commemorated in the curious beauty of some kind of architecture found far away from its birthplace. We do not suggest that the Russian Cathedral at Warsaw is one of the world's finest buildings. But it is an excellent specimen of its own curious half-Asiatic kind. If preserved it would serve as the best possible monument of the expulsion of Russia from Warsaw. But the new Poland is extraordinarily young in mind, and we suppose that neither a sense of humour nor a sense of artistic values is always strong in very early youth.—"The Manchester Guardian."

## Ugliness in Towns and Villages

It is curious and almost inexplicable, but nevertheless true, that it is hardly possible to imagine a seventeenth- or eighteenth century builder (in the West Riding, for example) building what we recognize as a normal nineteenth-century "artisan's dwelling." He couldn't have done it. There would have been a discernment and feeling about his coursing, a dignity of proportion in the plainest door or window, a sense of fitness in the eaves and roofs—in fact, a sense of design about the whole thing. Walk about the older West Riding places with your eyes open and you will see it. "What a beautiful row of cottages!" the stranger exclaims, and you answer at once: "Ah, yes! but look at the date of them." They were built, maybe, in 1660 or 1760. They are of the simplest, plainest and cheapest local materials; there is no ornament; but they fit their place and are restful to look upon and—are beautiful. The main reason is that people don't care. The builder takes no pride. The occupier is only too thankful to have a roof of some kind over his head, and so—people get the houses they deserve, and the result is that we get surrounded with ugliness and vulgarity; and generations of men, women and children are, day by day, unconsciously depressed and soured, and the sulkiness which is only too near the surface in most of us is encouraged and fostered. In all our older towns and villages we have still left to us good examples of seventeenth- and eighteenth-century building (to go no further back). Here we have simplicity and dignity of design, sense of proportion, and true and proper use of material.

The question for us is, can we insist that what we still have shall be retained, and that our public authorities shall see to it that some regard is had to good examples when new premises are being erected?—The Dean of York in "The Yorkshire Evening News."

## City Memorials

Just as the Scotsman is said to "joke wi' deeficulty," so there seems to be something in the English character against "producing an effect" with intent and purpose. In artistic matters, as in conduct, the Englishman generally brings off his best effects when his attention is otherwise engaged. If what engages his attention has some definite practical utility, material or moral, the better the unconscious effect is likely to be. To say that the Englishman is self-conscious, or that he lacks the histrionic temperament, are two ways of saying pretty much the same thing. The bearing of this upon the question of memorials is that memorials have two functions: the recording and the celebrating. Nobody who has looked at the war memorials up and down the country can doubt which function is most happily expressed by our architects and sculptors. On the whole such things as wall tablets with inscriptions, village crosses, or monuments which have some practical utility, such as stone benches, parish halls, or fountains, are well done; it is when some attempt has been made to express ideas connected with the war that the national self-consciousness, or lack of histrionics, spoils the effect—particularly in those monuments which have been designed after a pause for reflection, with the resulting loss of certainty about the ideals of the war. This is not because English people are unimaginative; on the contrary, the extraordinary success of such monuments as the Cenotaph, the Stone of Remembrance, and the Cemetery Cross is precisely because, while recording the event, they offer a blank space, a shrine, for the individual imagination of each observer. The material wreaths and bouquets round the Cenotaph are symbols of the thoughts and feelings of those who laid them there.—Charles Marriott in "The Daily Despatch."

## Town Development

Are we satisfied that our towns and cities have grown in the right way? In most cases the answer must be in the negative, for while here and there parts of them have been developed wisely, and in some cases a great effort on the part of the local authorities has led to fine results, broadly speaking town development has been in the main more or less haphazard. Can anything be done to ensure that further growth will be arranged on sound lines? Yes; a comprehensive plan can be prepared showing in outline a complete scheme for the wise development of a town and providing for its estimated growth for, say, the next fifty years. One of the wisest first steps to take is the appointment of an art commission in each town, city, or region. Such commissions have done invaluable work in American cities, and experiments in this direction may well be tried in this country. Its composition would vary in different places, but it might include, say, the Lord Mayor, the town-clerk, the chairman of the education committee, the vice-chancellor of the local university or the principal of a university college, with representatives of the local society of architects and of any local society dealing with town-planning, civic design, and kindred subjects. There will, doubtless, be in each locality others whose services should be secured by the commission because of their special knowledge of the subjects which will inevitably be discussed. While the appointment of an art commission is perhaps the best immediate step to take to get the best results, well-informed public opinion is needed, and that is slowly but surely coming with the growing realization of those in charge of our schemes of education that after all the great arts are worthy of consideration. —W. S. Purchon, M.A., A.R.I.B.A., in "The Western Mail."

# Enquiries Answered

### *Hipped Tiles.*

"Hipped" writes: "Owing to the exigencies of planning, the slopes of a hipped roof are as follows: hipped portion, 45°; roof pitch, 30°. The roof-covering is tiles, and it is proposed to cover the hip with a half-round ridge tile. Is this practicable, and will the differing slopes present a disagreeable appearance? Would special-made hip tiles be better?"

—A half-round ridge tile is really the only practical way of covering the hip where the intersection of unequal pitches occurs. It should not be forgotten that the tile courses will not line up on either side of the hip unless the gauge is adjusted so that they do so. This in practice would be very difficult, particularly as the flat pitch of 30° (too low for tiles) will require increased lap over what is adequate for the 45° slope. Special-made hip tiles rarely burn to the same colour as plain tiles, and often do not really fit.

G.

### *Cement Slurry.*

"Bridlington" writes: "Is there any form of cement slurry which will render waterproof the outer walls of a 9 in. brick building standing in an exposed position? The bricks are at present painted where not covered with Portland cement, the latter being of a poor quality."

—I have found either a slurry of "Super-cement" (obtained from Super-cement, Ltd., 10 Upper Woburn Place, London, W.C.) or of Portland cement and "Ironite" (latter from Ironite, Ltd., 11 Old Queen Street, Westminster, S.W.) to be completely effective in such cases, but the brickwork should, of course, be cleaned from anything likely to peel off and destroy the adhesion of the slurry. Several houses on exposed Fen sites, formerly admitting driving rain through 9 in. walls of bricks in bad mortar, after treatment last year, have apparently withstood this recent wet winter successfully.

G.

### *Architects' Fees.*

"Set Square" writes: "If an architect appointed by, and acting under the instructions of a rural or urban council, prepares designs for and supervises the erection of a number of houses under the Housing and Town Planning Act, 1919, can he, unless his contract with the council is under seal, make a claim in a court of law for his fees, such fees to be in accordance with the General Housing Memoranda in force, and exceeding £50?"

—This is rather a question for your legal adviser to deal with, after seeing your appointment; but speaking generally no contract can be legally made by a rural or urban council except under seal, and I should greatly fear that you would find yourself "non-suited" in an action.

F. S. I.

### *Book on Subsidence.*

T. writes: "Can you tell me if there is any book or information published on the subject of subsidence due to colliery workings, dealing more particularly with the effects of subsidence on buildings and their repair. I have never come across such a book, but there may perhaps be one, at any rate among the literature of the coal mining industry?"

—I do not know of any book on the subject of subsidence due to colliery workings and the effects on buildings, but numerous references to it are constantly being made in the technical journals. Possibly the Editor of "The Colliery Guardian" may know of such a book. The best safeguard is to build in reinforced concrete on an extended concrete raft. If subsidence should take place the building can then be brought level and the soil made up.

HENRY ADAMS.

### *Stability of a Church Tower and Spire.*

"Ringer" writes: "The church tower and spire shown on the accompanying sketch was built about sixty years ago, and has recently undergone restoration. The tower stands on a clay site about 500 ft. above sea level and is in a very exposed position. It is built of good common red brickwork (lime mortar) and is cased externally with pitch-faced ashlar of local soft red sandstone about 6 in. thick. Dressings are of Bath stone. The casing and brickwork are not bonded together. In the lower stages of the tower the thickening of the walls is effected by filling in behind the ashlar casing with stone and brick waste mixed with mortar. The buttresses are built of an external stone casing, as before described, with a core of filling as above only. One buttress has no substructure, but is corbelled out from the upper part of the tower above the roof of the nave.

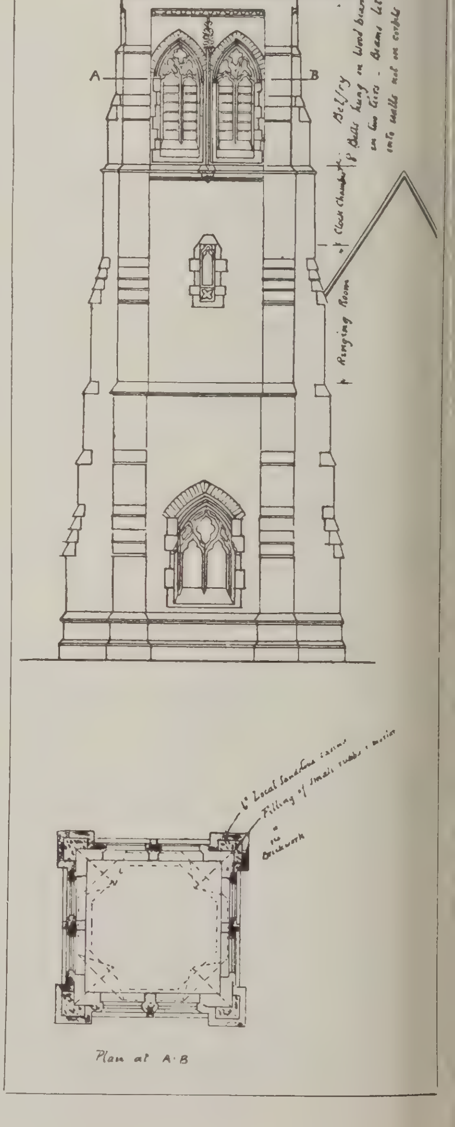
"The spire is of Bath stone, solid for 8 ft. at apex, and with walls of 6 in. thickness down to broach, where they thicken out, as shown. The square top of tower is worked off internally at the broach to the octagon of spire with arched oversailing brickwork gussets. The top of the spire is held down by a 1½ in. iron rod. This passes through and is grouted into the solid work. It is secured at the top with a gunmetal plate, and has a hook at the bottom to which is attached a succession of 1½ in. iron rods, carrying a balance stone weighing about 5 cwt. at the level of the broach.

The sandstone of the tower, which was badly perished, has been restored, mottled Hollington being inserted where new stone was necessary, and the whole has been repointed and treated with Szerelmey liquid. It has been necessary to rebuild about 15 ft. of the top of the spire, where it was found somewhat out of plumb, some of the stones being slightly displaced and others broken and badly decayed. The lower portion has been treated in the same way as the tower.

"Having regard to the construction as shown on drawing, and to the further fact that the whole of the old stonework bears signs of inferior execution, may the tower and spire be regarded as safe? If the answer to above is in the affirmative, can the peal of eight bells be rung without risk?"

—There are some objectionable featur in the details of the construction, but the repairs have been carried out judiciously the spire and tower may be considered safe for some years to come. Th balance stone, 5 cwt., appears to be ver light for 1½ in. iron rods to carry, and i might be increased if the hook, washer etc., are substantial. A 1½ in. iron ro with screwed ends will carry 5 tons safely As regards the bells no valid opinion ca be given without personal inspection The safety with a peal of eight bell depends partly upon how they are hung but if they have been used for many year and no exceptional vibration has bee noticed in the tower, there is no doub they might continue to be used.

HENRY ADAMS.


Wood floor
A
B
Belfry
8 Bells hung on Wood beams on two tiers. Beams let into walls not on corbels
Clock Chamber
Ringing Room
6" Local Sandstone casing
Filling of small rubble & mortar
& the Brickwork
Plan at A·B

# The New Housing Bill

HE new Housing Bill, the short
title of which is the Housing, etc.,
Act, 1923, has been introduced "to
nd the enactments relating to the
sing of the Working Classes (including
mendment and revocation of building
ws), Town Planning and the Acquisi-
of Small Dwellings." It consists of the
wing four parts: I—Amendments of
Housing Acts: Temporary Provisions
ncouraging the Provision of Housing
mmodation, Miscellaneous Amend-
s of the Housing Acts. II—Town
ning, etc. III—Amendments of the
l Dwellings Acquisition Acts. IV—
ral application to Scotland, Repeals
Extent. Short Title.

pended are some of the principal
es relating to the temporary pro-
n for encouraging the provision of
ing accommodation.

–(1) The Minister of Health may,
ct to such conditions as to records,
icates, audit or otherwise, as, with
approval of the Treasury, he may
mine, make or undertake to make
ibutions out of moneys provided by
ament :—

Towards any expenses incurred by
cal authority for the purposes
Part III of the Housing of the
ing Classes Act, 1890 (hereinafter
red to as the principal Act), in pro-
ng in accordance with section two of
Act the construction of houses of such
and size as is specified in this section
completed before the first day of
ber, nineteen hundred and twenty-

where the local authority satisfy the
ster that the needs of their area can
be met by the provision of houses
ly or partly by such an authority
selves, towards any expenses in-
d by the authority in making such
sion;

however, that such a contribution
not exceed the sum of six pounds for
house in respect of which the contri-
n is made, payable annually for a
d not exceeding twenty years.

The houses in respect of which con-
tions may be given under this section
be either—

A two-storied house with a minimum
hundred and twenty and a maxi-
of eight hundred and fifty super-
feet; or

a flat or a one-storied house with a
num of five hundred and fifty and a
mum of seven hundred and eighty
ficial feet.

The Minister may, with the appro-
f the Treasury, make or undertake
ke contributions out of moneys pro-
by Parliament towards the ex-
s incurred by a local authority in
ing out a re-housing scheme in con-
on with a scheme made under Part I
rt II of the principal Act (including
cquisition, clearance, and develop-
of land included in the last-men-
scheme, and whether the re-
ng will be effected on the area in-
d in that scheme or elsewhere), of
amounts, for such periods, and sub-
o such conditions as, with the ap-
l of the Treasury and after consulta-
vith the local authority, the Minister may determine, so, however, that the annual contributions in respect of any such re-housing scheme shall not exceed one-half of the estimated average annual loss likely to be incurred by the local authority in carrying out the scheme.

(4) Where within fifteen months before the passing of this Act a local authority has submitted to the Minister proposals for assisting persons or bodies of persons undertaking to construct houses, or for the provision of houses by the local authority themselves, and such proposals have been approved by the Minister otherwise than for the purposes of section seven of the Housing, Town Planning, etc., Act, 1919, contributions may be made of the like amount as if the assistance had been given or the houses provided after the passing of this Act, and notwithstanding that the houses do not comply in every respect with the conditions imposed by or under this section.

(5) References in this section to local authorities shall in any case—

(*a*) Where the powers of a local authority have been transferred to a county council; or

(*b*) where a county council, or any such board or body as is mentioned in subsection (3) of section eight of the Housing, Town Planning, etc., Act, 1919, exercises the powers conferred by that section of providing houses for persons in their employment or paid by them or by a statutory committee,

—include such county council, board, or body.

2.—(1) Local authorities for the purposes of Part III of the principal Act, may, in accordance with proposals submitted by them to the Minister and approved by him, promote the building of houses by giving or undertaking to give assistance in respect thereof in manner hereinafter provided.

(2) Before approving proposals under this section the Minister shall be satisfied—

(*a*) That the houses in respect of which assistance is proposed to be given are of the type and size specified in section one of this Act;

(*b*) that there is a need for such houses within the area of the local authority, and that such need cannot be met without assistance under this Act.

(3) Assistance under this section may be given in any of the following ways; that is to say, the local authority may—

(*a*) make grants by way of lump sum after the completion of the houses;

(*b*) undertake to refund, during such period as may be specified in the proposals, to the person by whom the rates on any house are payable, the whole or any part of the rates paid by him in respect thereof;

(*c*) undertake to provide, during such period as may be specified in the proposals, any part of the periodical sums payable by a person to a building society by way of interest on or repayment of advances made to him by the society for the purpose of building a house or purchasing a newly constructed house.

(4) A grant made by a local authority under this section in respect of a house, may be made subject to such conditions as the local authority may with the approval of the Minister impose, including a condition that during the period of five years from the payment of the grant the house shall not be used otherwise than as a separate dwelling-house and that no addition thereto or enlargement thereof shall be made without the consent of the local authority, and in the event of any breach of any condition so imposed the amount of the grant paid shall be recoverable by the local authority from the owner for the time being of the house, and shall be a charge on the premises having priority over all existing and future estates, interests, and encumbrances with the exception of quit-rents and other charges incident to tenure, tithe rentcharge and charges created by or arising under any Act of Parliament, whether public, general or local.

In this subsection "owner" has the same meaning as in the Public Health Act, 1875.

(5) A local authority may, before undertaking to give assistance under this section in respect of any house, require security to be given that the house will be completed before the said first day of October, and that the other conditions subject to which the assistance is given will be observed.

(6) The raising of money for making grants by way of lump sum under this section, shall be a purpose for which a local authority may borrow under Part III of the principal Act, and shall be a purpose for which the Public Works Loan Commissioners may lend money to a local authority.

(7) In the application of this section to the county of London the London County Council shall, to the exclusion of any other local authority, be the local authority for the purposes of Part III of the principal Act.

3.—(1) Where a society or company to which this section applies prove to the Minister that they are willing to undertake the construction of houses of such type and size and within such period as aforesaid without assistance from a local authority, if they receive from the Minister towards any expenses incurred by them in the construction of such houses the like contributions as the Minister is authorised by this Act to make towards expenses incurred by a local authority in providing such houses, the Minister may, subject to such conditions as aforesaid, make or undertake to make contributions out of moneys provided by Parliament towards such expenses of the like amount as he is authorised to make towards expenses incurred by a local authority in providing such houses.

(2) This section applies to any society or company established for the purpose of constructing, or facilitating or encouraging the construction of, dwelling-houses for the working classes which does not trade for profit or whose constitution prohibits the issue of any share or loan capital with interest or dividend exceeding the rate for the time being prescribed by the Treasury.

4. The failure to complete a house before the said first day of October shall not render invalid any undertaking to

make a contribution or give assistance in respect of the house, if the house is completed before the first day of January, nineteen hundred and twenty-six, and if the Minister is satisfied that the construction of the house was begun within a reasonable time and that the failure to complete the house before the said date was due to circumstances over which the local authority, person, or body constructing the house had no control.

5.—(1) A local authority for the purposes of Part III of the principal Act may, subject to such conditions as may be approved by the Minister, at any time before the first day of October, nineteen hundred and twenty-five :—

(*a*) advance money to persons or bodies of persons constructing or undertaking to construct houses subject to the provisions hereinafter contained ;

(*b*) undertake to guarantee the repayment to a building society of any advances made by the society to any of its members for the purpose of enabling them to build or acquire houses ;

(*c*) in the case of the conversion of a house into two or more separate and self-contained flats or tenements, undertake that, if the aggregate rateable value of the flats or tenements exceeds the rateable value of the house before conversion, they will during such period not exceeding twenty years as is specified in the undertaking refund to the person by whom the rates on any such flat or tenement are payable the whole or any part of the difference between the rates paid by him and the rates which would be payable were the rateable value of the flat or tenement reduced by such an amount that the reduced value would bear to rateable value the same proportion that the rateable value of the house before conversion bears to the aggregate rateable value of the flats or tenements.

Copies of the Bill may be obtained, price 6d. net, through any bookseller and directly from H.M. Stationery Office.

## The Prices of Building Materials

The Minister of Health announced recently in the House of Commons that in conjunction with the President of the Board of Trade he intended to set up a committee with the following terms of reference : "To be a committee to survey the prices of building materials and to receive and consider complaints in respect thereof, and to report from time to time to the Minister of Health and the President of the Board of Trade as to the facts, and, in particular, as to the extent to which in any case the price appears to be unduly high by reason of the operation of any trade combination, trust, or agreement."

The committee will be constituted as follows : Sir Halford Mackinder (chairman) ; Mr. A. V. Alexandra, M.P. (Secretary of the Parliamentary Committee of the Co-operative Congress) ; Sir Theodore Chambers, K.B.E., F.S.I. (chairman, Welwyn Garden City) ; Sir Charles T. Ruthen (Director General of Housing, Ministry of Health) ; Messrs. R. Coppock (General Secretary, National Federation of Building Trades Operatives) ; Stephen Easten (late President of National Federation of Building Trades Employers) ; E. R. Eddison (Board of Trade) ; George Hicks (President, National Federation of Building Trades Operatives) ; J. Stanley Holmes (Chairman of the Departmental Committee on the High Cost of Building Working-class Dwellings which reported in 1921) ; W. T. Lancashire (City Engineer of Leeds, President elect of the Institution of Municipal and County Engineers) ; Lieut.-Col. Cecil B. Lovita, C.B.E., M.V.O., J.P. (chairman of the Housing Committee of London County Council) ; Messrs. D. Ronald (Scottish Board of Health) and J. Walker Smith (Ministry of Health).

The secretary of the committee will be Mr. T. H. Sheepshanks, of the Ministry of Health, Whitehall, S.W.1, to whom all communications should be addressed.

## The R.I.B.A.'s Proposals for an Academic Dress

The gowns illustrated on page 715 have been suggested to the Council of the R.I.B.A. for adoption for the use of Members and Licentiates of the R.I.B.A. The Council referred the suggestion to a small Sub-Committee.

The drawings reproduced show the type of dress recommended by the Sub-Committee for the three classes of membership. The colours suggested are black and old gold, and the description in each case is as follows :—

*For Fellows.*—The silk-lined hood is attached to a cape of black silk with a narrow edging of colour, under which is worn the ordinary college gown of dull black cloth with full sleeves. The cap is the ordinary square-shaped college cap—the early form before the use of the mortar-board came in.

*For Associates.*—The hood is attached to the gown, without a cape, and its colour is carried down the front of the gown with wide bands. The gown is as before, with full sleeves.

*For Licentiates.*—Similar to the last, except that the hood is not lined throughout, but has an edging of colour, the same being carried down the front of the gown in a narrow strip.

## R.I.B.A. New Student

The following candidates, having pass satisfactorily through the architectu courses at the "recognized" scho indicated against their names, have be registered as "Students R.I.B.A." T asterisk (*) denotes students exempt from the Intermediate Examination unc the special War Concession to Prol tioners.

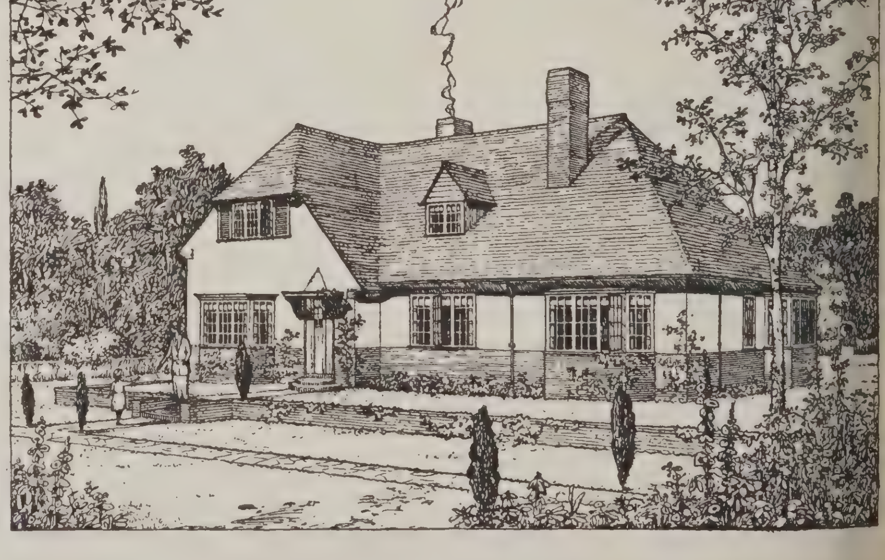
Billimoria, H. F. (Liverpool University), Liverpool.
Blackburne, S. L. (Architectural Association), London.
Brooke, D. (Liverpool University), Liverpool.
Cooper, J. B. (London University), Oxford.
Cortis, W. N. (Cambridge University), Beaconsfield.
Fry, E. M. (Liverpool University), Liverpool.
Harriss, E. R. B. (London University), Ealing.
Higham, E.H.H. (Liverpool University), Liverpool.
*Higson, C. G., Wolverhampton.
Hill, J. R. (London University), Brondesbury, N.W.
Monson, J. W. S. (Cambridge Universit Acton.
Morgan, G. L. L. (Lon University).
Pringle, G. (Cambri University), London.
Raafat, M. (Liverp University), Liverpo
Seely, H. J. A. (Cambri University), Isle Wight.
Short, C. H. (Lon University), North K sington.
*Simpson, D. J., Bristo
Turner, R. H. (Liverp University), Bridpor
Welsh, O. M. (Lon University), London.
White, A. W. (Cambri University), London.
*Williams, A. E., Sto on-Trent.
*Wiltshire, D. C., Bour mouth.

## A Correction

In our article on the Wembley Stadiu published last week we stated that t electric cooking installation was carri out in three weeks. This should rea The whole electrical installation, etc. V also stated that the electrical work w executed by the Electrical Installatio *Company*. This should read : Electri Installations *Limited*.

## "An Ideal Home"

The bungalow illustrated below w erected at the Ideal Home Exhibitio recently held at Olympia. The architec were Messrs. Douglas G. Tanner a Arthur Horsburgh, A.R.I.B.A., Birmin ham. The erection was carried out l Messrs. Y. J. Lovell and Son. The co of this bungalow is comparatively lo being a little less than £1,000. A stu is contrived in a gallery which runs alo one side of the dining-hall.



BUNGALOW RECENTLY ERECTED FOR THE IDEAL HOME EXHIBITION, OLYMPIA.
MESSRS. DOUGLAS G. TANNER AND ARTHUR HORSBURGH, A.R.I.B.A., ARCHITECTS.

# The R.I.B.A. Council Nominations

ppended is the list of members ninated by the Council to serve for 3–4. The balloting paper for the ction (to be announced on June 11) be issued a few days after the annual eral meeting on Monday, May 7.

**RST DIVISION (a).**

**PRESIDENT.**

s, Alfred William ephens, M.A. Cantab.

**ICE-PRESIDENTS.**

THCOTE, Charles Henry anchester).
cs, Sydney, F.S.A.
y, William Edward, B.A.
LES-WOOD, Herbert incan.

**ONORARY SECRETARY.**

n, Arthur.

**MEMBERS OF COUNCIL.**

WOOD, Henry John.
KE, Max.
ARD, Allan Ovenden.
N, Heaton.
ARDS, Frederick Erst Pearce (Sheffield).
KTON, Charles Burvs (Sheffield).
EST, George Topham, R.S.E.
ER, Percival Maurice.
GILL, Charles Lovett.
GOTCH, John Alfred, F.S.A. (Kettering).
HIORNS, Frederick Robert.
HUBBARD, George, F.S.A.
HUNT, William George.
JOSEPH, Delissa.
MOORE, Albert Walter.
SCOTT, William Gillbee.
SCOTT-MONCRIEFF, William Walter, M.C.
SHEPHERD, Herbert.
SOLOMON, Digby Lewis, B.Sc. London.
SWAN, James Alfred (Birmingham).
WILLS, Herbert Winkler.

**ASSOCIATE MEMBERS OF COUNCIL.**

ASHFORD, William Henry (Birmingham).
BATES, Ernest.
CULLIFORD, Leonard Arthur.
HEPWORTH, Philip Dalton.
SCOTT, John Douglas.
SEDDON, Joseph.
WELFORD, Arthur.
WOODWARD, Frank.

RECTIONS TO MEMBERS.—Additional Nomina- to the Offices respectively of President, four Vice- dents, Hon. Secretary, eighteen Members of Council, six Associate Members of Council, for the ensuing of Office, may be made by ANY SEVEN SUB- IBING MEMBERS (viz., Fellows and Associates), 1om at least FOUR must be Fellows. Each of such inations (to be made in writing) should be addressed 1e Secretary, R.I.B.A., at 9 Conduit Street, Regent t, London, W., signed by SEVEN subscribing bers as aforesaid; and it must be accompanied by tten undertaking by the nominee to serve if elected. Nominations may be forwarded at once, but E WILL BE VALID unless delivered to the Secre- before the close of the Annual General Meeting, lay, May 7, 1923.

**OND DIVISION (b).**

**AST PRESIDENTS:**

ON, John William, mbre Corr. de l'Institut de France.
RHOUSE, Paul, M.A. on, F.S.A.

**HIRD DIVISION (c and d).**

**RESENTATIVES OF IED SOCIETIES:**

, Francis (Manches- Society of Archits).
HEAD, James (Glas- Institute of Archis).
, William Thorpe, .A. (Northern Archiural Association).
AR, Charles Geddes, .A. (Scot.) (Dundee itute of Architects).
SKINNER, Willie Swinton (Bristol Society of Architects).
WILSON, Robert Gordon, Junr. (Aberdeen Society of Architects).
MUNBY, Alan Edward, M.A. Cantab. (York and East Yorkshire Architectural Society).
HARRIS, Sidney Frank (Northamptonshire Association of Architects).
MORLEY, Eric (Leeds and West Yorkshire Architectural Society).

**FOURTH DIVISION (e).**

**REPRESENTATIVE OF THE ARCHITECTURAL ASSOCIATION (LONDON):**

HALL, Edwin Stanley, M.A. Oxon.

## *of Members Nominated to Serve on the Standing Committees.*

Balloting Paper for the election of the Four Stand- ommittees (to be announced on June 11, 1923) will ued a few days after the Annual General Meeting, ay, May 7, 1923.

**STANDING COMMITTEE.**

**Fellows:**

EAD, Prof. Stanley venport, M.A. Liver- l.
Walter.
N, Heaton.
GE, William Robert.
ING, Henry Philip ke, F.S.A.
Frederick Charles, ., F.S.A.
, Thomas Francis tshire.
s, Emanuel Vincent.
s, Frederick Robert.
CHESTER, Henry ghan.
DO, Halsey Ralph.
-MONCRIEFF, Wil- Walter, M.C.
ON, Prof. Frederick re.
, Arnold Dunbar.
James Alfred.
, Maurice Everett, . Cantab., D.S.O.,

**Associates:**

BROOKS, William Edward.
BUCKNELL, Leonard Holcombe.
FAREY, Cyril Arthur.
LOVELL, Percy Wells, B.A. Cantab.
POWYS, Albert Reginald.
SEDDON, Joseph.
SOMERFORD, Thomas Retford.
TAIT, Thomas Smith.
WATERHOUSE, Michael Theodore, M.C.
WELFORD, Arthur.

**LITERATURE STANDING COMMITTEE.**

**Fellows:**

ANSELL, William Henry, M.C.
BRIGGS, Martin Shaw.
CORLETTE, Major Hubert Christian, O.B.E., R.B.C.
CRESWELL, Harry Bulkeley.
DAWSON, Matthew James.
FYFE, David Theodore.
GOTCH, John Alfred, F.S.A.
HALL, Edwin Stanley, M.A. Oxon.
MOBERLY, Arthur Hamilton, M.A. Cantab.
OLIVER, Basil.
RAMSEY, Stanley Churchill
SPOONER, Charles Sydney.
STRATTON, Arthur, F.S.A.
TAPPER, Walter.
TOWNSEND, Charles Harrison.
WARD, William Henry, M.A. Cantab., F.S.A.

**Associates:**

BRADSHAW, Harold Chalton.
COWLES-VOYSEY, Charles.
CULLIFORD, Leonard Arthur.
DRYSDALE, George.
EDWARDS, Arthur Trystan M.A. Oxon.
SAYER, Charles Edward.
SLATER, John Alan, M.A. Cantab.
WORTHINGTON, John Hubert, M.A. (Manchester).

**PRACTICE STANDING COMMITTEE.**

**Fellows:**

ASHLEY, Henry Victor.
ATKIN-BERRY, William Henry.
CLARKE, Max.
COLLARD, Allan Ovenden.
FORREST, George Topham.
FRANCK, James Ernest.
FRASER, Percival Maurice.
HUNT, William George.
JONES, Francis (Manchester).
JOSEPH, Delissa.
KEEN, Arthur.
MILBURN, Thomas Ridley (Sunderland).
MOLE, Charles Johns, M.B.E.
PERKS, Sydney, F.S.A.
SCOTT, William Gillbee.
TEATHER, Harry (Cardiff).
WHITE, William Henry.
SHEPHERD, Herbert.
SOLOMON, Digby Lewis, B.Sc. London.
SAUL, Henry Albert.

**Associates:**

COCKRILL, Gilbert Scott.
CUBITT, Horace William.
ELKINGTON, George Leonard.
HAWKINS, Percival William.
SCOTT, John Douglas.
SMITH, Charles Benjamin.
WELCH, Herbert Arthur.
WOODWARD, Charles.

**SCIENCE STANDING COMMITTEE.**

**Fellows:**

BENNETT, Thomas Penberthy.
CROMPTON, William Edward Vernon.
DIXON-SPAIN, John Edward, O.B.E.
FARROW, George Reginald.
HOOPER, Francis George Fielder.
JAGGARD, Walter Robert.
LEY, Algernon Sydney Richard.
MUNBY, Alan Edward, M.A. Cantab.
PITE, William Alfred.
SMITH, Prof. Ravenscroft Elsey.
UNWIN, Raymond.

**Associates:**

ANGEL, Robert John.
BAGENAL, Hope, D.C.M.
BURROWS, Henry William.
EMERSON, Harry Valentine Milnes.
MARKHAM, John Hatton.
SAYER, Harvey Robert.

DIRECTIONS TO MEMBERS.—Additional Nominations to the ranks respectively of ten Fellows and six Associates in the Standing Committees for Art, Literature, Practice, and Science, for the ensuing year of Office, may be made by ANY SEVEN SUBSCRIBING MEMBERS (viz., Fellows and Associates), of whom at least FOUR must be Fellows. Each of such Nominations (to be made in writing) should be addressed to The Secretary, R.I.B.A., at 9 Conduit Street, Regent Street, London, W., signed by SEVEN subscribing Members as aforesaid; and it must be accompanied by a written undertaking by the nominee to serve if elected. Such Nominations may be forwarded at once, but NONE WILL BE VALID unless delivered to the Secretary before the close of the Annual General Meeting, Monday, May 7, 1923.

Following are the nominations by the 1922 Emergency Committee and their candidates' address :—

DEAR SIR,—The action of the present Council, in promoting a Registration Bill without first securing some measure of agreement on general policy, was condemned by a large majority at a special general meeting held in January last.

The vote of the general body at that meeting was, in effect, a vote of no-confidence in the present Council and their proposals, and a position has resulted which, if it continues, must do great harm to the prestige and influence of the Royal Institute.

In asking your support for our candidature we realize that many difficulties have yet to be overcome and many conflicting interests both within and without the Institute to be reconciled.

Much progress had been made in this direction prior to the advent of the present Council, whose policy has resulted, after a year's work, in a complete deadlock. The only result has been during this period to antagonize those interests which were previously working with the Institute to secure agreement.

It cannot be too strongly impressed upon all members of the R.I.B.A. that general agreement on principles is essential before any measure of Registration can stand a chance of success, and if we are elected, we shall make every effort to secure such agreement as rapidly as possible.

But, in addition to this important question of Registration, there are many other interests vital to architects and architecture, of which the R.I.B.A. is the guardian.

The Institute has reached its premier position because it has always put these interests in the forefront and declined to permit any political issue such as Registration to obscure their importance.

This great tradition it would be our aim to uphold and, at the same time, to regain the ground lost during the past year in this matter of Registration.

We are,
Yours faithfully,

ASHLEY, Henry V.
ATKINSON, Robert.
BARNES, Harry.
BRADSHAW, H. Chalton.
BUCKLAND, Herbert T.
BURNET, John.
CAVE, Walter.
COOPER, Edwin.
CORBETTE, Hubert C.
DAWBER, E. Guy.
FLETCHER, Banister.
FLETCHER, Henry M.
FRASER, Gilbert.
GOTCH, J. A.
GREEN, W. Curtis.
KEEN, Arthur.
KEPPIE, John.
LAWRENCE, G. C.
LUTYENS, Edwin L.
NEWTON, William G.
MILBURN, Thomas R.
SCOTT, G. Gilbert.
TAPPER, Walter.
THOMAS, Brumwell.
THOMAS, Percy.
WARREN, Edward P.
WATERHOUSE, Michael.
WEBB, Maurice E.
WELCH, Herbert A.
WORTHINGTON, Hubert.

**NOMINATIONS.**

**PRESIDENT.**

GOTCH, John Alfred (Northampton).

**VICE-PRESIDENTS.**

BARNES, Major Harry.
BUCKLAND, Herbert Tudor (Birmingham).
DAWBER, Edward Guy.
GREEN, William Curtis.

**HON. SECRETARY.**

KEEN, Arthur.

**ORDINARY MEMBERS OF COUNCIL.**

ASHLEY, Henry V.
ATKINSON, Robert.
BURNET, Sir John James, A.R.A.
CAVE, Walter.
COOPER, Sir Thomas Edwin.
CORLETTE, Major Hubert Christian.
FLETCHER, Sir Banister Flight.
FLETCHER, Henry Martineau.
FRASER, Gilbert (Liverpool).
KEPPIE, John (Glasgow).
LUTYENS, Sir Edwin Landseer, R.A.
MILBURN, Thomas Ridley (Newcastle).
SCOTT, Giles Gilbert, R.A.
TAPPER, Walter.
THOMAS, Sir Alfred Brumwell.
THOMAS, Percy Edward (S. Wales).
WARREN, Edward Prioleau (Berks).
WEBB, Maurice Everett.

**ASSOCIATE MEMBERS.**

BRADSHAW, Harold Chalton.
LAWRENCE, George Churchus (Bristol).
NEWTON, William Godfrey.
WATERHOUSE, Michael Theodore.
WELCH, Herbert Arthur.
WORTHINGTON, John Hubert (Manchester).

# Architects and Clients

With the increase of public interest in architecture there is a parallel increase of interest in architects. Architecture was for a long time regarded as something that "just happened" as a result of the energies of bricklayers, stonemasons, and structural engineers. To-day, however, buildings are definitely identified with architects as creative artists, and there is a gratifying eagerness on the part of the public to discover "who did what." The readiest means of providing this information is a book of reference, such as "Who's Who in Architecture," of which a second edition is now being prepared for press. A book of this sort serves, however, a further and more important purpose—it brings architects into touch with clients; the biographical data, and lists of executed works given providing just that essential information which prospective building owners require and find so difficult to obtain. Architects who have not yet received their forms should apply at once to the Editor, Mr. Frederick Chatterton, F.R.I.B.A., "Who's Who in Architecture," The Architectural Press, 27–29 Tothill Street, Westminster, while those who already have forms are requested to fill them in and forward them on with as little delay as possible.

# Parliamentary Notes

BY OUR SPECIAL REPRESENTATIVE.

### *The £6 Subsidy.*

Mr. N. Chamberlain informed Mr. T. Thomson that he would not extend the £6 subsidy to houses other than the "non-parlour" type.

### *Building Materials.*

Replying to Captain Terrell, Mr. N. Chamberlain said that tenders received recently showed a fall of approximately 30 per cent. in the price of building materials. There were no indications at present of attempts to force up building prices.

### *Municipal Housing Schemes.*

Answering Mr. Cooper Rawson, Mr. N. Chamberlain said he was aware that a number of local authorities were proceeding with the erection of houses in anticipation of the new Housing Bill, and the fourth sub-clause of the Bill provided that local authorities would not be prejudiced as regarded the subsidy on account of having so acted. Any loss on schemes beyond the amount of the subsidy would, of course, fall on the local rates.

### *Houses Unfit for Habitation.*

Mr. N. Chamberlain informed Mr. T. Thomson that reports received from the medical officers of health of 1,665 local authorities for the year 1921, showed that 18,321 houses were reported as unfit for human habitation, and 257,686 houses were found not to be in all respects reasonably fit for habitation.

### *Housing Progress.*

Mr. N. Chamberlain, in reply to Mr. Turner, said that 159 local authorities in the West Riding of Yorkshire made returns at the end of 1919 as to the housing needs in their areas. Under the State Assisted Scheme, 18,587 houses had been erected by local authorities and public utility societies, but information was not available as to the number erected by other agencies. From the result of the Census of 1921, it appeared that the average annual increase of population between 1911 and 1921 was 13,627.

### *Westminster Hall.*

Sir J. Baird, First Commissioner of Works, informed Sir H. Brittain that Westminster Hall would be clear of scaffolding in about one month, and a further three or four weeks would be required for the repair and part renewal of the large paving slabs. The hall, therefore, should be free for opening by the end of June. He hoped that the electric lighting of the hall would be so placed as to enable visitors to appreciate the beauty of the unique oak roof.

### *Ancient Monuments.*

Sir J. Baird stated that with regard to ancient monuments among the important ruins recently taken over by his department were Norham Castle; White Castle, Monmouthshire; Spofforth Castle, Yorkshire; Ewloe Castle, Flintshire; Warkworth Castle, Northumberland; Huntley Castle, Aberdeenshire; Incholm Priory, Fife; Netley Abbey, Hampshire; Furness Abbey, Lancashire; and Grosmont Castle, Monmouthshire.

# Competition News

### *Two Important Scholarships.*

Entries are to be deposited within the next few weeks for the Scholarship for the Study of Modern Architecture Abroad, and the Victory Scholarship, two of the most important of the competitions promoted by the Society of Architects.

The Scholarship for the Study of Modern Architecture Abroad will be awarded for the first time this year, and will be tenable in the United States of America. The object of the scholarship is to encourage the study and development of modern architecture in its widest sense, by providing the holder with the opportunity and means for travel and investigation abroad. The scholarship will be offered annually for three years in succession and afterwards at such other regular intervals as may be announced. The scholarship is to the value of three hundred pounds, and the winner will be required to spend a period of not less than six months in America, and to present upon his return a report which should form an important contribution to contemporary architectural literature. Entrance is open to any British subject between the ages of twenty-five and forty years. Messrs. H. V. Lanchester, F.R.I.B.A., Arthur J. Davis, F.R.I.B.A., L. Sylvester Sullivan, A.R.I.B.A., Lieut.-Col. H. P. L. Cart de Lafontaine, and Howard M. Robertson, have been appointed to act upon the jury who will select the holder for the present year. It is anticipated that this scholarship will before long yield results of considerable value, and that it will come to be looked upon as one of the most coveted distinctions open to young British architects.

The Victory Scholarship, which was instituted by the Society of Architects several years ago, will be awarded for the third time this year. The scholarship is to the value of one hundred pounds, and carries a gold medal. The extraordinary success which has hitherto attended this competition is largely due to the soundness of the lines on which it is conducted, and which are derived from those generally in use at the Ecole des Beaux Arts in Paris. Ten final competitors are selected from a large number of candidates, who are required to prepare a sketch design, the subject of which is only disclosed at the last minute, at a twelve hours *en logo* sitting. Last year close upon sixty entries were received, and the gold medal went to Mr. H. St. John Harrison for an unusually interesting design for an Olympic Stadium. The entire collection of drawings was subsequently exhibited at Cambridge, Sheffield, Manchester, Leeds, Liverpool, Glasgow, Edinburgh, and Bristol, where they attracted considerable attention.

Entry forms for both scholarships may be obtained from the Secretary of the Society of Architects, 28 Bedford Square, London, W.C.1. The closing date for the Scholarship for the Study of Modern Architecture Abroad is May 15, and that of the Victory Scholarship May 18.

### *Tunbridge Wells Pavilion Competition.*

The R.I.B.A. have issued the following notice: "The Competitions Committee desire to call the attention of Members and Licentiates to the fact that the Conditions of the above Competition are not in accordance with the Regulations of the R.I.B.A. The Competitions Committee are in negotiation with the promoters in the hope of securing an amendment. In the meantime Members and Licentiates are advised to take no part in the Competition." A notice to the same effect has been issued by the Society of Architects to their members.

# List of Competitions Open

| Date of Delivery. | COMPETITION. |
|---|---|
| June 1 | New Municipal Buildings and Town Hall, Cork. Total cost not to exceed £120,000 Assessor Mr. Lucius O'Callaghan F.R.I.A.I., A.R.H.A. The successful competitor will be appointed to carry out the work. Second and third premiums £200 and £100 respectively. Apply Mr William Hegarty, Town Clerk, Cork. The competition is limited to architects living and practising in Ireland. |
| June 12 | Concert Pavilion, Bournemouth, to seat 2,000. Estimated cost £100,000. Assessor, Sir Edwin Cooper, F.R.I.B.A. Premiums: £300, £200, and £100. Apply Town Clerk, Municipal Offices, Bournemouth. Deposit £2 2s (cheque). |
| June 30 | Bridge over Nygaardsstrommen in Bergen. Apply Department of Overseas Trade (Room 50), 35 Old Queen Street, Westminster, S.W. 1. |
| June 30 | National War Memorial at Melbourne to cost £250,000. Competition, in two stages, open to Australians, not necessarily residing in Australia, and British subjects resident in the Commonwealth. Preliminary designs to the Right Hon. the Lord Mayor of Melbourne, Chairman of the Executive Committee, Town Hall, Melbourne, Australia, by June 30. Apply Agent-General in London, Victoria House, Melbourne Place, Strand. Deposit £2 2s. |
| July 3 | Pavilion in Calverley Gardens, Tunbridge Wells. Assessor Mr. E. Guy Dawber, F.S.A., F.R.I.B.A Premiums £150, £100, and £50. Apply Town Clerk. |
| No date | The Crown Agents for the Colonies, acting on behalf of the Government of the Straits Settlements, invite competitive designs for the reinforced concrete work required in connection with the construction of a new general post office at Singapore. Tentative designs, for which no fees will be paid, are required in the first instance, from which it is proposed to select a design and specify its adoption in the contract for the construction of the building. The firm whose design is so adopted will be subsequently engaged to prepare full detail plans, specification, quantities, &c., for an approved fee. Drawings can be seen and further details of the competition obtained from the Crown Agents for the Colonies, 4 Millbank, Westminster, S.W. 1, quoting Z/Straits Settlements 5664. |
| No date | Five shops for the Prestwich Co-operative and Industrial Society. Premium 75 guineas. Apply General Manager of the Society, Warwick Street, Bury New Road. Prestwich, Lancs. |
| No date | The Crown Agents for the Colonies invite Architects in Britain and the British Dominions to submit designs for the new Raffles College, to be erected at Singapore as the Singapore Centenary Memorial. Premiums: £300, £200, and £100. Mr. John Begg, F.R.I.B.A., late Consulting Architect to the Government of India, has been appointed Assessor. Apply Crown Agents for the Colonies, 4 Millbank, London, S.W. 1. Deposit £2 2s. |

# Joseph Nollekens

Monday was the centenary of the death of Joseph Nollekens, R.A., the last of the old school of English sculptors, who passed away on April 23, 1823.

Nollekens is chiefly known as a maker of busts. As Dr. Johnson said, Nolly could "chop out a head with any of them." But his later works in that field are deplorable.

Seventy-seven monuments can be ascribed to Nollekens, and it is in these that he shows himself in the true line of descent and takes his place among the greater English sculptors.

nesday, May 2, 1923 Vol. LVII. No. 1478

# THE ARCHITECTS' JOURNAL & Architectural Engineer

With which is incorporated "The Builders' Journal."

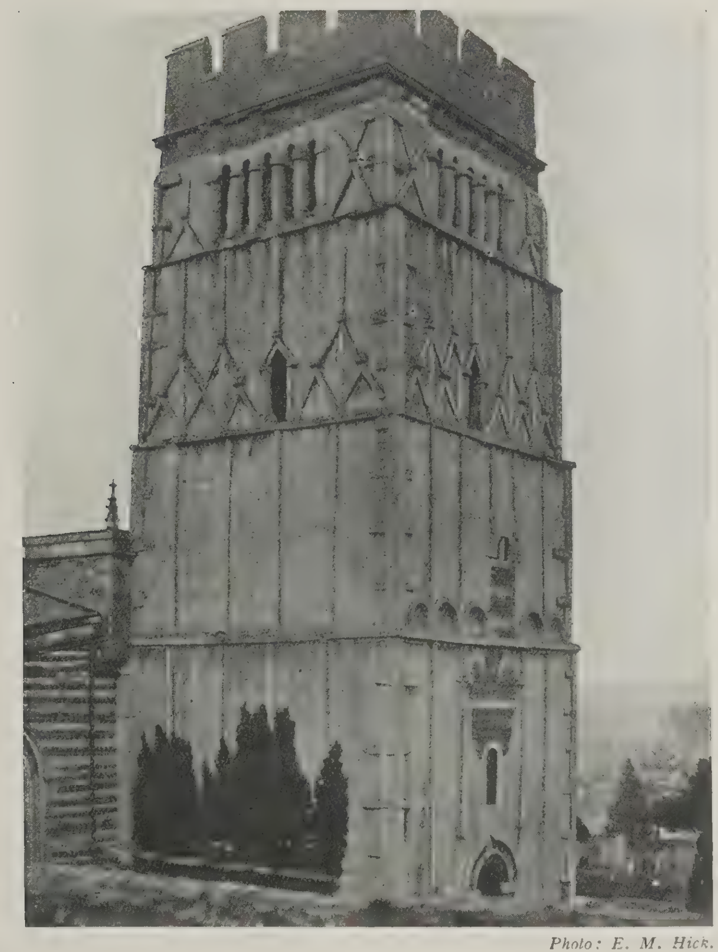


Photo: E. M. Hick.

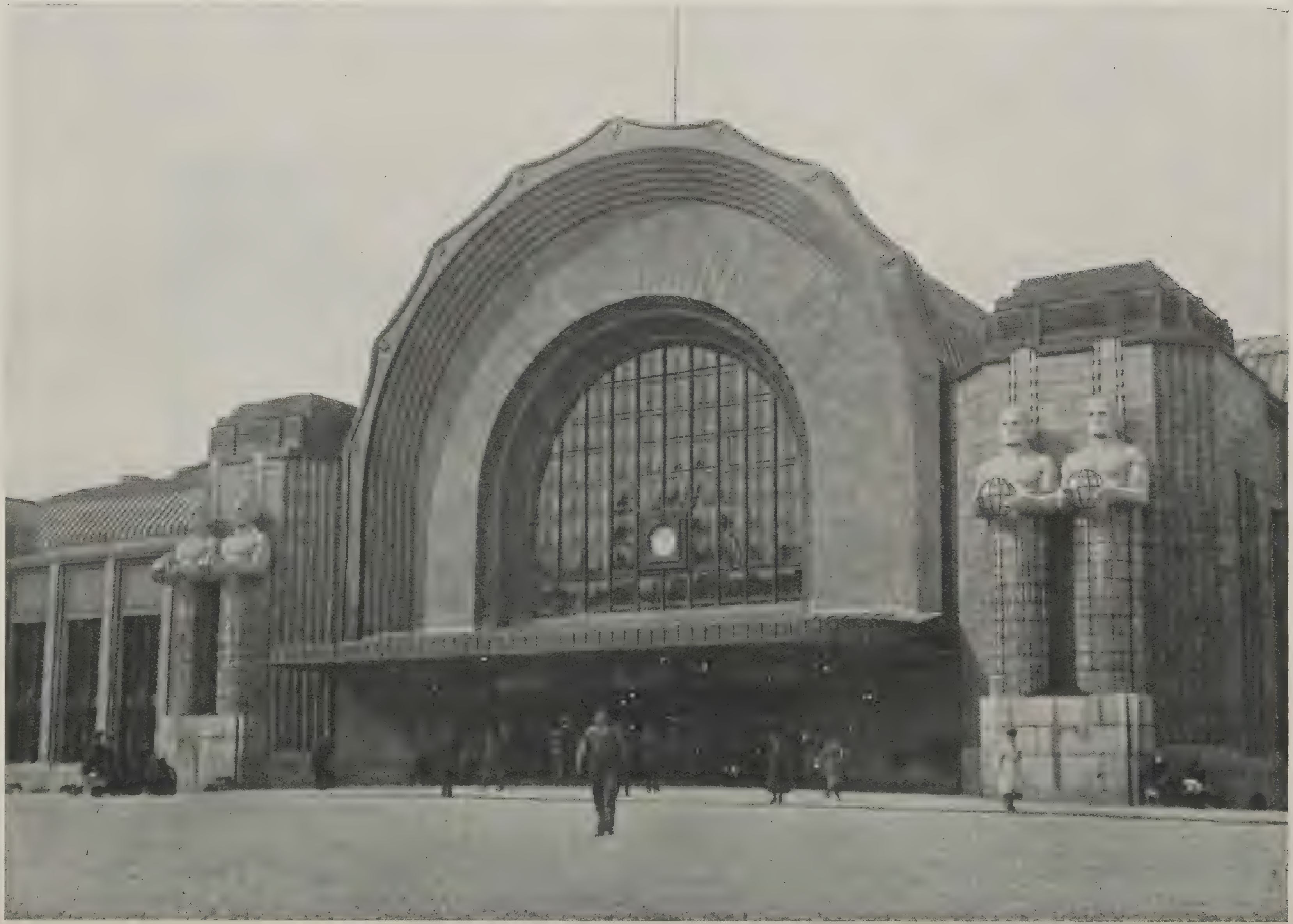
EARL'S BARTON CHURCH, NORTHANTS: THE TOWER.

This tower, roughly 24 ft. square and 68 ft. high, is possibly the most "architectural" piece of pre-Norman work in the country.

27-29 Tothill Street, Westminster, S.W.1.

# Current Architecture. 174.—The Station Entrance, Helsingfors

Gesellius, Lindgren & Saarinen, Architects



The Station Building, Helsingfors, is situated at one end of an immense Place, so that it is possible to view the whole composition from a suitable standpoint.

THE

ARCHITECTS' JOURNAL

27-29 Tothill Street, Westminster, S.W.1.

ednesday, May 2, 1923 Volume LVII. No. 1478

# The R.I.B.A. Elections

THE culmination of the dissension which has for some time been apparent in the R.I.B.A. is the issue by the 1922 Emergency Committee of a separate list of nominations for the 1923–4 Council. It is obvious, therefore, that the forthcoming elections will be fought more or less on party lines. That a learned and distinguished body such as the R.I.B.A. should be riven by internal political dissension is to be deplored; all those who have the best interests of the Institute at heart will wish that the conflict had been avoided. Yet the facts must be faced. The existing position is entirely the responsibility of the present Council, who initiated the policy of propaganda and the circularization of members at the last elections. If the 1922 Emergency Committee have to employ similar methods, it is certainly not their fault.

Since all who have any regard for the welfare of the Institute will have to take thought as to the issues involved, we venture to offer a brief survey of the position as it presents itself at the moment.

In our issue for April 18 we published a letter from Professor Adshead, in which he advised members to "make their own selection and not base it upon any particular issue," and vote accordingly. Professor Adshead's advice might, under normal conditions, be followed; but, unfortunately, conditions are not normal, owing to the existence of what is styled the "Defence League," which claims to protect the members of the Institute from any attempt to obtain a measure of unification before registration has been first obtained. This "Defence League" achieved two things: first, it succeeded in stifling discussion upon the recommendations of the "Unification Committee," and, secondly, by a carefully organized election campaign, ousted practically the whole of the Vice-Presidents and Council who had been sitting during the 1921–22 Session, and elected a Council pledged to "Registration" without first attempting "Unification." This policy was condemned at a Special General Meeting, held on January 29, by a two-thirds majority.

It is common knowledge that the business of the Council has been conducted on purely party lines during the present session, and the culminating effort of the Council has been to confine its nominations for the new Council to those only who are declared supporters of a procedure which has been condemned by the general body of the Institute. There is unfortunately little doubt but that the whole machinery of the "Defence League" will be brought into action to secure the election of the candidates nominated under its ægis. It is on this account that we suggest the impossibility of voting in the manner proposed by Professor Adshead.

The Emergency Committee's list of nominations consists of distinguished architects in London and the provinces, who, we feel, may safely be trusted to deal with the many problems of importance which come before the Council—not from a party point of view, but in the best interests of a great profession.

It is a matter for regret that it has proved necessary to resort to party tactics to secure the election of such a Council; but party tactics are obviously unavoidable if the election campaign of the present Council is to be conducted on party lines.

At the present moment all is not well with the Institute. If it is to regain health and strength and add to its prestige, dissensions within its own ranks must cease; and a sure means to this end is to secure the election of a strong, representative Council. We believe this will be achieved by the election of the men nominated by the Emergency Committee. We cannot imagine any man better qualified by attainment and long service in the councils of the Institute to act as President than Mr. J. A. Gotch, F.S.A., and we understand his nomination was warmly approved by the London men when the provincial Presidents urged that the time had come when this honour should fall to a provincial man. Mr. Cross, the Council's nominee for Presidential office, has served the Institute nobly in the past, and he is clearly and rightly in the direct line for the Presidential chair. That the vagaries of the political situation should find him temporarily in what we cannot but regard as an unhappy position, is a matter for unqualified regret. It is our sincere hope that when dissension has finally died out—may it be as quickly as possible—Mr. Cross may enjoy the reward to which his distinguished services justly entitle him.

We are told that during the past few years the provincial Presidents of the allied Societies have been taking an ever-increasing part in the work of the Council, and it is in recognition of this fact that one of the Vice-Presidents nominated is from the provinces, and that there are nine provincial nominations for Members and two for Associates. Having regard to the large number of provincial Members and Associates in the Institute, the proposed representation is in a more just proportion than has hitherto been the case. If the body of voters in the provinces is really concerned to secure the election of these representatives, it behoves them to see that they send in their voting papers. We believe that records show that less than 50 per cent. of the general body take the trouble to vote; it is to be hoped that the present differences of opinion will stimulate members to rise to the occasion and show that they really have the interests of their Institute at heart.

Balloting papers will be issued a few days after the Annual General Meeting on Monday, May 7. Between now and then the thoughts of members, whether for good or ill, will be largely pre-occupied with professional politics. The columns of this JOURNAL are open for free and full discussion, and we shall welcome any correspondence on the subject, no matter what opinions it may advance or what side it may support.

# Notes and Comments

## Bush House and its Critics

A GOOD deal of incompetent criticism has lately appeared in the Press in connection with Bush House. Some of it is incompetent through ignorance of architecture in the abstract, some through ignorance of the form which Bush House is ultimately to take. Both groups of critics do harm—the first by entirely misleading the public as to what architecture is, the second by basing its criticisms on a misconception. With the critics who revile "cliff-like walls" and desire the perpetuation of London's motley disorder and meanness of aspect, everybody with any imagination will find himself in disagreement; while those critics who do not know that Bush House is at present incomplete, and therefore not yet to be judged as an architectural composition, should at least take the trouble to find out the facts before they put damaging remarks on paper. For their information we should like to point out (what we are sure is already perfectly well known to architects) that what is at present to be seen of Bush House constitutes merely the central block; that immense wings, designed to act as a foil to the great arch facing Kingsway, have to be added on both sides; and that a great tower is meant to crown the receding stages which at present terminate the building. Not until all these parts are added will it be possible to judge the building as an architectural composition. For our own part, judging by what is at present built, we feel that the building promises extremely well. Messrs. Helmle and Corbett are to be congratulated upon the big way in which they have handled a very difficult problem; also upon the cleverness they have displayed in the design of the south front which, in spite of its immensity, forms a perfect background to Gibbs's delicate little church of St. Mary-le-Strand.

## The Site of the "Globe"

The controversy about the site of the Globe Theatre, on Bankside, is carried a step further (perhaps ended) in a monograph by Mr. George Hubbard, F.S.A., which, appropriately enough, in view of the First Folio Celebrations, has just been issued by the Syndics of the Cambridge University Press (price 7s. 6d. net). The main point at issue is whether the Globe stood on the north or the south side of Maiden Lane. Most of those who had examined the evidence were inclined to the view that it stood on the site of Barclay and Perkins's Brewery—that is, on the south side—until Professor Wallace discovered the lawsuit between Thomasina Ostler and her father, John Hemynges, who, of course, was co-editor with Henry Condell of the 1623 folio of Shakespeare's works. This lawsuit revealed the fact that the Globe must have stood on the north side of Maiden Lane—that is, much closer to Bankside. A long discussion ensued between the contending parties, the advocates of the brewery site arguing that the plan used in the lawsuit was wrongly orientated and had to be turned upside down. To clinch the matter, the Shakespeare Reading Society, in 1913, affixed a bronze tablet to the brewery wall, affirming that here was the site of the Globe Theatre. Mr. George Hubbard, who had made a close and careful study of the problem and had come to the conclusion that the Globe must have stood about 250 ft. to the north-east of the spot indicated by the tablet and on the *north* side of Maiden Lane, at once protested, but without effect. He did so again in 1921, whereupon the London County Council issued a pamphlet by Mr. W. W. Braines, confirming the brewery site, where the tablet still is. Mr. Hubbard has now set out the story of his investigations in book form, giving with it a series of plates, being reproductions of views of the Bankside area by artists contemporary with the Globe Theatre. Mr. Hubbard makes out a very strong case for his site. We have no space in which to follow his arguments, which are based entirely upon documentary and pictorial evidence, but there can be no doubt that his opponents will be hard put to it to upset them. The point, of course, is mainly one of antiquarian interest. Since the theatre has been gone nearly three hundred years and its site is now covered by warehouses there is little profit in knowing the exact spot whereon it stood. But if a memorial is erected on a wrong spot, as Mr. Hubbard contends, at least the fact should be known and the error corrected.

## Houses and Lay-outs

The Press outcry against the limited dimensions of houses to be provided under the new Housing Bill—dimensions that virtually exclude the parlour-type of house—has been all to the good; but it is a pity that attention has not been more forcibly directed to an equally, if not more, important aspect of the matter, that is, the lay-out of the houses on the site and the number to the acre. The advantages of the "open" as against the "dense" method of development are too well known to need recapitulation here. The improved standard of lay-out that was secured as a result of post-war housing enthusiasm must not be abandoned now that purses are tighter and spirits none too buoyant. The health of the race demands that we should maintain the new standard, even if it means increased expense; though on this point it is well to remember that, on the evidence of the Ministry of Health, open development can be as economically carried out as the crowded method of the primitive past.

## Public Decorations

The Royal Wedding of last week provided further proof of the incapacity of our civic authorities for street decoration. Once again we saw the familiar scaffold poles and festoons which have so often done service in the past. True, in some cases the scaffold poles were enclosed in square casing for about two-thirds of their height, but the projecting length of pole, with its crown stuck on top, here and there with rather rakish effect, did not add anything of dignity to the ensemble. No inconsiderable sum must have been spent upon the decorations in the vicinity of the Abbey. For a like sum it would have been possible to engage architectural advice and to provide a decorative scheme that would have done justice to the occasion. Our civic authorities have yet to learn that a good effect can be achieved at no more cost than a bad one. Public decorations may be a very small part of the national life but it is the small things that affect the judgment o foreign visitors, in whose eyes the recent decorations have done nothing to enhance our artistic reputation.

## The New Architect A.R.A.

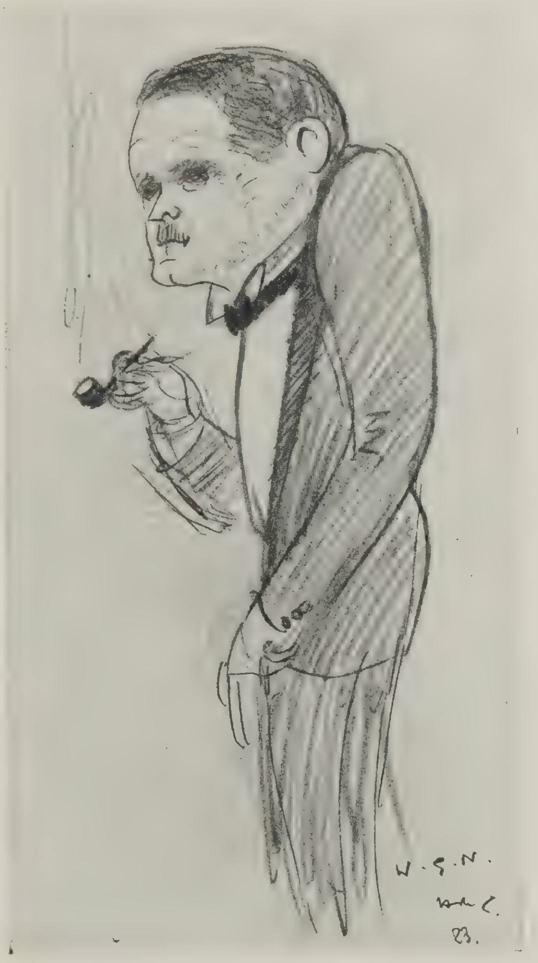
Mr. W. Curtis Green is to be heartily congratulated on hi election as an Associate of the Royal Academy. Mr. Curti Green has much scholarly architectural work to his credit and, unlike many of his contemporaries, he has no specialized in any particular class of building; he is a happy in domestic design as in the monumental manner We have only to look at the Wolseley Building, which ha just received the distinction of being selected as the "Bes Building of the Year," to appreciate his quality in th design of street façades, and his little building recentl completed in Duke Street shows him to be equally successfu with small-scale work. Mr. Green was trained in the offic of the late Mr. John Belcher, R.A., and has been in practic for some fifteen or twenty years. One-time President o the Architectural Association, he is now Chairman of th Board of Architectural Education.

# Theories: Classical and Romantic

## Mr. W. G. NEWTON at the R.I.B.A.

MR. W. G. NEWTON, M.C., A.R.I.B.A., in reading a paper on "Theories: Classical and Romantic," at the R.I.B.A., said: The title first suggested for my paper was "The Literature of Architecture"; but when I came to consider the matter more closely and to reflect that there are 20,000 books in the library of this Institute, and that if they were placed end to end they would reach from here to the Bethlem Hospital (but not back again), this began to seem too vast, and, I may add, too dangerous a quest. It seemed better, if I may reverse the old examination story, not to attempt the whole list of the Kings of Israel and Judah, but rather to spend a little time in considering the views and the worth of the various major and minor prophets.

Writings on architecture divide themselves naturally into descriptions of the past, which are history, and research treatises on the present, which are the manuals of all kinds on subjects as far apart as drainage and theatre design; and those works which, based on the past and the present, peer into the future, the works which try to arrive at principles, at a philosophy of architecture. "To forget the past," writes Mr. Lethaby in this context, "would be as foolish as to ignore the future. Behind is custom, as in front is adventure."



MR. W. G. NEWTON.
*(From a Caricature by H. de C.)*

When we think of these latter works we think naturally of those great tomes which adorned particularly the eighteenth century in our own country, when we are first of all told how "the ancients" did all these things; then from their practice certain first principles are deduced and a large part of the book is normally filled with a number of "little things of my own"—a scheme based on the model of Palladio, who is moved to great enthusiasm when he reminds himself of all the delightful buildings he has designed for so many distinguished people.

The large pages which the engraved plates demanded had a serious effect on literary style—an effect that has lasted on to our own day. The writers seem often overwhelmed by the largeness of the superficial area to be covered, and lose themselves in a very wilderness of polysyllabic nonsense, of which perhaps Inwood's work on the Erechtheum is as good an example as any. Or Chambers will say, "The architect's aim is to erect salubrious edifices" instead of "to build healthy buildings." We have this kind of thing still with us.

There is, I think, no little danger in all this polysyllabic vagueness. It is worth our while now and then to pause, as a profession, and consider where we are going and what we are aiming at. We run from committee to sub-committee and from meeting to meeting, and have too little time for thought and for the exercise of that pondered skill which is, after all, our main title to consideration. In the midst of all this hurry and obvious "business" we suffer from muddled ideas, muddled phrases, and muddled standards of judgment. Nor are we alone in this.

Our muddled phrases are a study in themselves. Take, for an example, the word "classical." This should mean, surely, "of or belonging to a standard." Mediæval architecture was classical for Sir Gilbert Scott, and the appeal of Roman architecture to the architects of the Italian Renaissance was all through less classical than romantic—less, that is, a reference to a standard of past achievement than a continual inspiration from a past of which they considered themselves the heirs, and with few or no restrictive covenants in the will.

This, perhaps, is not a very important point; but at the back of our confusion of thought is our equal confusion of phrase. And phrases are everywhere with us, doing duty for thought. They are scattered about our critical writings, "constructional, function, scholarly, sumptuous, architectonic" (that loud-sounding substitute for the simpler word "architectural"), and, in the colder jargon of the atelier, "solution of programme."

What we are groping after is a standard of judgment by which we can judge the works that are now being done, and which will colour our own mental processes in the travail of design. I may say that I do not think we shall find it. The whole subject is subtle, complicated, and elusive. But if in the course of our enquiry the ground is cleared a little from the mass of debris and the path a little opened for further research, the time will not have been spent in vain.

I am very much indebted in the next part of my paper to Mr. Geoffrey Scott's "Architecture of Humanism," certainly the most pregnant and closely reasoned examination of architectural theory that I have read. I would also venture to remind you of Mr. Lionel Budden's analysis of Croce's æsthetic with his own contribution to theory as a development of it. Anything that I have said about muddled phraseology certainly does not apply to this essay, which was recently awarded the Institute medal. It is a model of pleading in the Court of Chancery.

Mr. Newton then gave a résumé of Mr. Scott's handling of the five great fallacies—the Romantic, the Mechanical, the Ethical, the Biological, and the Academic—with a few comments of his own.

Romanticism, he said, was defined by Scott as a high development of sensibility towards the remote as such. It idealized the distant and identified beauty with what was unfamiliar. On certain conditions the romantic could express itself through the concrete arts. These conditions were: (1) There must be no fundamental incongruity between the forms suggested by the romantic impulses and those current; (2) the romantic impulse must come at a time when the art of form was vigorous enough for assimilation; and (3) the technique and organization required by the new ideal should be nearly identical with those of the existing forms of art. From romanticism unabsorbed arose the fallacy of regarding architecture as symbolic.

According to the mechanical fallacy, only by being intensely real could we get back wonder into building once more; there was no beauty other than as the sum of certain obviously desirable qualities, such as durability and masterly construction; and it was absurd for an architect to study cathedrals; he should give the time to steel and concrete construction. But this "assimilating all that's sweet to a clean house in a clean street" seems a somewhat frigid creed; though, perhaps, in our own little day it is all one can aspire to. It was not, however, for these meagre tasks that Peruzzi laboured and Wren gave a life of unremitting toil.

The ethical fallacy was the judging of a building by the supposed character of those who designed and built it. This is discredited and out of fashion nowadays.

As to the biological fallacy, it was hardly to be expected that architectural criticism should escape the evolutionary theory. "Growth, maturity, decadence," have become the key to unlock all mysteries, alike of history and of art. But however convenient as a *schema* for arranging the happenings of the past, this formula could be of no value as an instrument of criticism. For it was interested primarily in sequence as such. It would criticize a man's work by reference to his successors. But the values of art do not lie in the sequence but in the individual terms. The successful moments of an art are self-justified and self-complete. To estimate one by reference to another is a dangerous method of criticism.

The academic fallacy is that which set up a standard by which all things were to be judged. This was the universal attitude in our own country in the eighteenth century: "It is not to be supposed," wrote Chambers, "that the first restorers of the ancient manner of building could at once bring it to a degree of purity incapable of further improvement." And again: "The antique is to the architect what nature is to the painter or sculptor, the source from which his chief knowledge must be checked, the model upon which his taste must be founded." We are less assured than our ancestors as to the source of our inspiration, but our critics are still ready to use such words as "pure," "scholarly," and "academic." Academic tradition is fruitful when allied to a living sense of art, but academic theory is at all times barren.

We have found that architecture neither speaks nor can be judged by the language of romanticism, and yet that overtones of association cannot be excluded. We have seen that its structural facts are not the all-in-all of its appeal, and yet to ignore the opportunity for emphasis which those facts afford is to deprive ourselves of a very potent weapon. We have seen that while architecture cannot be judged by moral standards, because that involves a confusion of thought, yet it must not be emptied of moral content, or walled away from the whole life of man. We have seen that while it may only be misleading to classify, it is impossible to appraise architecture by evolutionary standards. And we have seen, lastly, that, though we cannot put architecture to the inquisition of an unyielding creed, nevertheless a creed may be valuable as an inspiration.

The problem of architectural form to-day is peculiarly to the fore. Russia, in the recurring revolt against forms which are identified with a discredited past, is trying out of her consciousness to evolve an architecture which shall bear no relation to anything man has hitherto made, but shall somehow sum up the triumph of the idea of an electrically driven proletariat state. Holland is discontented with old shapes and playing with her bricks in all manner of ways. Germany, on paper at least, is experimenting with a new manner, where the function of the building is underlined by the shape, which is further to be conditioned by an unfettered use of the newer materials, steel, concrete, an glass. Of these new modes of expression there are yet to few examples for adequate criticism. But at the back o them all seems to be a certain hysteria—a hysteria fron which, anyhow in theory, we are not ourselves free—o self-consciously striving to be "of to-day." With ourselve it takes perhaps more generally the view that we mus not mislead posterity. With those other nations it is mor a desire to make a clean sweep after the war. But posterit can take care of its own antiquarianism. We can never b other than ourselves, and always recognizable, so far as i necessary. And is the world so very different that w need a complete re-orientation ?

I am sure it is now all to the good that we should con centrate both in teaching and in practice on what w might call the general conception, the primary solution o the programme. Here there is a reasonable foothold, an canons of criticism can gradually be established; but alway in our judgments we must be alert to appreciate the *whol* of the programme, the "besoins moraux," as well as th "materials," the low voices of sentiment or tradition n less, in their due measure, than the clarion calls of axis an mass. On these lines we may prosper; but all the time w shall acknowledge that the distinction between conceptio and dress is conventional. We may adopt it for convenienc of thought and even for convenience of practice. But a the time we may be sure that we are falling short of ou aim until we find the two fusing in our minds, until we ca begin our solutions, not only in terms of mass and shado and line, but in terms of mass clothed in material of textu and colour, in terms of line definitely contoured.

Professor A. M. Hind, Slade Professor at Oxford, i proposing a vote of thanks, expressed his sympathy wit Mr. Newton as to enormous bulk of literature on ar In a sense it was better to see a work of art than t go into analysis. There was too much analysis. Th painter, perhaps, was more concerned with the romanti in architecture than the architect. He expressed h gratitude to the Institute's Board of Education for th interest it had taken in the proposals for the study of arch tecture at Oxford. He thought that Mr. Newton shoul inaugurate that study. Mr. S. D. Kitson, M.A., F.R.I.B.A seconded the vote of thanks. The paper, he said, was fu of interest.

Lord Justice Warrington, in referring to the fallacy structure, said that to the ordinary layman architectur structure had an important bearing. One saw at on whether the material in which the building was built w of the right kind, whether the building was suited to i locality, and whether it served the purpose for which it w required. He referred to the eighteenth-century houses Berkshire and those of the merchants of that centu in the East End of London. Constructed as a home thought that there were no houses like those of the eig teenth century.

A letter was read by Mr. Ian MacAlister from Profess Baldwin Browne, of Edinburgh University, who regrett his inability to be present and hoped the paper would recei good discussion.

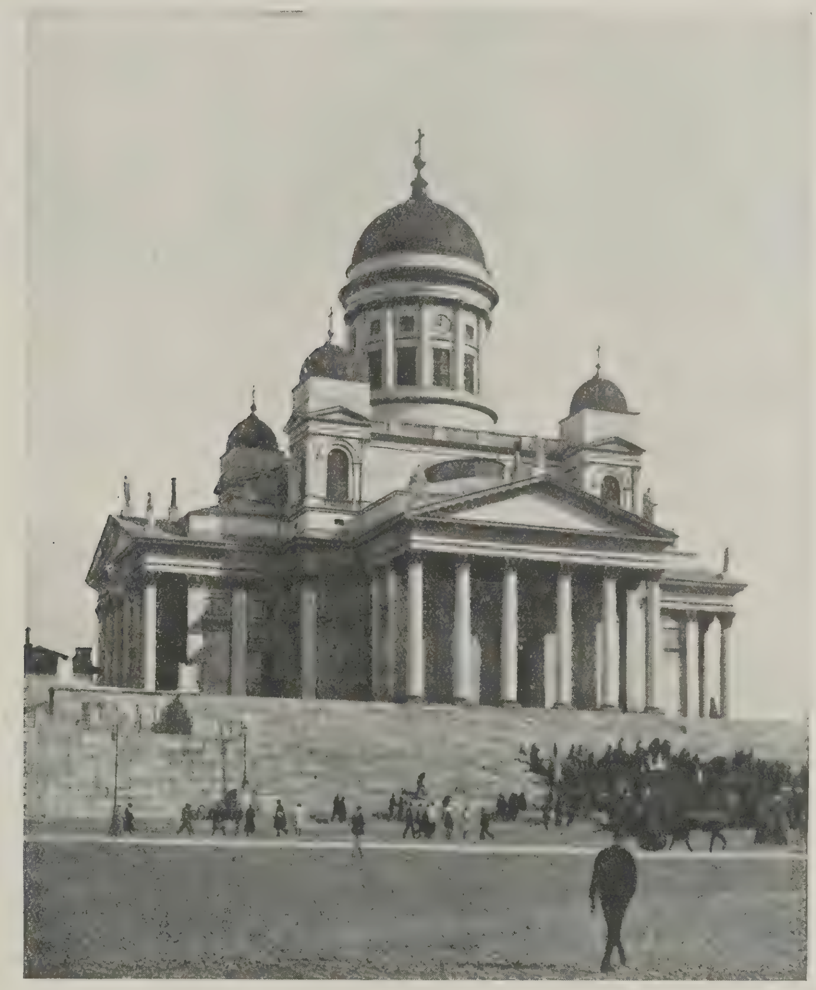
Mr. F. R. Hiorns, F.R.I.B.A., referred to the value a importance of the study of traditional styles of art. was a little surprised that Mr. Newton had seemed to sugge that to-day they should develop a style of their own. Whi it was necessary to have a complete knowledge of works the past, Mr. Hiorns thought this knowledge should be us unconsciously in application to their own work. A buil ing should be designed suitably to its purpose only, in co formity with its setting and from the standpoint of presen day requirements. Mr. A. S. G. Butler, A.R.I.B.A., also spok

The president said there was a great deal he would li to say with regard to the paper, but he would "have out" with Mr. Newton over a pipe of tobacco. He express his pleasure as an old Balliol man at the kind way in whi Oxford had received the suggestions of the Institute wi regard to the study of architecture in that city.

# Architecture in Finland: The Growth of a National Style

### By A. R. FAIRBAIRN

FINLAND as an independent country owes its birth to the world-war, but Finnish nationality has a long history. It will be surprising to those who have some hazy idea about Finland as a part of the former Russian Empire to learn that the Finns have always considered themselves as an outpost of Western culture against Slavonic art, ideas and customs. This is a justifiable claim, and it is all the more surprising when we remember that the Finns were, in remote history, of Mongolian origin, having now features of a distinct Mongolian cast; but, more importantly, they have a language entirely different in structure from most European, *i.e.* Aryan, languages.



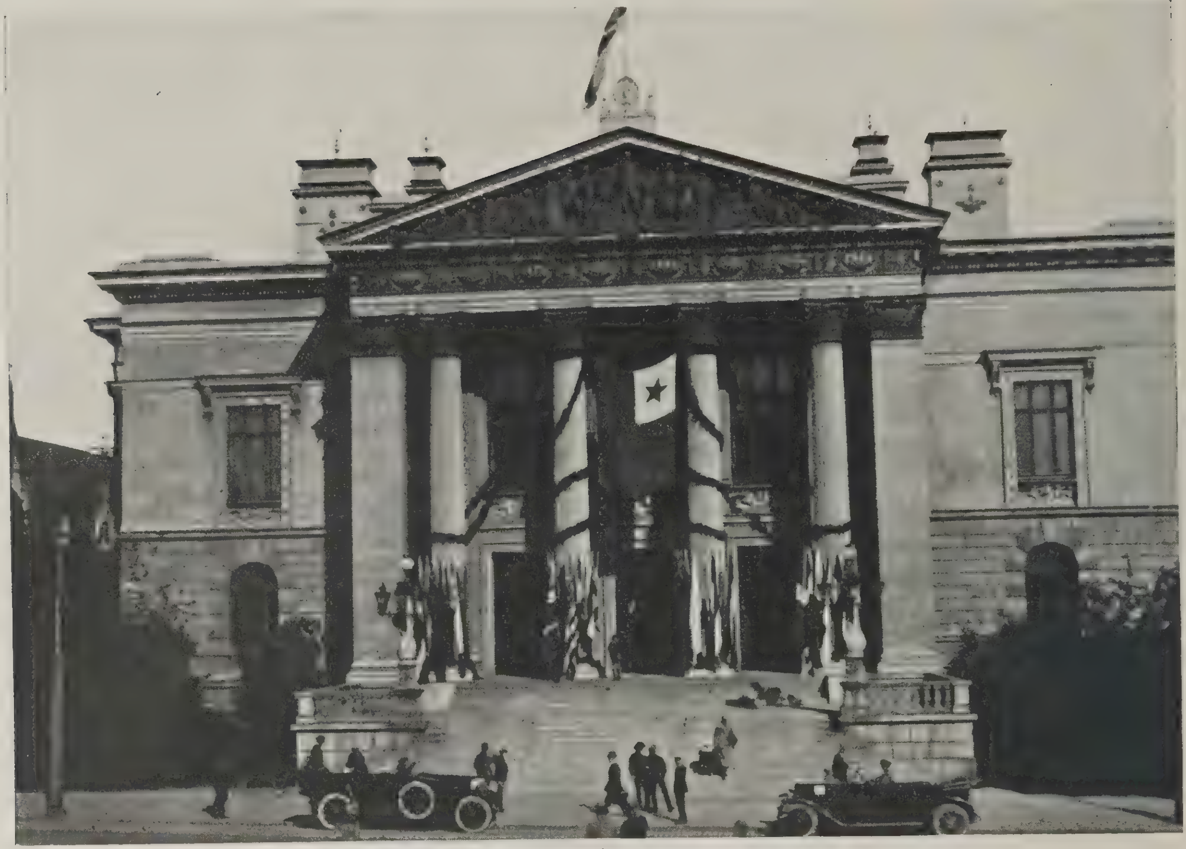
THE CATHEDRAL OF ST. NICHOLAS, HELSINGFORS.
J. C. L. ENGEL, ARCHITECT.

The last quarter of a century has seen a development of rchitecture in Finland which is truly native, decidedly igorous, and entirely expressive of their jealously cultivated ational sentiment. To understand its origin it is necessary o look briefly at the recent history of the country. At he beginning of the nineteenth century Finland passed rom the possession of Sweden to that of Russia. This hange gave an impetus to the desire for national freedom, nd every disappointment of their hopes, as well as the cts of absolute political suppression which occurred during he Russian regime, merely strengthened the feeling of ational entity. But the Finns are a patient, industrious eople, and instead of turning to political revolution they tilized the intellectual impulses of the nineteenth century to cultivate among themselves their Finnish poetry, art, music, and architecture.

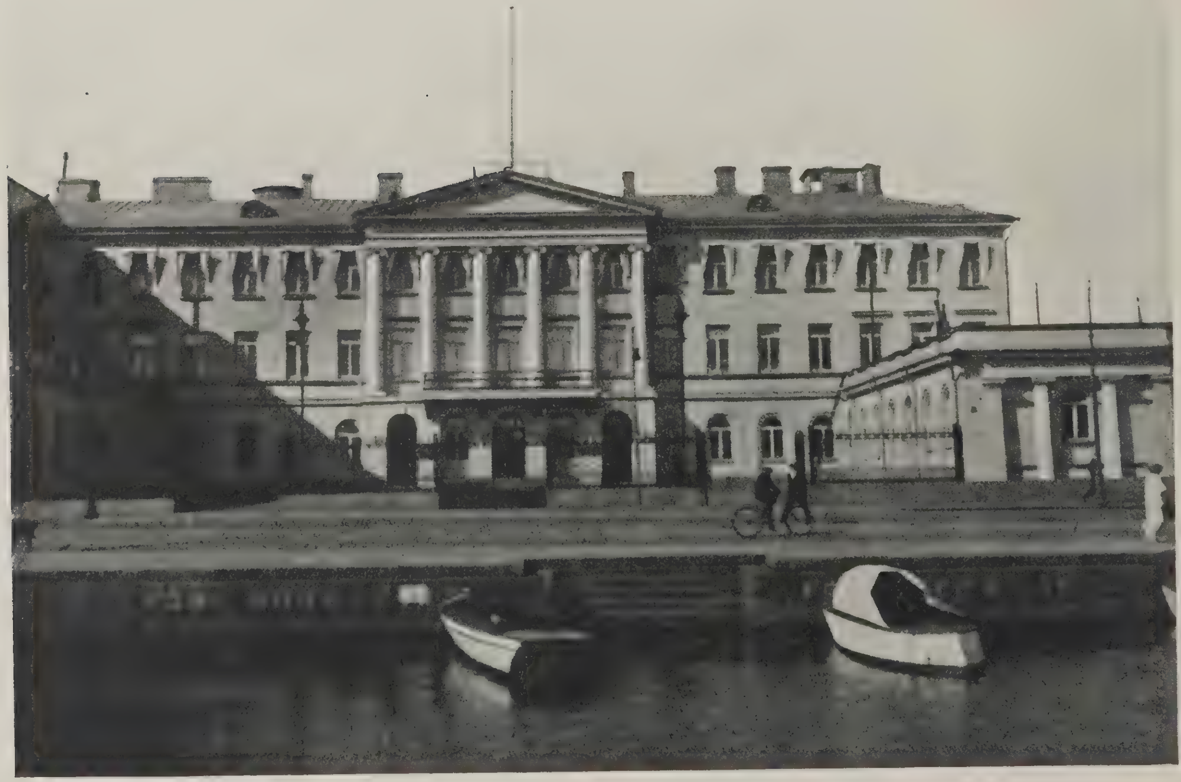
In spite of Russian disapproval, or because of it, they succeeded in establishing a Finnish art which became an outlet for those desires denied of expression in other directions. It is significant that in the review in which they present themselves to the international public—"Esperanta Finnlando"—there should appear at the commencement of its existence issues devoted to, first, Finnish poetry, then their architecture, and following these, their music. The last named is already famous throughout the musical world, the second we can now consider, and the first, especially the great epic poem "Kalevala," awaits the Longfellow or Fitzgerald who shall give it to the English-speaking peoples.

To consider rightly the emergence of their national architecture we must look backward a little, taking examples of what may be called the "pre-nationalistic" period. For the purpose of this article they are limited to buildings in Helsingfors, the capital, though the styles they represent are to be found in other towns also.

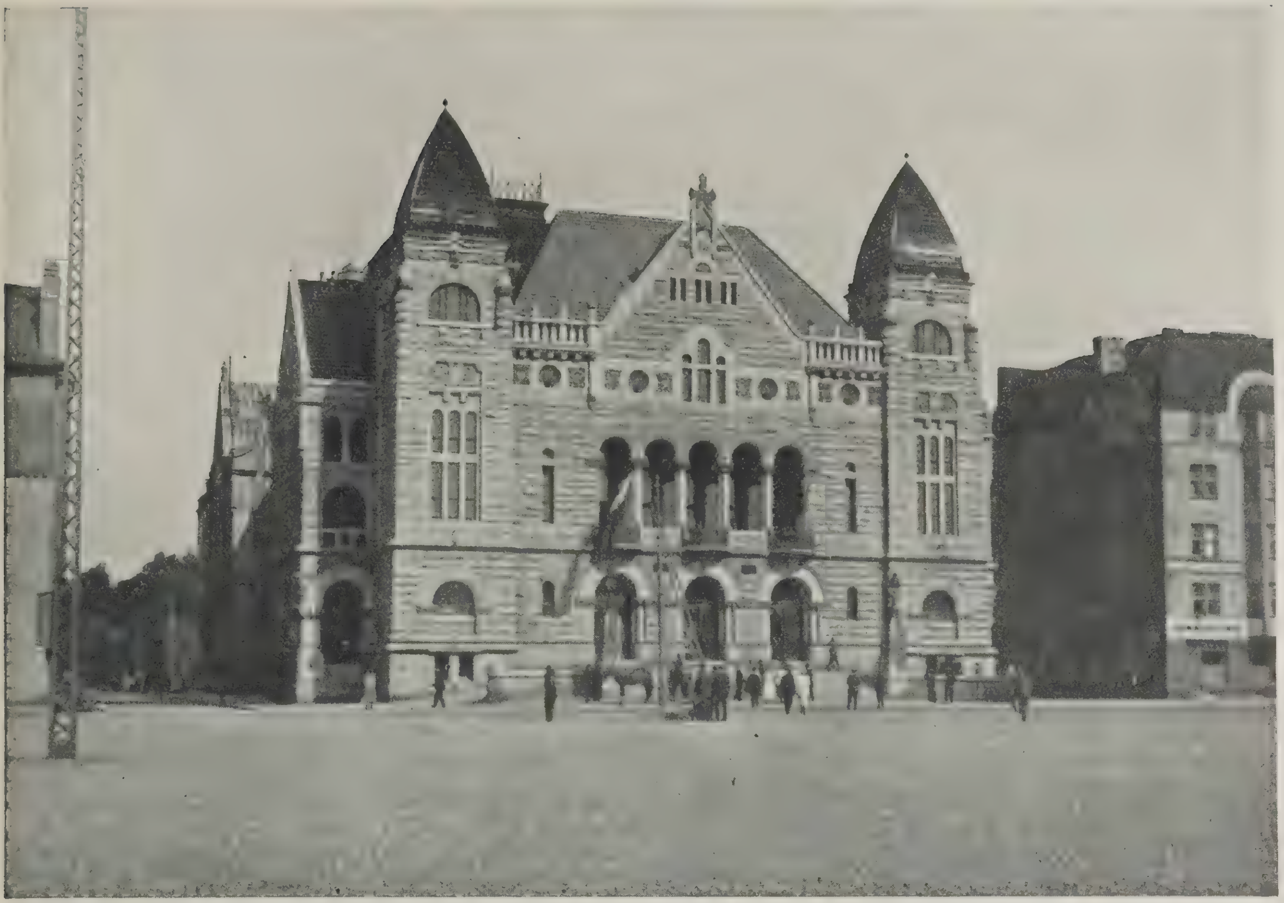
Of these the chief is the Cathedral of St. Nicholas, which to every voyager arriving in the beautiful south harbour is the dominant feature of the city. This was the work of J. C. L. Engel, a German architect, who settled in Finland in 1816, though the cathedral was only built in 1840-52. A nearer view of the cathedral is a somewhat annoying



OLD PARLIAMENT HOUSE, HELSINGFORS.
PROFESSOR GUSTAF NYSTRÖM, ARCHITECT (1888).



THE PRESIDENT'S HOUSE, HELSINGFORS.
J. C. L. ENGEL, ARCHITECT (1837).



THE FINNISH NATIONAL THEATRE, HELSINGFORS. ONNI TARJANNE, ARCHITECT.

experience, as it is found to stand on the high side of the sloping Government Place, and the too enormous range of steps which forms the southern side of the podium is so much above the level of the eye as one approaches that its exaggeration detracts from the proportions of the cathedral.

Near to the cathedral stands the former Parliament House, where three of the four "estates of the realm" met during the Russian regime. These were the ecclesiastics, the burghers and the peasants; the fourth estate, the nobles, meeting in what is now the House of the present, single chamber, Parliament. The old Parliament House is a very successful building, architecturally, both externally and internally. The illustration speaks for its external appearance; internally a fine effect is produced by the monumental staircase and balconied corridors, which appear to occupy the greater part of the building. Every British visitor is at first puzzled by the absence of a large chamber, until he remembers that it was designed to accommodate three sections of a small parliament who deliberated separately.

The present Parliament House is, curiously enough, perhaps the most disappointing building, from an architectural standpoint, of all the public buildings in Helsingfors. Of mere box-like form externally, it has an uninspired Gothic façade and a very casual main entrance under a balcony. Internally it consists mainly of a large chamber on the first floor, with panelled walls, having the carved, gilded and painted blazons of the nobles of the country occupying the panels from dado to ceiling.

The building which is the official residence of the President of the Republic is typical of many of that period; suggesting French influence by its general appearance, it is just of that kind which could be found in almost any European capital, as, indeed, are also the similar Government Offices and the University, these of "Georgian" severity and simplicity.

They are therefore representative of the period when Finland was, in the nationalistic sense, "finding itself"; they carefully presented European architecture as contrasted with Russian. For the latter one must go to Sveaborg, an island overlooking Helsingfors and commanding the south harbour, where the Russians had their stronghold.

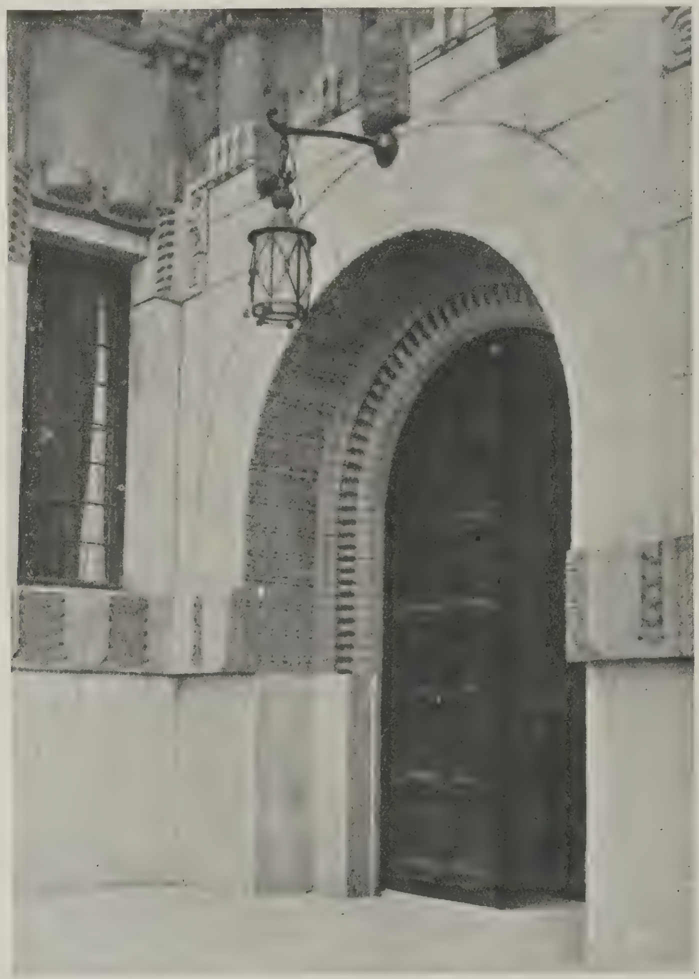
Just at the close of the nineteenth century the Finnish style emerged. A desire to express themselves architecturally in accordance with their own traditions, suitably to their climatic conditions and as demanded by their native materials, found its opportunity when Helsingfors was largely rebuilt in granite instead of wood. A characteristic building of this period is the National Theatre, a work of the architect, Onni Tarjanne, in 1902. Contrasted with the work of a later period, one sees that though it was emerging into a distinctive style, yet its rounded forms show the influence of the traditional styles. This also applies to other buildings of that period, and though different architects were at work, yet there was the same evolution in their designing.

The National Museum shows the style evolved, confident, and its material unhampered by any foreign tradition. The tall tower seems to have been constructed as a mile-post on the road to national self-expression, as it is a translation into granite of the detached timber-built, campanile-like bell-towers which are typical of Finnish country churches. Square towers, in one form or another, are an almost inevitable feature of all their public buildings. The illustration of the main entrance gives an idea of the way in which they handle details, and, apart from the low relief carving, which, whether dealing with animals, human forms or natural growths, may sometimes be crude, but is always vigorous, there is enormous pleasure to be derived from their treatment of surfaces. They have succeeded in giving to the native granite an endless variety of texture, as even the illustration shows; fortunately, however, without including that most unsuitable treatment, polished surfaces.

The National Museum and the Railway Station are the works of the architects Gesellius, Lindgren and Saarinen. The station building is fortunate in being situated at one side of an immense Place, so that it is possible to view the whole composition, with its typical tower, from a suitable standpoint. The top of the tower was obscured by scaffolding at the time of photographing.

The designers of this building have certainly succeeded in giving external form to an internal feature. The lofty entrance hall, with its barrel-vaulted roof, is emphasized externally; but one feels that here was a problem not so successfully overcome as others that could be more easily handled in the downright Finnish manner. The Cyclopean figures flanking the main entrance suggest German influence, as internally one is reminded of the American examples of spacious station planning.

Another interesting building is the church of Kallio, which stands upon a hill in the working-class quarter. Though this was designed by Lars Sonck, there is a remarkable resemblance in general outline between its tower and that of the station. The writer was unable, unfortunately, to get a photograph of this church from any other angle, but a little consideration of the elevation-like view of the tower will explain why the newcomer to the city so often mistakes one for the other. The church of Kallio stands so high that it is the dominant feature in any view of the city from the east, it is also utilized as a vista feature, for it stands axially at the north end of a long straight road, leading from the centre of the city.



THE MAIN DOORWAY, NATIONAL MUSEUM, HELSINGFORS.
GESELLIUS, LINDGREN AND SAARINEN, ARCHITECTS.

Of commercial buildings the premises of the Insurance Company, " Suomi," deserve attention. Here the architects have produced something entirely Finnish in its varied surfaces, square forms, and bold details. Another illustration of banking premises gives an example of different treatment, where most of the detail is lavished on one feature, the projecting balcony over the doorway, which, in its upper part at least, gives more suggestion of Russian ornament than is to be seen almost anywhere else in Helsingfors.

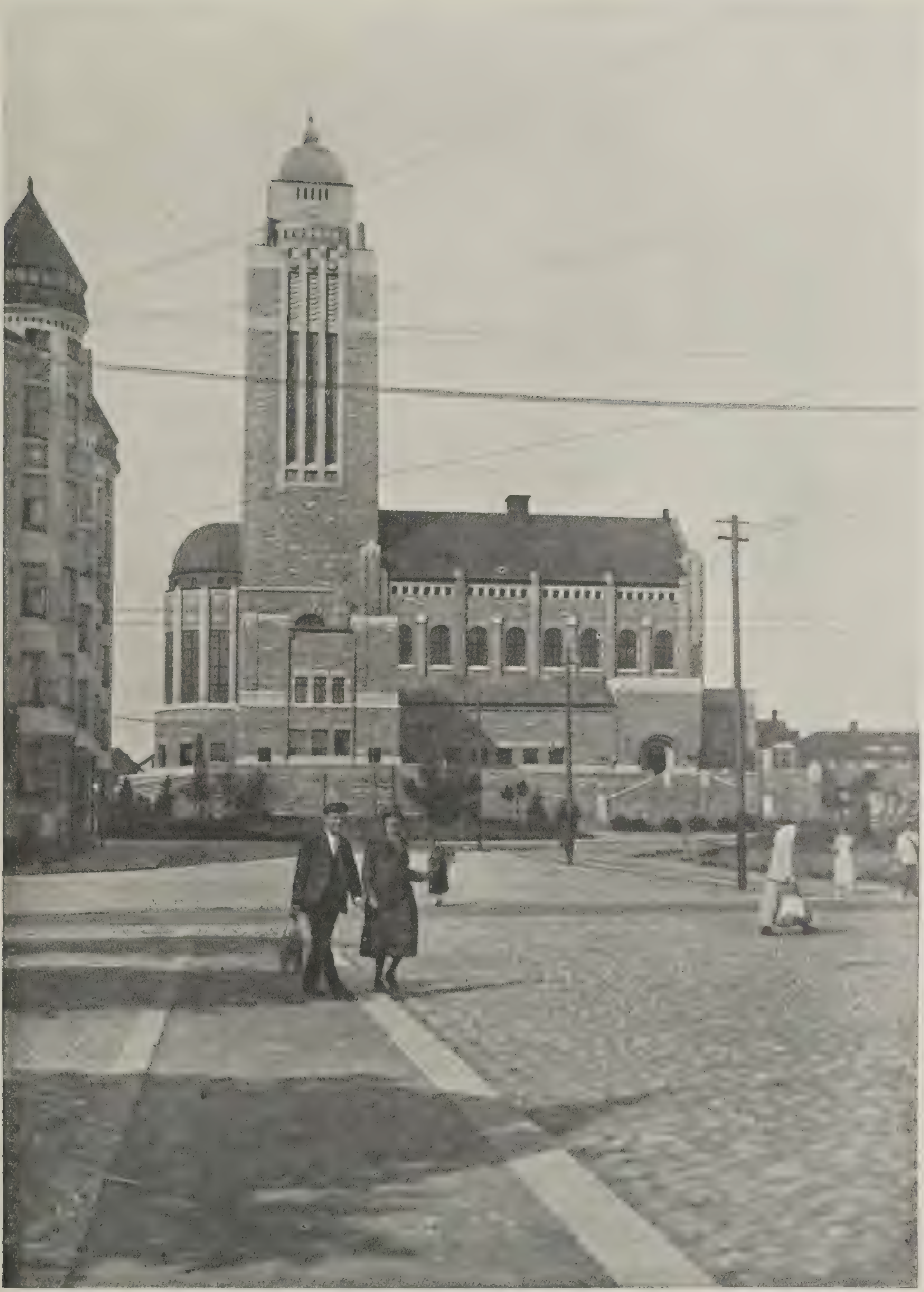
Domestic architecture, as we know it in England, must be sought outside the city, among the beautiful islands that form the suburbs or summer residential quarters. In the city most of the dwellings are arranged out of the tradition of building large houses with an enclosed yard for the enormous stacks of firewood necessary for the winter. As a recent example of less monumental architecture than those previously noted, the country hotel, or " pension," may be regarded as typical. One must remember that as warm red tiles, white or cream distemper, and zinc dormer-tops and flashings are used, colour plays a larger part in design than in this country.

All their wooden houses have the ground floor at least 4 to 5 ft. above ground level, on account of the deep snow in winter. External entrance steps are therefore a necessity, and this feature has become an architectural motive.

Finland, now a self-governing country, has great possibilities of steady development: in spite of the general depression of European trade, and of the civil war which followed the establishment of their new Republic, they have succeeded in abolishing all visible poverty; unemployment as a problem is non-existent, and they contemplate a rebuilding of those parts of Helsingfors which do not conform with modern standards. All this offers a grand field for artistic activity, and it will be interesting to see whether their native-born style can develop still further. But for what their artists have already done we can be thankful; here is an expression of nationality that can cause no conflict, an outlet for that laborious, undaunted racial spirit that is as enduring as the granite they handle so lovingly; a translation of their personal cleanliness and intelligence into buildings clean, straightforward and lofty.

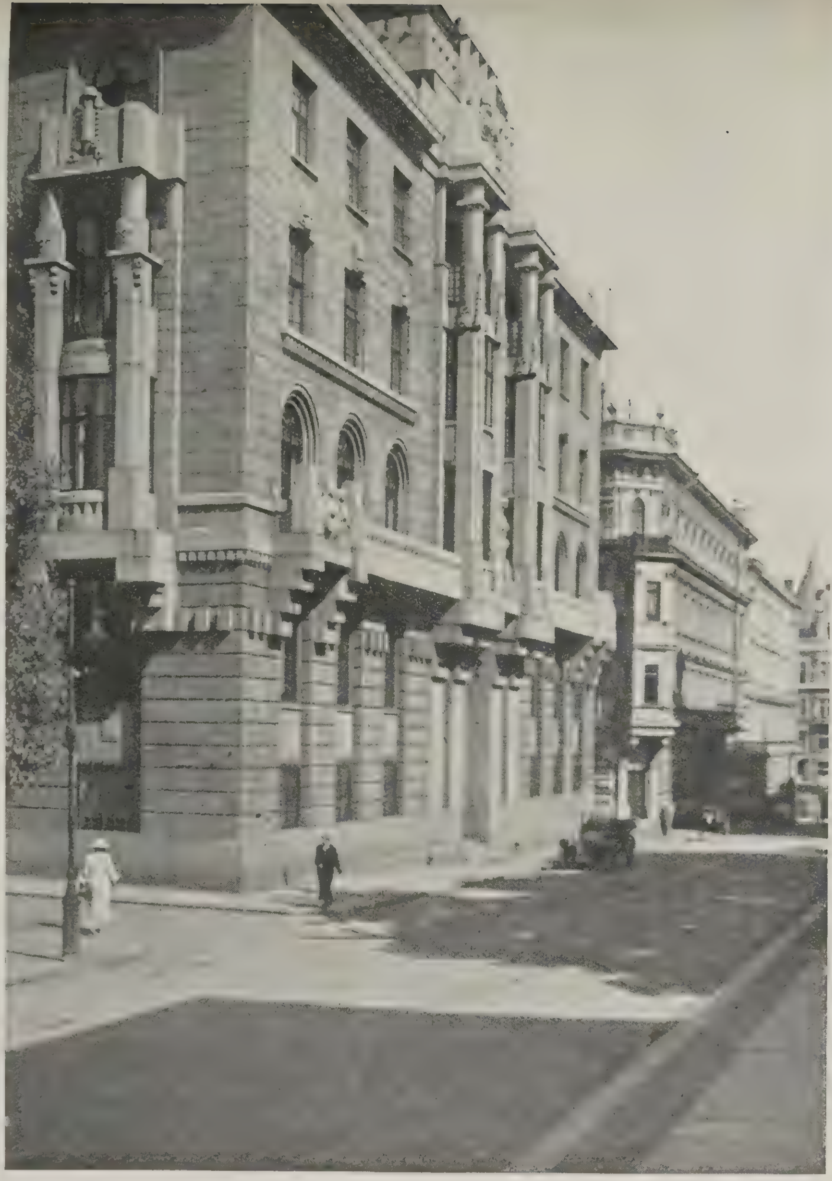
# Modern Ecclesiastical Architecture. 21.—Church of Kallio, Helsingfors

### Lars Sonck, Architect

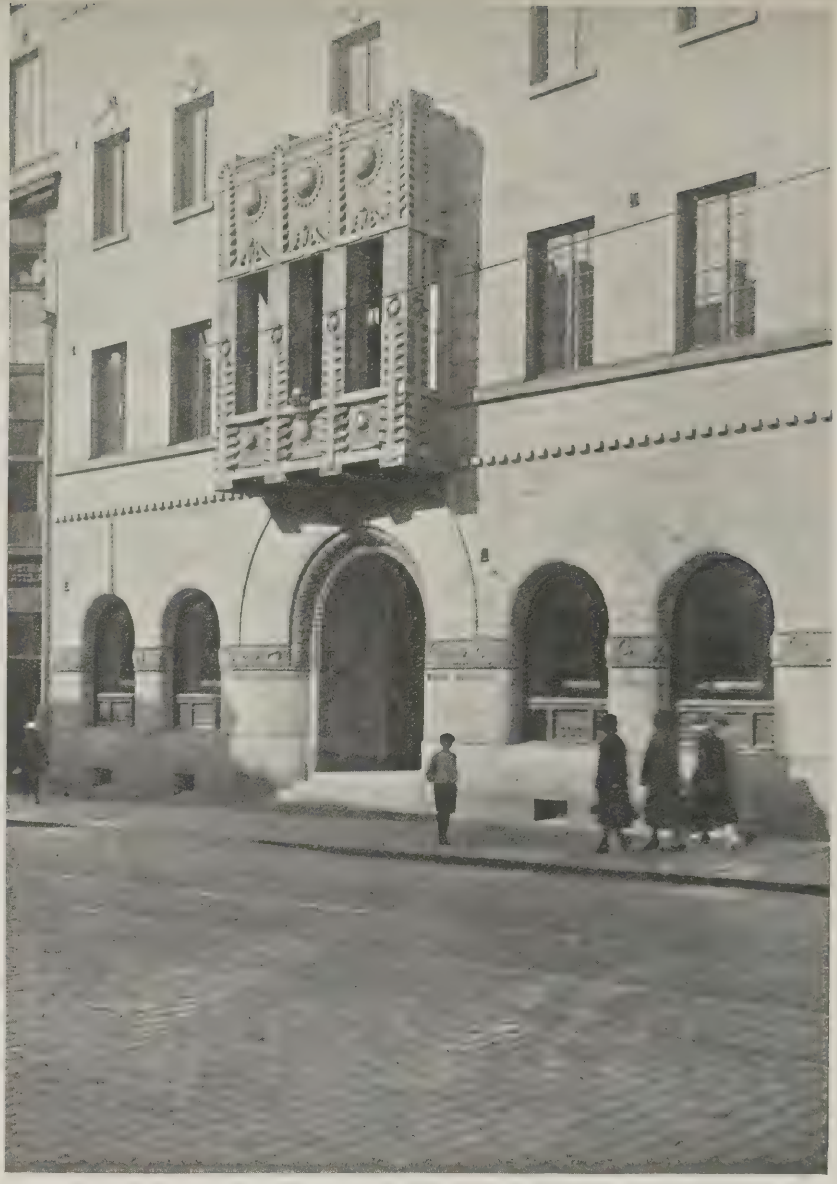


This church, the author tells us, stands upon a hill in the working-class quarter, and, though designed by a different architect, its tower has a remarkable resemblance to that of the station.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS



"SUOMI" INSURANCE COMPANY'S OFFICE.



THE NORTHERN UNION BANK.

BUSINESS PREMISES IN HELSINGFORS.
GESELLIUS, LINDGREN AND SAARINEN, ARCHITECTS.

# Modern Craftsmanship. 3.—Fresco Painting

By J. D. BATTEN

*(Concluded.)*

SUPPOSE an art school should accept my advice. To watch the running of the lime milk and to take careful note of the process with accurate records of time and quantities, whether by weight or measure, will be the first lesson of the students. After that their usual studies will not be interrupted for, say, a year (a year is but a short time in the life of a school), except that from time to time the pit will be uncovered, and they will notice how things are going on. At the end of one year the putty may not be up to the old Roman standard, but it will be exceptionally good stuff, for all that, and quite suitable for students' trial pieces.

Now will be required (1) a wall, (2) clean sand, (3) a skilled plasterer, (4) a few tools, trowels and floats, and one or two other wooden tools.

(1) Naked walls can be found in stables, outhouses, back passages and staircases. Outer walls of buildings or garden walls can be utilized by providing for the student some pent or shelter from the sun and rain. The fact that such places are inappropriate for decoration is a merit, not a fault, for it emphasizes the necessity of familiarity with the materials of the requisite craft before permitting the mind to approach the problem of decoration. To set a student who has never mixed a pint of lime and sand to design a fresco for an imaginary palace is to start him on his voyage with a false chart. As soon as familiarity with methods and materials is obtained, the decorative impulse can no longer be gainsaid to any student who has the makings of an artist in him. Decorative conceptions will push and crowd for utterance. It is mere quackery to profess to teach, apart from the fabric to which it is to be applied, "Decorative Design." There is no such thing.

(2) Sand.—For most purposes lime plaster is a mixture of lime and sand. Sand may be replaced either wholly or in part by pounded marble. As marble is a crystalline form of carbonate of calcium, it is evident that lime-and-marble plaster as it sets will form a homogeneous mass, consisting solely of carbonate of calcium, and it is probable that this mass will be stronger and more durable than any mixture of lime and sand. This belief is confirmed by the testimony of ancient writers, and also by examples of ancient and of Renaissance plaster which remain to us. This plaster is of extreme beauty, but, to my thinking, its serene and exquisite whiteness renders it unsuitable for the common uses of life. If fresco painting is to establish itself here it must take its start from the common serviceableness of plastered walls. I also think that anyone who has handled lime-and-marble plaster will feel more prompted to model with it than to paint upon it. An interior wall of smooth lime-and-sand plaster affords the most peaceful surface on which the eye can rest. It is not white, but it is very luminous. The particles of colour which differentiate it from white are separate sand grains, translucent or opaque, of red, orange, yellow, grey and black. Separately they are not discernible, but collectively the coloured light from them satisfies the eye without wearying it in the way that any wide expanse of monotonously tinted white will weary it. However much our decorative purpose may lead us to embellish it with colour, we shall no more wish to cover it up than an illuminating scribe wishes to concea his parchment page. The sand must, of course be clean; even sand reputed clean had bette be washed again If sand direc from the sandpi is supplied i must be washed through a copper wire sieve * and then washed again until the water come away clean. This the students will do. The sand shoul be allowed to dry, otherwise it will add to the plaster an amount of water difficult to compute.

"THE ARRIVAL OF GARETH."

Fresco painted by Mrs. Sargant Florence on a wall of the old School, Oakham.

(3) A Skilled Plasterer—Even he cannot be allowed quit a free hand. The plastering trade has for so long a tim been subjected to unsatisfactory industrial and commercia influences that its traditions are no longer trustworthy Few plasterers have ever had a chance of working wit quite clean materials. In the first lesson I ever had from skilled plasterer he set me to lay the under coat of plaste with a material as brown as burnt umber. You have onl to look at lime putty and at sand to realize that a mixtur of these cannot be brown except by the addition of a larg

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* Mine has 20 wires to the inch. That is perhaps closer than need be.

"THE CHALLENGE."
A Fresco by Mrs. Sargant Florence.

quantity of dirt. The plasterer still retains his knowledge of the procedure of the work, his strength of arm, his skill of eye and hand. If he be supplied with clean materials all will go well. The students will act as "boy" (or as Vitruvius's *decuria*) and knock up the stuff for him. If they do this efficiently he will not be tempted to add that excess of water to which the modern practice of the trade has accustomed him.* The students will watch and learn and, again, make notes of quantities and proportions, and then make their own attempts.

(4) Tools.—These are very few, and the plasterer's advice may be accepted in the choice of them. It seems to have been a tradition of the craft for the plasterer to work with as few tools as possible. In this he differs from the cabinet-maker, who has as many tools as a dentist. The only hint that I would give is that students should incline to select the smaller tools. The usual plasterer's trowel is of a size adapted to covering large surfaces; it is obvious that the smaller the tool, the greater is the pressure that can be applied with the same exertion. It is necessary that the student should be able to do the whole work from the wall outwards, otherwise he will never feel himself master of the job. It does not follow that in actual practice it will be necessary for the fresco painter to do the whole plastering. The final coat of plaster laid piecemeal day by day he must, of course, lay with his own hand. To have a skilled plasterer in attendance every day early in the morning to lay, perhaps, two square foot of plaster, would increase the cost of fresco painting unreasonably—and, besides that, the painter would surely be ashamed to be found so incompetent; but for actual work on a large scale I should advise that a skilled plasterer be employed to lay the under coats, and that the fresco painter should, for the time, play the humble part of boy and help knock up the stuff for him. It must be remembered that a skilled workman can do a given piece of work with less than half the exertion required from an unpractised man, however great his strength and natural ability.

We now come to colours. It is commonly believed that lime destroys colours, but it is necessary to enquire whether by "colours" we mean the pigment itself or the medium with which it is applied. Lime, as I understand, converts linseed oil into a soluble soap; if this washes off, the pigment comes with it. It follows that oil-painting is unsafe on a lime plaster ground, and methods are in practice for laying some kind of preparation between the lime plaster and the oil paint. But that is no concern of the fresco painter. His pigment adheres without any medium, without any tempera, to use the word in its early sense.

Some pigments are destroyed by lime. I made a number of experiments with pigments which I thought unsafe. Most of the results were such as might have been expected, but there were one or two surprises. The madders disappeared

"GARETH BEFORE KING ARTHUR."
A Fresco by Mrs. Sargant Florence.

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* All this I have tried. A brief account of my experimental fresco class appeared in "The Builder," May 19th, 1922. The one point which I would reiterate is this — that the final coat of plaster, laid nine years ago by unskilled students under the directions of a skilled plasterer, has in every case stood to the present day without crack, blister, flaw or fault of any kind.

within a few weeks—the false madders (alizarins) as well as the true. Gamboge did the same. Vermilion, out of doors, turned black. (Vitruvius said it would.) I neglected to make any trial of Prussian blue or of chrome yellow.

The surprises were that aureolin (cobalt yellow) turned blackish within three days, and that Naples yellow (antimoniate of lead) has stood absolutely unchanged under the severest tests. It is not possible to disregard the repeated evidence of observers as to the unreliable character of Naples yellow. I believe that the difference is due to a careful manufacture of the pigment, leaving no excess either of antimony or of lead.[*]

The fresco painter has an ample palette :—

- For White—slaked lime dried in the sun and reground. (Cennino's "*bianco sangiovanni*").
- For Yellow—yellow ochres of various shades and, with good luck, Naples yellow;
- For Red—the various oxides of iron and the natural earths which, raw or calcined, owe their colour to such oxides;
- For Green—the opaque oxide of chromium and the transparent oxide (viridian), and, if used with discretion, terra vert;
- For Blue—all the cobalt blues and artificial ultramarine;
- For Black—the carbon blacks and black Italian chalk, but to these I much prefer the black oxide of cobalt.

And there are others.

The students of an art school should make trials of plaster composed of different proportions of lime and sand (and perhaps marble dust), and also trials of all pigments. Some of these trials should be under cover and some should be out of doors, exposed to sun and rain. All trials should be clearly described and dated. In this way reliable permanent evidence will be accumulated and our attenuated stock of knowledge will be replenished, till fresco painting is no longer an experiment, but becomes once more a safe and clearly understood method of work.

The obstacle which lies right across the path of fresco painting, or, indeed, of any kind of mural painting, is that the people who would have to pay for it do not believe in it. It is obvious that the present stagnation is not wholly due to "bad times," or want of money, for in church decoration, at any rate, money is still devoted generously to regrettable objects. But people will not pay money for painting walls if they believe that the paint is going to come off again. Such belief may be due to ignorance, but it is an ignorance which no one has taken any industrious pains to dispel. It would be unjustifiable to attempt to bluff the situation. The only straightforward course is to display the evidence as to methods of permanent mural decoration. It is up to the art schools throughout the country and to such municipal bodies as profess to foster art to supplement the evidence which already exists by new evidence based upon new trials. It is not necessary that these trial pieces shall be of decorative importance, but it is essential that a clear and dated record shall be kept of all technical details.

I turn now to the problem of design. The piecemeal nature of the work in fresco painting demands that the whole of the design, whether large or small, must be completely thought out before the painting begins. There must be a cartoon on which the principal forms are delineated with precision, otherwise to-day's work will neither fit on to yesterday's nor give a fair start for to-morrow's. Also the colour effect of the whole must be very clearly foreseen. Unless the artist has an exceptional power of mental vision, a small colour scheme will be necessary for him. I would advise the student not even to think the colour (if he can help it) in any other terms than fresco. On a small slab of stone, or on a tile of surface rough enough to give key to the plaster, let him lay with a trowel or palette knife a single coat of lime-and-sand plaster, and, having transferred to it the traced outline of his small design, paint straight away with the raw pigments and water. That will show him something that he really needs to know.

Water-colour on paper is very likely to deceive him, and the appearance of oil paint, or of pastel, is too remote from that of fresco to be of any service.

Not every artist is called to be a fresco painter. There are methods of painting which can be tentative at every stage. Colour is applied, judged, amended, its hues intensified or subdued, its tone lightened or darkened. The finishing touches which determine whether the work is a success or something less than a success are scarcely perceptible. An artist whose genius finds expression by such means will probably feel repugnance to the very method of fresco painting. In any case, the method is exacting. There is the cautious preparation of the ground, the deliberate planning of the complete design, leaving nothing to chance or afterthought, and when all is in readiness, then suddenly the assault, made with all the decision and swiftness of which you are capable, painting for all you are worth the whole length of each day's daylight, with undeviating fidelity to the pre-conceived plan and with a risk of failure not easily retrieved before you every hour of every day.[*]

The larger the work, the greater the risk. One would gladly seek to make a first decorative attempt in fresco on a small wall space, and preferably in a building of domestic character; but here a difficulty arises. Fresco cannot be an afterthought. It belongs to that final coat of plaster with which the inner surface of walls is commonly finished. In a church or other public building it may often be possible to leave certain portions of the inner wall surface unfinished until the community for whose use the building is intended shall have had an opportunity of expressing its wishes; but in a domestic building this is only possible when a man is building a home for himself—and in such case, by the time he has finished with all lawyers, architects, surveyors and inspectors, he is crying out, "Not one day more! Give me my four walls and let me get inside them!" None the less, there may in such a house be one room, the shrine of whatever gods to him may be, over the completion of which the owner is willing to loiter, and here, I think, would be the chance which above all others, a fresco painter would seek. Setting aside such rare opportunity, what path is open for the decorative training of a fresco painter? I have already spoken of the technical training of the student, but decorative training is a lifelong affair; it may be begun, but can never be completed at school.

I think that after the handling of the materials has been sufficiently mastered, the approach to the decorative problem of painting "in fresco" will lie through painting *in secco*. This will be done after the finished plastering of the walls, and may be done at your own pace. The one requisite is a clean and honest plastered wall. My own belief is that lime and sand plaster, prepared as for fresco painting, is not only the most beautiful, but also the safest ground for a painting *in secco* with a tempera of yolk of egg or some analogous emulsion. As to the durability of yolk of egg tempera on a lime plaster wall, we have the fortunate evidence of Mr. Henry Payne's painting on the walls of Lord Beauchamp's private chapel at Madresfield. The walls of the chapel were specially plastered with old lime putty and sand in 1902, and the painting with yolk of egg tempera proceeded for several years.[†]

Into our recognition of the dignity and worth of any building enters the sense of its enduring character. If it be a home it will surely last from one generation to another; if it be a church, its function is not of yesterday, or o

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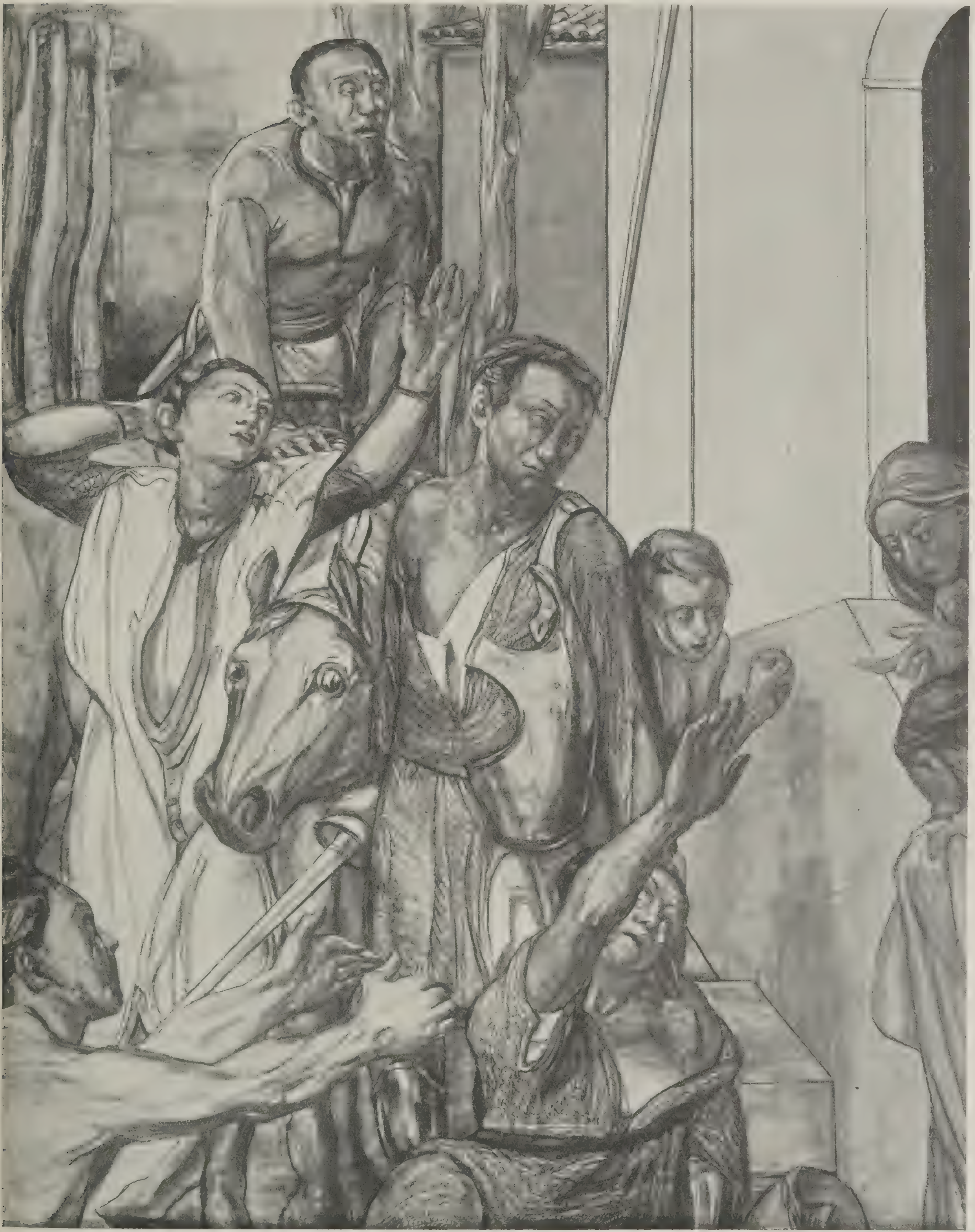
[*] My sample was one of a number of Potters' Colours, kindly supplied to me by Mr. William Burton, M.A., through Messrs. Pilkington & Co. I have obtained several other useful pigments from the same source.

[*] I do not mean that every mark of the brush is irreparable. Within the limit of a hour or so the fresco painter has considerable freedom in washing out and putting i again; but the unit of work is the day's work. If this goes wrong there is nothing fo it but to cut it out and do it again before the next unit is added.

[†] Mr. Henry Payne's account of the painting is in a paper contributed to the Societ of Painters in Tempera in 1907.

# Details of Craftsmanship. 19.—"Gareth's Victory," by Mrs. Sargant Florence



A detail from a Fresco painted by Mrs. Sargant Florence on a wall of the old School House, Oakham.

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to-morrow, and fresco painting will be felt to be impertinent unless it can attain a character, which (if the word were not so stupendous) I would call eternal. I mean, more than permanence; I mean, a character unqualified, unhindered, untouched by date.

Ephemeral art has its true opportunity and service in life, but these occur elsewhere than in mural decoration.

### POSTSCRIPT.

Mr. Noel Heaton's report of his investigations at Knossos is given in the "Journal" of the Royal Institute of British Architects, Vol. xviii, Third Series, No. 19, September 30th, 1911; also in the "Journal" of the Royal Society of Arts, January 7th, 1910, and August 2nd, 1912.

My thanks are due to Lady Beauchamp for kindly providing the photographs of Mr. Henry Payne's paintings at Madresfield; also to Mrs. Sargant Florence, for allowing me to use Mr. Hollyer's photographs of her paintings at Oakham.

The students' frescoes in the stable of the Halsteads, East Sheen, were done during the summer vacation of 1913, and the photographs were taken last year. No colours have failed or changed.

My own work, here reproduced, is a fresco recently done on a panel of expanded metal lathing, covered in front with three coats of lime plaster and with one coat of the same at the back. It is an enlargement to life-size of part of a composition representing the start of Atalanta's race.

The only part which has needed retouching *in secco* is the fold of Milanion's tunic which holds the apples, and thence to the bottom of the picture.

The patch of plaster laid for the day's painting was a large one. I laid the plaster at 9 o'clock in the morning; by the end of the daylight I had not finished the painting, and I continued by artificial light till quarter past one. The faulty part was all done, I think, after midnight, certainly after eleven o'clock. The colour was not completely firm, and I have retouched with yolk-of-egg tempera. I ought, of course, to have cut off at the end of a reasonable day the plaster I had not been able to cover.

The lesson is, that after, say, twelve hours you cannot rely on the plaster exuding sufficient solution of hydrate of calcium completely to bind the pigment. J. D. B.

# The Architectural Societies.—I

## York and East Yorkshire Architectural Society

*[This is the first of a series of articles on the British Architectural Institutions allied to the R.I.B.A. Further articles will appear from time to time.]*

THE Society was founded in 1882 as the "York Architectural Association," and was the outcome of a circular sent out by Messrs. Hepper, Burleigh, Tate, Benson and S. Smith, calling a meeting on November 9, 1882, at the Victoria Hall, York. Mr. W. G. Penty was elected President, and a Committee was formed. Subsequently the Society became known as the "York and Yorkshire Architectural Society," and was afterwards known as the "York and East Yorkshire Architectural Society."

MR. W. G. PENTY, F.R.I.B.A.
FIRST PRESIDENT OF THE YORK ARCHITECTURAL SOCIETY.

The executive consists of President, two Vice-Presidents, Secretary, Treasurer, Librarian and five ordinary members of the Committee. The members are divided into three classes, viz.: Fellows, who are in practice as architects; Associates, who are assistants to architects; Hon. Members, who are interested in architecture or art generally.

The present membership of the Society is as follows :—

| | |
|---|---|
| Architects in practice .. .. .. | 26 |
| ,, retired .. .. .. .. | 2 |
| ,, holding public appointments .. | 3 |
| Assistants and students .. .. .. | 33 |
| Quantity Surveyor in practice .. .. | 1 |
| Hon. Members.. .. .. .. .. | Nil |
| | 65 |

The first President was Mr. W. G. Penty. There have been thirteen Presidents altogether, Mr. Alan E. Munby, M.A., F.R.I.B.A., now holding the office.

The objects of the Society are to afford facilities for the study of architecture, sanitary engineering and other subjects identified with the architectural profession, and to advance the professional interest of the members. It has endeavoured to carry out these objects by means of (1) papers and discussions upon all subjects and questions connected directly and indirectly with architecture; (2) the preservation of ancient buildings and monuments; (3) the advancement and encouragement of professional knowledge and study in the younger members of the profession by the formation of classes for study and the award of prizes for satisfactory work, etc.

The Society was allied to the Royal Institute of British Architects in 1893, and was allotted to the province of the North Riding of Yorkshire. In 1913, as the result of a series of meetings with the Leeds and Sheffield Societies, it was thought that a further decentralization would be an advantage, and the Hon. Secretary endeavoured to stimulate the architects in Hull and district to form a separate society to take the major part of the East Riding. This, though failing to mature at the time, has borne fruit. Many architects of Hull have joined the Society, and now Hull forms an important section of the York and East Yorkshire Architectural Society. This is interesting in the light of other societies splitting themselves up into areas and branches. However, as a matter of history, the three Yorkshire Societies—viz., "Leeds and West Yorkshire," "York and East Yorkshire," and "Sheffield and South Yorkshire"—rearranged their boundaries, a step which received the immediate sanction of the R.I.B.A., and now they constitute a triad which could pronounce, if they were united under a central area, the whole voice of Yorkshire. The Society hopes that the original aims—that of a closer co-operation—will come to birth and establish a living federation which will speed the outflowing life of the R.I.B.A. and be an important outpost of its consciousness.

Since the alliance with the R.I.B.A. there has been a desire on its part to come more in touch with provincial societies and to discuss with them many important events before taking action. This Society has undertaken examinations on its behalf in architecture, and it is satisfactory to record that on two of these occasions the highest award of merit throughout Great Britain was obtained by candidates examined in York.

In 1900 the R.I.B.A. wrote to the Secretary of the Lunacy Commissioners, directing his attention to the resolution of the York City Council: that the plans of a new asylum should be entrusted to the City Surveyor and the plans of Middlesbrough Asylum be used to save architects' fees. The R.I.B.A. pointed out that asylum construction was the work of an expert; that the York Corporation was not even calling in the services of a professional architect, and to the undignified action of the York Corporation in using, free of cost, the plans of another asylum. The Lunacy Commissioners replied that they were entirely in agreement with the conclusions expressed in the letter. The R.I.B.A. also sent a strong letter of protest to the York Corporation, and this Society also wrote. The result of this was that the Town Clerk of York stated that the Corporation decided not to depart from their course of action.

When the amalgamation of St. Helen's Parish with another was proposed, this Society, fearing that the Church of St. Helen's would suffer the same fate as that of St. Crux when that parish was amalgamated with another, passed a strong resolution against the project, and sent it to the Archibishop. The Church was disused; after being closed for some years, it has been repaired and was reopened last February.

When the "Light Railways" Order was applied for by the York Corporation, it was suggested that the vibration from the trams would damage the fabric of All Saints Church, Pavement, especially the lantern tower, and that the iron standards would interfere with the general view of the church. A resolution was passed by this Society, embodying the above, and sent to the Corporation. The tower has since been repaired, but the damage arising from the trams is nothing compared with the intense shaking due to the heavy motor traffic rumbling over the uneven surface of the street.

In 1887 the Society of Architects held a week's conference in York, in connection with this Society. They were received by the Lord Mayor (Sir Joseph Terry) at the Mansion House and hospitably entertained, and, after visiting Beverley Minster, Kirkstall Abbey, Ripon Minster and Fountains Abbey, and many places of interest in York, attended a conversazione held by this Society. The York Society had from its inception taken a keen interest in the question of the Registration of Architects, and at this conference Mr. Roumneur Gough read a paper on this subject.

The minutes of the Society are dotted here and there with interesting recommendations to the parent Society. With reference to expert advice, this Society decided "That the architect should be responsible for all contracts under him, and that he should pay out of his commission any charges entailed on the original contract by the employment of specialists."

In view of the revised scale of charges, as recommended for adoption by the R.I.B.A., this Society felt that the charges were too high for new work and could not be maintained in this district.

It was resolved to write to several town and urban district councils, who were about to prepare housing schemes, urging the employment of duly qualified architects. This Society was often asked to recommend architects for this work.

The R.I.B.A. issued a letter (November 8, 1918) asking for information whether any delay in housing schemes occurred in the East Yorkshire area. This Society found that the delay in carrying out housing schemes did not arise from lack of skill or dearth of architects, but from the Government offering no encouragement to private enterprise in not providing a high enough subsidy.

In looking over some of the past annual reports of this Society there is striking evidence of activity, compared with the present. It was a time when many interesting and instructive papers were read at meetings and excursions made to places of interest in the district. The annual conversazione was in evidence, at which drawings were exhibited.

To give some idea of the scope of the lectures a few have been extracted from the reports, viz., "The History and Development of Locks and Safes," by Mr. H. W. Chubb, of London, illustrated by limelight views, photographs, drawings and models of some exquisite specimens of locksmith's craft; "Robert Adam and his Period," by Percy Fitzgerald, M.A., F.A.A.; "Old York and its Mediæval Glass," by George Benson, A.R.I.B.A.; "Building Stones," by Alan E. Munby, M.A., F.R.I.B.A.

The ebb and flow of life in the Society is no different from others. The law operates the same in all movements that rely upon honorary effort, and those who have had any connection with the working of a society know how greatly its success rests upon a nucleus of enthusiasts, bound together by ties of common interest, which finds its foci in a President and Council. When the fevered energy upon the part of the nucleus begins to wane, it is always reflected in the outer society. The enthusiasm of early days, which ushered the Society into being and sustained it, has not abated so much as diffused. York is unique in having another Society, called the Yorkshire Architectural and York Archæological Society, a non-professional

MR. ALAN E. MUNBY, M.A. (CANTAB.), F.R.I.B.A.
PRESIDENT, YORK AND EAST YORKSHIRE
ARCHITECTURAL SOCIETY.

MR. J. E. REID.
HON. SECRETARY YORK AND EAST YORKSHIRE ARCHITECTURAL SOCIETY.

Society, to which some of our members belong. Its interest lies chiefly in research and in the preservation of ancient monuments. The halo surrounding things of a past age is often more attractive than the mere practical questions of the present. Yet it fills a place and attracts a public to whom modernity is ever novel. As the effects of the war begin to pass away and the architectural profession is fanned with the breath of a new energy, the York and East Yorkshire Architectural Society will continue to fulfil its purpose and carry out the objects for which it was founded and uphold the dignity of the architectural profession.

J. E. Reid, *Hon. Secretary.*

Mr. Alan Munby, now in office as President, comes of a legal stock, and has a long family connection with York, his grandfather having been Recorder and his father Castilian of the City. Educated at Repton School and at Durham, Heidelberg and Cambridge Universities, he was past thirty when it occurred to him to enter the architectural profession. He then served three years' articles, in London essayed the Royal Institute examinations, got ploughed, went in again and passed, since which time he has been actively interested in the affairs of the R.I.B.A., having served on the Council and many of its Committees. He has been twice chairman of the Science Standing Committee, is an honorary and statutory examiner and on the Board of Architectural Education, and during the war was for a long time Hon. Secretary to the Architects' War Committee. More recently he has represented the profession on the Home Office Committee upon lead paints.

Mr. Munby is the author of a book on science relative to building materials, and one on laboratories, and has made literary contributions upon arbitrations and other matters of interest to the profession.

Mr. J. E. Reid, the Hon. Sec. York and East Yorkshire Architectural Society, served from 1886 to 1890 under the county architect for Northumberland, the late Mr. John Cresswell. After gaining experience under several architects as junior assistant, he ultimately became chief assistant. For the last twenty years he has been on the staff of the architect to the N.E. Railway (now the L.N.E.R.). He was elected Licentiate R.I.B.A. in 1911. In 1917 he became acting hon. secretary to the York and East Yorkshire Architectural Society during the absence of the hon. secretary at the front, and was subsequently appointed hon. secretary.

# A House in the Hampstead Garden Suburb

## HENNELL and JAMES, Architects

DURING the war, building operations in the Hampstead Garden Suburb came to a complete standstill, but now they are again proceeding apace, and the ground purchased for the extension is rapidly being covered. Beginning at Golders Green, it stretches uphill to the "Old Bull and Bush" at Hampstead, and across country to as far afield as East Finchley. It is becoming not so much a garden suburb as a garden city.

The house, of which drawings appear on the succeeding pages, is just nearing completion, from the designs of Messrs. Hennell and James, architects, who have houses to their credit in other garden suburbs than this.

The unusual shape of the plan was dictated by the fact that the building area was limited to a rectangle about 50 ft. by 70 ft. Building lines on both the north-west and south-west sides were tied, and the position of the drawing-room was dictated by extensive views down a narrow strip of garden leading on to the Heath extension.

The house is to be occupied by three persons, having important work and living somewhat independent lives, hence the three sitting-rooms in addition to the dining-room.

The bedrooms are all on one floor, and no difference has been made for those which will be occupied by the staff, which are equal in size and finish to the others. The materials used are Thomas Lawrence facing bricks with hand-made plain tile roof. The roundels on the front elevation are in Empire stone. The front door will have a white surround and pilasters of wood, metal fanlight and door, painted blue-black, in one panel. The hall is being treated with plaster panels with wood surrounds, with a floor of heavy linoleum on concrete. All the sitting-rooms have hardwood floors. The staircase has a panelled balustrade with ramped mahogany handrail. Each bedroom has one or more cupboards, which are two feet deep, and stretch from floor to ceiling; there are five fitted basins and two baths in the house.

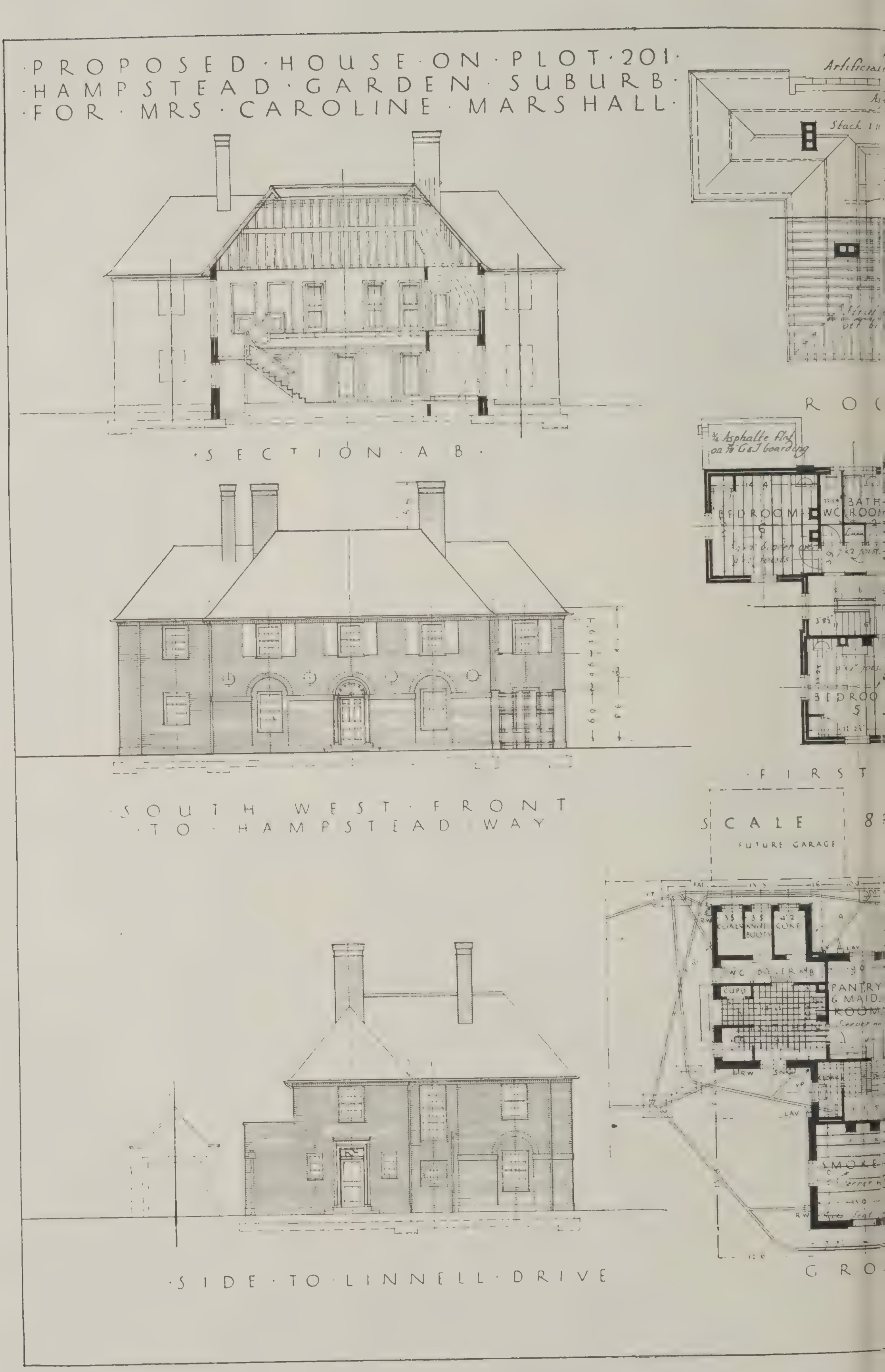
Central heating is being installed as an auxiliary for the rooms and to keep the hall and staircase at an equable temperature. The hot-water supply and cooking are done by an "Eco" stove, which is a combination of a coke boiler and gas-cooker.

The architects are designing the sideboard, several bookcases, window-seats, and pantry fitments.

Guild Housing, Ltd., are the contractors, and the cost works out at approximately 1s. 8d. per cube foot. This price includes the furniture mentioned, and a certain amount of garden work.

# Architects' Working Drawings. 61.—H

Hennell and


PROPOSED · HOUSE · ON · PLOT · 201 ·
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· FOR · MRS · CAROLINE · MARSHALL ·
· SECTION · AB ·
· SOUTH WEST · FRONT
· TO · HAMPSTEAD · WAY
· SIDE · TO · LINNELL · DRIVE
¾ Asphalte flat on ⅞ G&T boarding
BEDROOM 6
WC
BEDROOM 5
SCALE
FUTURE GARAGE
COAL
KNIVES
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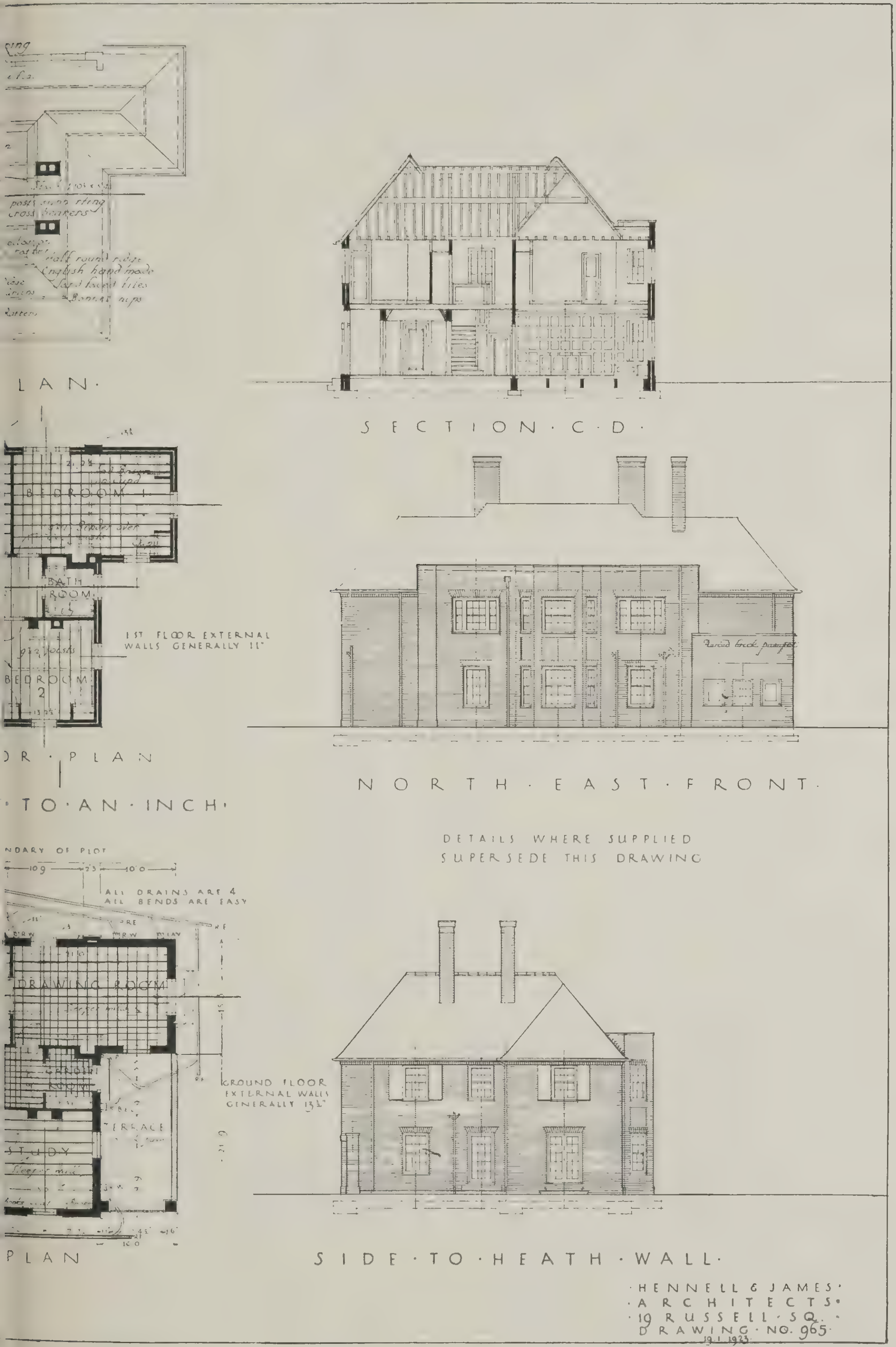
PANTRY & MAID'S ROOM

(For Descrip

# on Plot 201, Hampstead Garden Suburb

Architects.



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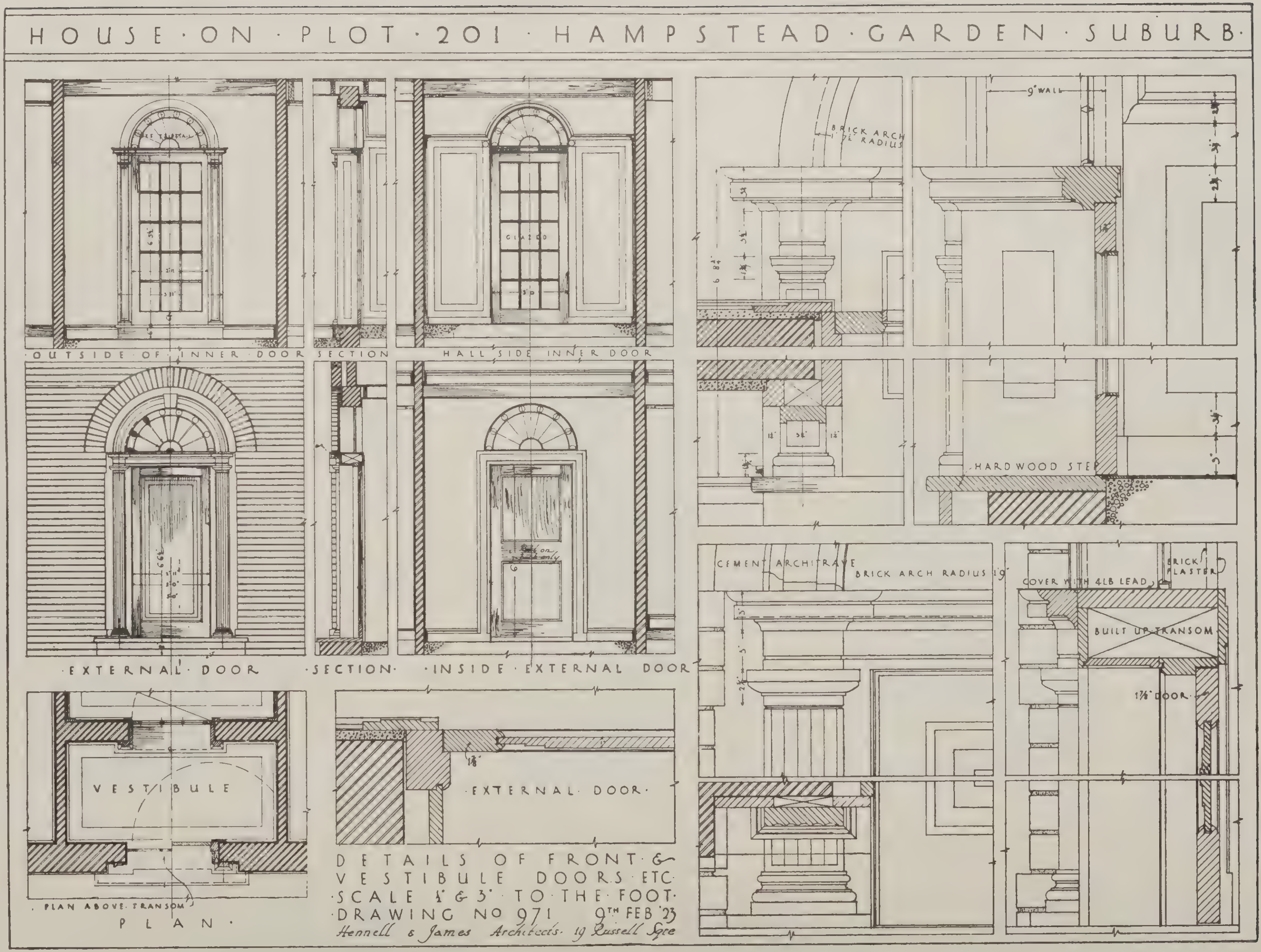
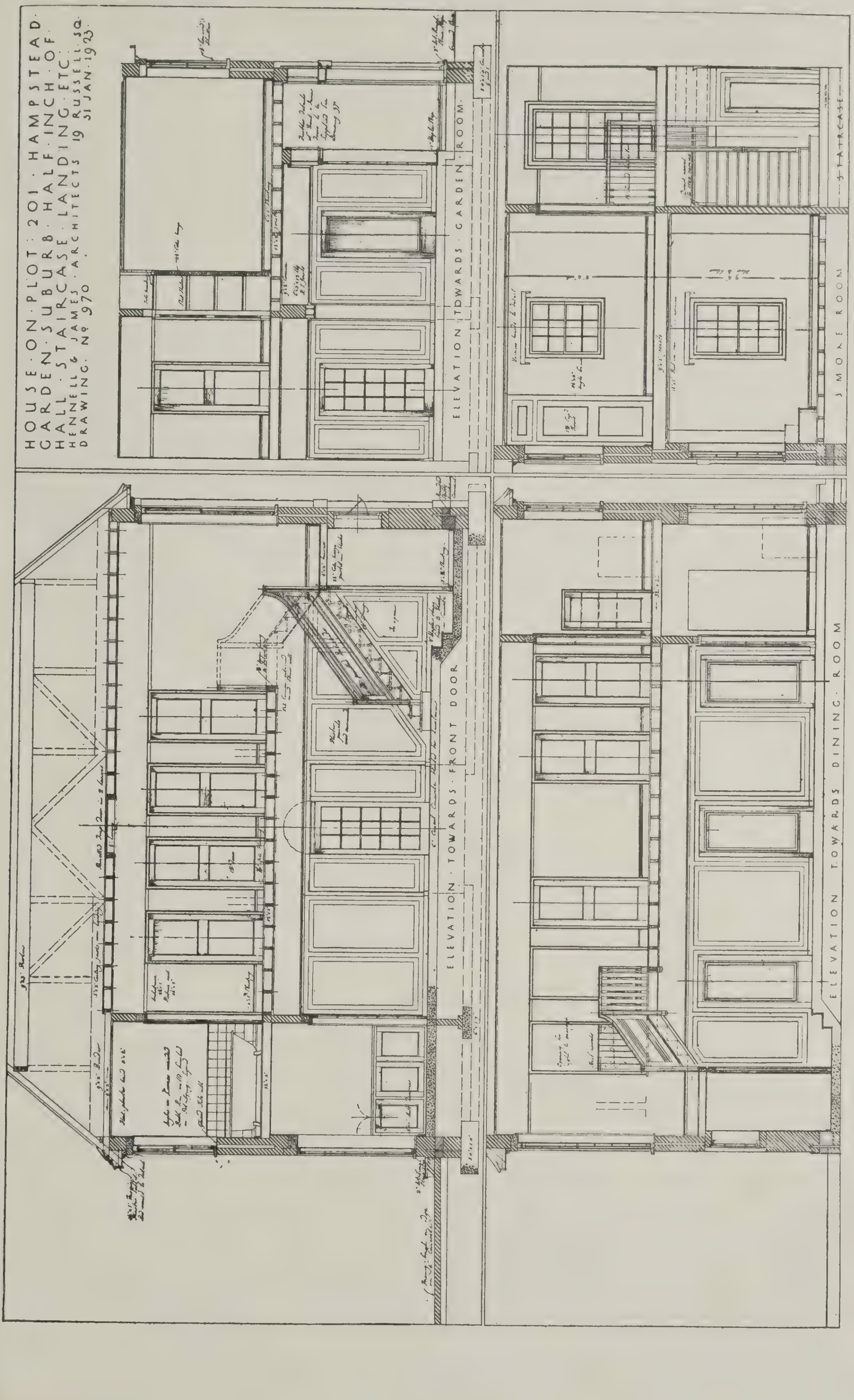


HOUSE IN HAMPSTEAD GARDEN SUBURB: DETAILS OF FRONT AND VESTIBULE DOORS. HENNELL AND JAMES, ARCHITECTS.


HOUSE·ON·PLOT·201·HAMPSTEAD
GARDEN·SUBURB·HALF·INCH·OF·
HALL·STAIRCASE·LANDING·ETC·
HENNELL & JAMES ·ARCHITECTS 19 RUSSELL SQ.
DRAWING· Nº 970 · 31 JAN 1923
ELEVATION·TOWARDS·GARDEN·ROOM·
STAIRCASE
SMOKE ROOM
ELEVATION·TOWARDS·FRONT DOOR
ELEVATION TOWARDS DINING ROOM

HOUSE IN HAMPSTEAD GARDEN SUBURB: DETAILS OF HALL STAIRCASE, LANDING, ETC. HENNELL AND JAMES, ARCHITECTS.

# Contemporary Art

*The Goupil Gallery.*

It is some years since I began to enjoy F. H. S. Shepherd's paintings of the insides of rooms—furniture, musical instruments, and those sorts of things. Then I liked his landscapes with their natural, primitive adjuncts; later his portraits, with their artistical, primitive incentives. I like all these still, but I felt the need of half a dozen dominating things in this show of good all-round work; dominating either as subjects or as exercises in painting. There is ample evidence of what the painter can do. I am quite certain that when F. H. S. Shepherd braces himself up to a deliberately strong assertion he will produce something very fine.

A. Neville Lewis is a South African: he was a student of the Slade School, and he is a lover of gipsies. "Albert in a Striped Jersey" is a magnificent fellow, splendidly realized and strongly painted. No one else there is so good, although "Catherine" and "Moses with a Hat" run him close. Everyone who likes gipsies, and everyone who likes Augustus John's gipsies, and, indeed, that artist's general output, will like Neville Lewis's work. He makes the nearest approach of any painter to kinship with John in style, but he is a realist, while John is a seer, so there is no comparison permissible either way.

*The Independent Gallery.*

Thirty-two paintings and twenty-three drawings are sufficient material for the appraisement of an artist, especially if they are good. Roger Fry's best are the little harbour scenes, wonderfully realized, projecting just the impression obtainable by getting near to large sails and heavy hulks of boats and other things by the immediate quayside.

*The St. George's Gallery.*

It is pleasant to welcome a new society. The Modern English Water-Colour Society claims an English descent and a consequent English practice in the art of which we are so proud. It does not follow that the claim is established or needs to be at the first, or, indeed, at any subsequent exhibition so long as the work is good as it is at this. How can drawings by Charles Ginner and Maresco Pearce, or Ethelbert White ever be in the tradition of de Wint, and David Cox, and Birket Foster? It doesn't matter. Ginner's "High Class Butchers" is as good as anything Birket Foster ever painted —to-day. It would have been a most unpleasant thing if it had happened fifty years ago. The drawings—Randolph Schwabe's, Henry Rushbury's, Francis Unwin's—are bound to be good, and that is why the stress of the introduction to the catalogue seems to be in the wrong place. The thing that matters, however, is that the initial show is an excellent, an interesting, and a valuable one.

*The Mansard Gallery.*

The best feature of the eighteenth exhibition of the London group is the sculpture. There are "Ann," and "'Bob' McAlmont," by Frank Dobson, strong, naturalistic pieces in bronze, excellently conceived and modelled; Margaret Hayes's wonderful fat baby "John" in stone, a bust, "Elizabeth," by Betty Muntz, and a charming statuette in plaster by Maria Petrie. Dobson's "Seated Torso" in stone is the only cubist work in this section. Randolph Schwabe's "Nude," a drawing in charcoal and tint, shows an admirable containing line of much surety, and Frank Medworth's pencil and sanguine "Mademoiselle Blonde" is another fine drawing. Francis Unwin's woodcut, "Beeston Church," is a good print, and so is S. de Karlowska's "Landscape." The most accomplished painting is "At Littlehampton," by Frederick J. Porter. Richard Carline's "Portrait of a Woman" is very good, and Mary Godwin's bedroom scene, "Reminiscences," has points. The little things that Walter Sickert sends are full of interest.

*The Fine Art Society.*

The exhibition of etchings, etchings in colour and water-colour drawings by T. François Simon, a Czecho-Slovak artist, seems to draw attention not only to this individual painter's work, but to the astonishing artistic activity of the new state. Everywhere its production of painting, prints, and sculpture is to be noted; it is the coming force that will have to be dealt with. It is a business-like force, and this exhibition is noteworthy not only for the quality of the work of François Simon, but the air of its having been prepared in order to be sold!

The memorial exhibition of the paintings and water-colours of F. A. W. T. Armstrong, a prominent West of England artist, who died in 1920 at the age of seventy-one is full of interest and honest work. It is typical of a class of artist of worthy powers who works in the provinces, is little known in London, and yet builds up a deserving reputation and a solid achievement. The 120 works to be seen include some fine mountain studies.

KINETON PARKES.

# "An Academic Dress"

The following document is of uncertain origin. An Associate of the R.I.B.A. says he found it lying upon his drawing-board, and asks us for help in saying to what it refers:—

ROBES.

"A BEE IN THE BONNET."

*Addenda.*

The following distinguishing badges were held up pending the decision of the small sub-committee in conjunction with officials of general and allied mental hospitals as to whether the term "bee in the biretta" should be carried out by forming a slit or slits in the lining of the same and exposing the insect or insects, or the word "on" be read into the meaning—as true art includes simplicity.

And it is considered that what is decided on will assist those members who wear shoulder marks of rank and medals on their robes, or special constable badges, volunteer badges, or other badges of distinction as the academy bone.

*Licentiates.*—One bee on front of biretta.

*Associates.*—One queen bee on front of biretta. Associate Member of Council one ordinary bee each side of above.

*Fellows.*—One queen bee on front of biretta, and one ordinary bee on each revers. If Member of Council the queen bee in front to have supporters as above.

*Honorary Associates.*—One drone bee on front of biretta.

*Honorary Fellows.*—One drone bee on front of biretta, and one on each revers.

*Vice-Presidents.*—One queen bee in front surrounded by an orle of No. 8 ordinary bees, and No. 4 ordinary bees on each revers.

*President.*—As above, but No. 8 ordinary bees on each revers with the addition of not more than No. 365 ordinary bees, except in leap year No. 366, and an odd wing distributed over the whole biretta.

*Past-Presidents and Vice-Presidents.*— As those gentlemen who held office befor 1922 have had no part in the presen glory of the Institute they may only wea badges of their rank as Fellows. Th badges of future Past-Presidents and pas Vice-Presidents are :—

*Past Vice-Presidents.*—One queen be on front of biretta in an orle of No. ordinary bees, and No. 2 ordinary bees o each revers.

*Past-Presidents.*—One queen bee o front of biretta in an orle of No. 6 ordinary bees, No. 6 ordinary bees on eac revers, and No. 24 ordinary bees space round the biretta.

# R.I.B.A. Council Meetin

Following are notes from the minute of the last council meeting of th R.I.B.A.

Revision of Charter and By-Laws- It was decided to summon a speci general meeting on April 30 for th purpose of considering the revision of th Charter and By-Laws, and also proposals for the adoption of an academ costume for members of the R.I.B.

Reinstatement.—The following e members were reinstated.—As Fello Alfred Arthur Cox; As Associate, J. Cockrill; As Licentiate, K. B. Spurgi

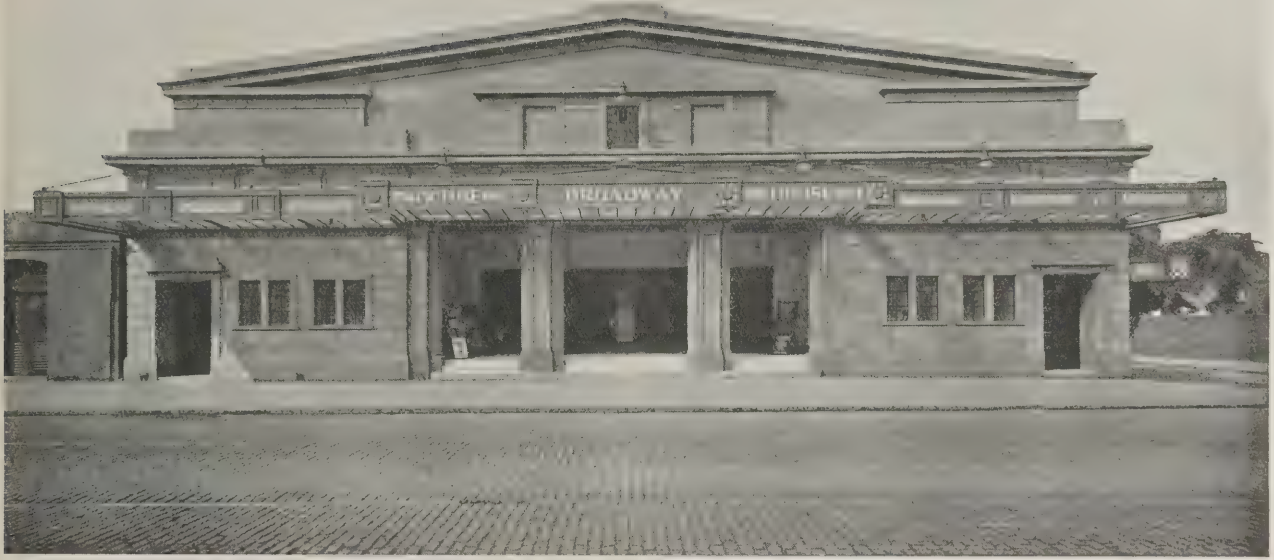
National Association for the Preventi of Tuberculosis.—Mr. Edwin T. Hall a Mr. Rupert Savage were appointed represent the R.I.B.A. at the nin annual conference of the National Asso ation for the Prevention of Tuberculo at Birmingham in July, 1923.

# The Broadway Picture House, Bootle

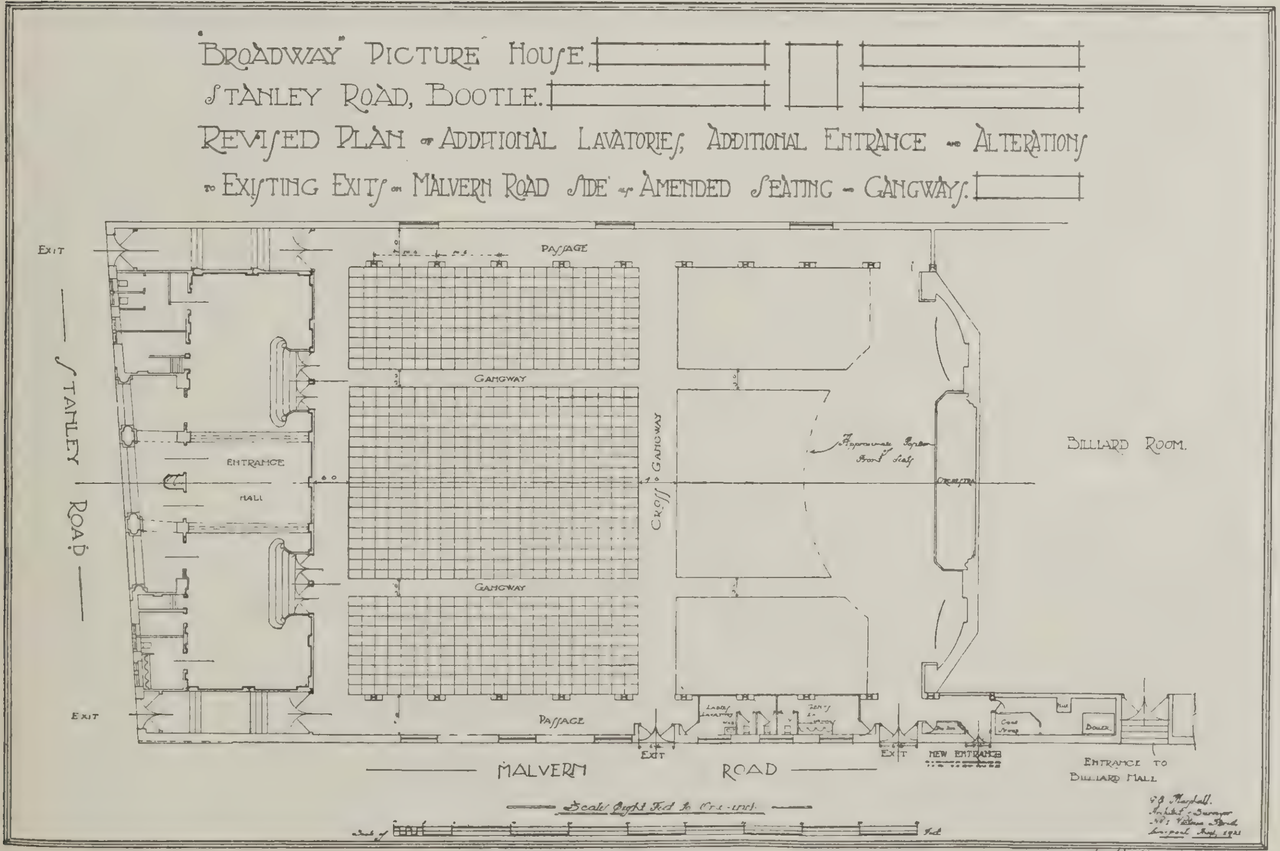
The cinema illustrated on pages 777 779 has been erected in Stanley Ro Bootle, from the designs of Mr. G. Marshall, architect. It accommoda over fourteen hundred people. T general contractor was J. A. Mileston of Wallasey, the sub-contractors bei as follows:—Burmantofts, Leeds (ter cotta); Musgraves, Ltd., Liverp (sanitary ware and fittings); Macker & Golland, Liverpool (electric wiri and ventilation); Tanner & Sons, Liv pool (plasterwork); Brightside Foun and Engineering Co., Liverpool (heati apparatus); Messrs. Jelley, of Boo and H. Rimmer, Liverpool (artists a craftsmen).

# The Broadway Picture House, Bootle

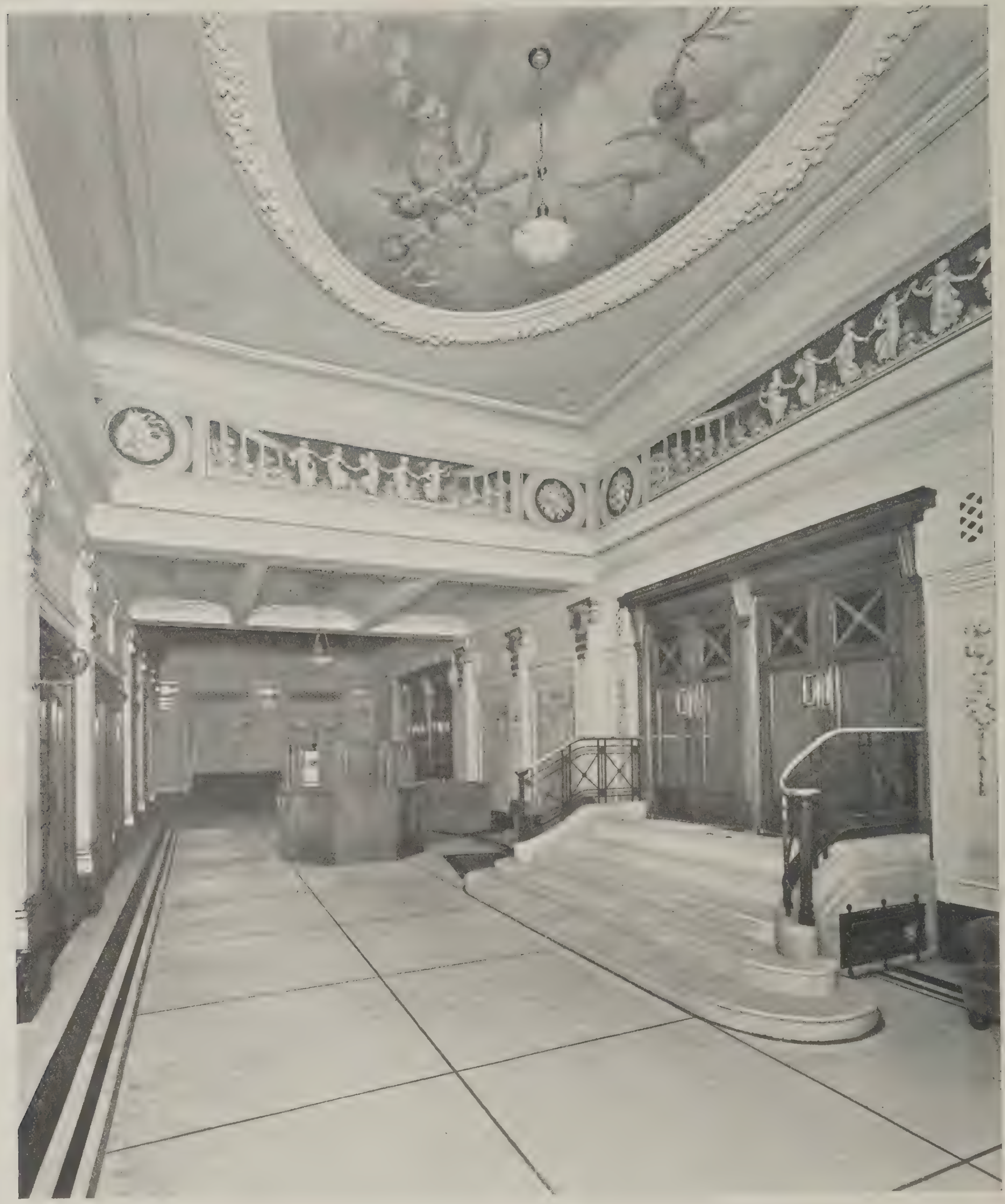
G. E. MARSHALL, Architect



THE ELEVATION TO STANLEY ROAD.

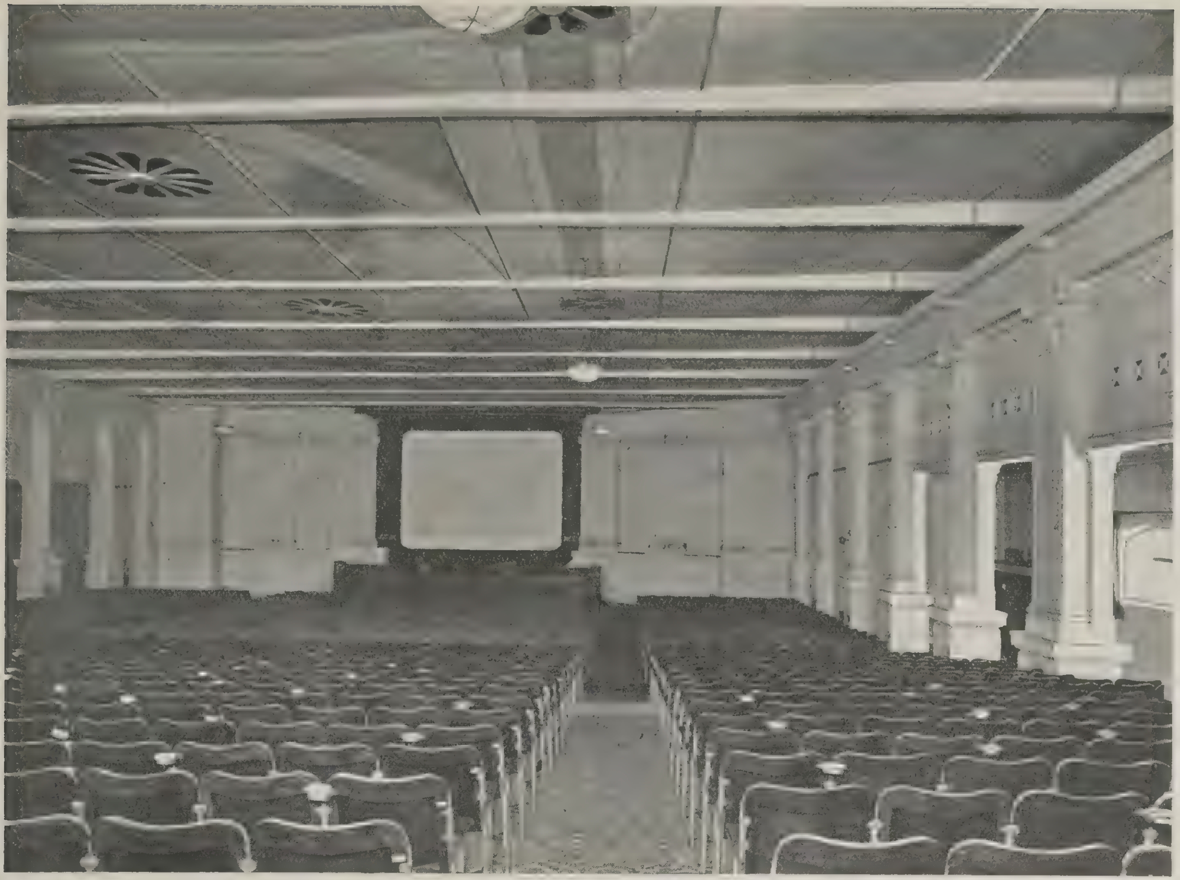

"BROADWAY" PICTURE HOUSE.
STANLEY ROAD, BOOTLE.
REVISED PLAN OF ADDITIONAL LAVATORIES, ADDITIONAL ENTRANCE AND ALTERATIONS
TO EXISTING EXITS ON MALVERN ROAD SIDE & AMENDED SEATING - GANGWAYS.
EXIT
STANLEY ROAD
PASSAGE
GANGWAY
ENTRANCE
HALL
CROSS GANGWAY
Approximate Position of Front Seats
ORCHESTRA
BILLIARD ROOM.
GANGWAY
EXIT
PASSAGE
EXIT
EXIT
NEW ENTRANCE
MALVERN ROAD
ENTRANCE TO BILLIARD HALL
Scale Eight Feet to One inch
Feet
G. E. Marshall.
Liverpool

PLAN

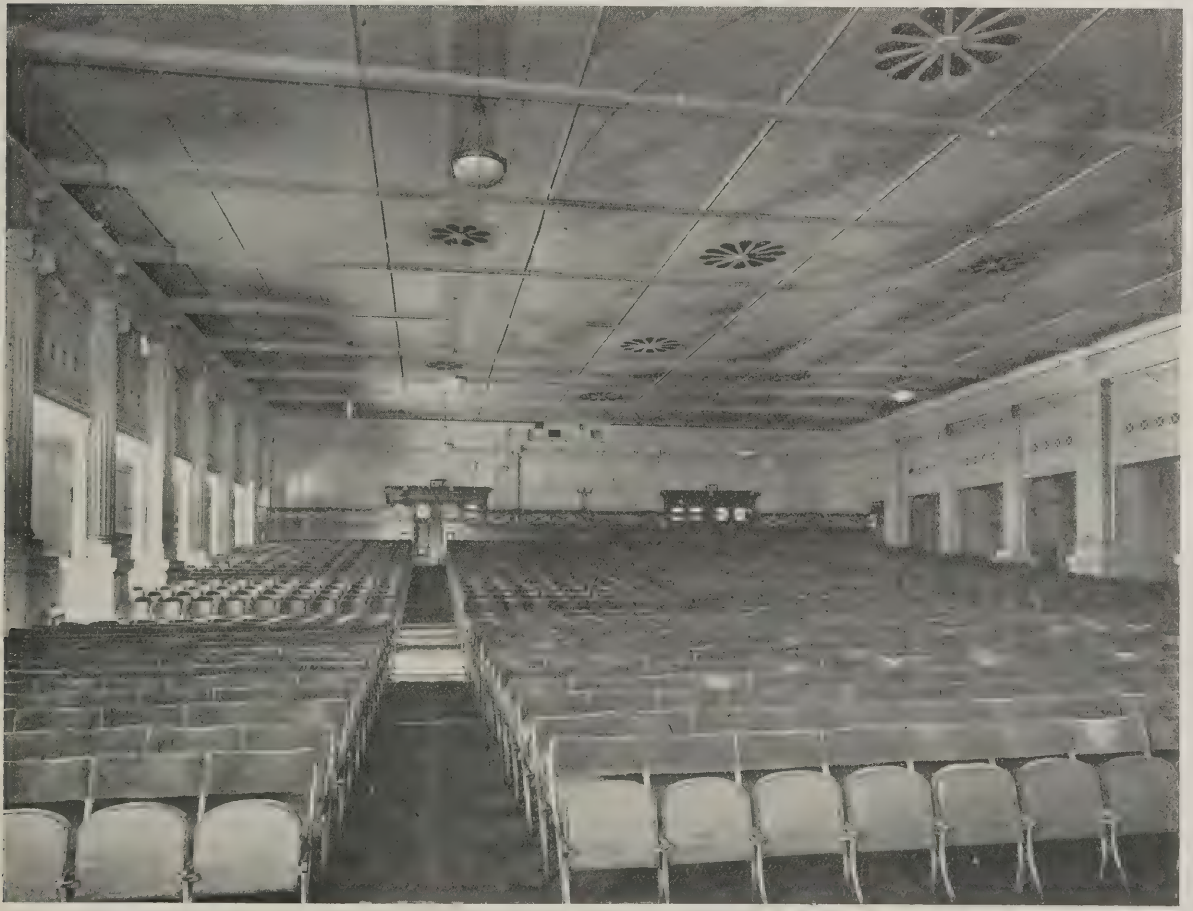


THE BROADWAY PICTURE HOUSE, BOOTLE: THE LOUNGE ENTRANCE

G. E. MARSHALL, ARCHITECT.



INTERIOR: LOOKING TOWARDS SCREEN.



INTERIOR: VIEW FROM SCREEN.

THE BROADWAY PICTURE HOUSE, BOOTLE. G. E. MARSHALL, ARCHITECT.

# A Town-planning Symposium

THE publication of the proceedings of the town-planning conference which was held at Manchester in October last year is another valuable addition to the literature on the subject of town planning.* Each town and district has its particular problems—South Wales, Doncaster, Dublin, and Manchester are each of them individual; the one is characterized by its unusual natural configuration; another by tracts of unexploited coal; while the third has recently been devastated by civil war. In no area in the whole kingdom, however, is the necessity for a comprehensive scheme of development more necessary than that of which Manchester is the heart. The area concerned is comprised within a radius of fifteen miles from the centre of the city and implicates no less than seventy-three local authorities. To traverse the district is to pass imperceptibly from town to town where much is sordid, chaotic, and depressing. The particular character of the problem arises from the cotton industry, of which, of course, Manchester is the centre. From the encircling towns, Rochdale, Oldham, Ashton, Bolton, and the rest, the material pours in straight from the looms to the great warehouses, where it is folded and packed and sent out again. Yet, in addition to this, the city has its own domestic affairs. It is the seat of a university; it is a cathedral town; an inland port; and it possesses, moreover, a high standard of cultural life.

The necessity for co-ordination, again, is clearly seen by the number of public services within the area. Lord Derby enumerated these in his address to the conference: fifty-one concerns supplying gas; thirty-five supplying water; thirty supplying electricity; twenty-nine running trams and omnibuses; 100 controlling drainage; and 108 maintaining highways. It was once assumed that competition was the sure road to efficiency. The fallacy of this theory has now been made apparent, and a district with one or two well-managed and well-equipped gas or electricity concerns will be better and more cheaply served than one in which a multitude of small undertakings compete and overlap.

However, the extreme value of the publication that we are considering does not lie in any local application to Manchester and the surrounding districts, but in the fact that it contains a series of papers of the utmost diversity read at the conference by men of varied outlook and high intelligence. It is indeed a veritable symposium on town planning, and constitutes, perhaps, the most interesting collection of papers on the subject that has ever been brought together in this country.

If there be any that still doubt the value of town planning here is ample enough evidence for conversion. The fact of the matter is that town planning is the very soundest economy, and each year the nation spends millions of pounds because her cities have not been town planned in the past. Mr. Orr, late director of housing to the London County Council, pointed out at the conference how by not securing sites for open spaces in advance of the development of a town when this could be done at agricultural prices, either the town lacks open spaces subsequently or these must be acquired when the value of the land has enormously increased.

But the matter does not end there. What are the results of insufficient open spaces in a town? Illness, increased number of street accidents due to children turning the streets into playgrounds, a lower vitality, and so on through endless ramifications, each one of which is directly translatable into terms of currency showing a definite national monetary waste, in addition to indefinite human suffering.

Mr. Pepler pointed out how a nation can only survive if its business is conducted economically, and this town planning seeks to do. Moreover, since the available amount of money for town improvements is limited it behoves careful expenditure. This is ensured by a co-ordinated town-planning scheme.

Mr. Adams, in replying to Mr. Hopkinson, emphasized the same point and stated, furthermore, truly enough, that "economy does not mean keeping money in our pockets. It consists of using common sense and sound judgment as to the expenditure we must incur in any case." And Captain Reiss showed by an example in the London docks, where the riverside is occupied by dwelling-houses so that the factories and warehouses are placed inland, and by an example in Manchester, where a street widening due to lack of foresight in the past cost the city £3,000,000, that town planning is a sound investment.

Other aspects of the subject are dealt with. Professor Adshead's paper is entitled "Imagination in Town Planning." It is full of wisdom. A small but interesting point that he makes is that the more exiguous an open space the greater the expense of upkeep; "it should always be remembered that a tight scheme means an urban finish—well-trimmed hedges, closely cut grass, and neat verges." Whereas a large green of an acre or upwards or a wide grass margin of 15 ft. look after themselves. Another interesting suggestion—we choose these at random, for the whole paper is full of good things—is that housing sites of uniform houses, that is to say, uniform as regards their accommodation, and the lives and habits of their inhabitants—should not be so large as to accommodate more than 500 houses, otherwise the effect is devastating monotony, which must act to the ultimate detriment of the inhabitants.

One of the papers of a less specialized nature and crammed with good sense and sound advice was that read by Mr. Frank Elgood on "Town-planning Schemes." After showing that town planning is everyone's concern, he passes on to the consideration of a scheme under certain definite headings. The broadest aspect of town planning is doubtless sociological, and an admirable paper dealing with the matter from this standpoint was read by Mr. Ewart Culpin. The sociologist comes in first, for the town is primarily a place for people to live in, and live, we hope, happily. The business man and the tradesman's point of view, about which we hear so much that we sometimes wonder if anyone else matters at all, arise later, so do the activities of the specialists, of the architect, the engineer, and the surveyor. Of the more specialized papers those of Sir Henry Maybury on "Arterial Roads and Town Planning," Professor Abercrombie on "Regional Town Planning," and Mr. Ebenezer Howard on "Garden Cities and Satellite Towns," are of especial interest.

The final paper, by Alderman Thomas Turnbull, deals with the work of the Manchester and District Joint Town Planning Advisory Committee, of which he is the chairman. The first meeting of the committee was held in January 1921. The whole of that year was spent in organization and in collecting information, and the subsequent year, up to the date of the conference, saw town-planning activities begin over 100,000 acres within the area of the joint committee.

The volume contains a variety of illustrations, all of them being reproductions of exhibits at the exhibition which was held in connection with the conference. The illustrations comprise sections of roads, plans of various cities, and schemes, some American propaganda cartoons from "Progress," the official organ of the Citizens' Committee on City Plan, Pittsburgh, U.S.A. Interesting is the chart showing the loss of sunshine energy in Manchester and surrounding cities, the maximum being 25 per cent. or more. We should have thought this a low estimate. We have the word of the Committee on Smoke and Noxious Vapours Abatement that the increased cost in household washing alone at Manchester due to smoke is £290,000 Here is another argument in favour o town planning. This sum represents a capital loss of nearly £6,000,000 in a single town. Proper town planning and sane methods of fuel consumption would have saved much of this. The fact that a paper was not devoted to the smoke problem surprises us. No town can b properly planned that fails to take ful note of it, and who could have been mor fitted to speak on the subject than th then Lord Mayor of the city, Mr. E. D Simon, who was not only a member o the Smoke Abatement Committee, bu one of the two members who went and studied the subject in Germany, the othe being the chairman, Lord Newton?

Particularly interesting among th illustrations—is a series of five plans c Manchester: Manchester as it was i 1845; Manchester as it was in 1920 Manchester as it might have been in 192 had it developed in accordance with town-planning scheme; Manchester i 2000 as it will be if it continues to develo on the lines of the past; Manchester i 2000 as it may be if developed in accord ance with a town-planning scheme. Th series in itself is sufficient surely to convinc the most sceptical of the financial wisdo in adopting town-planning measures.

We commend the book to everyone, an congratulate the municipal authoriti of Manchester on their wise decision i publishing it.

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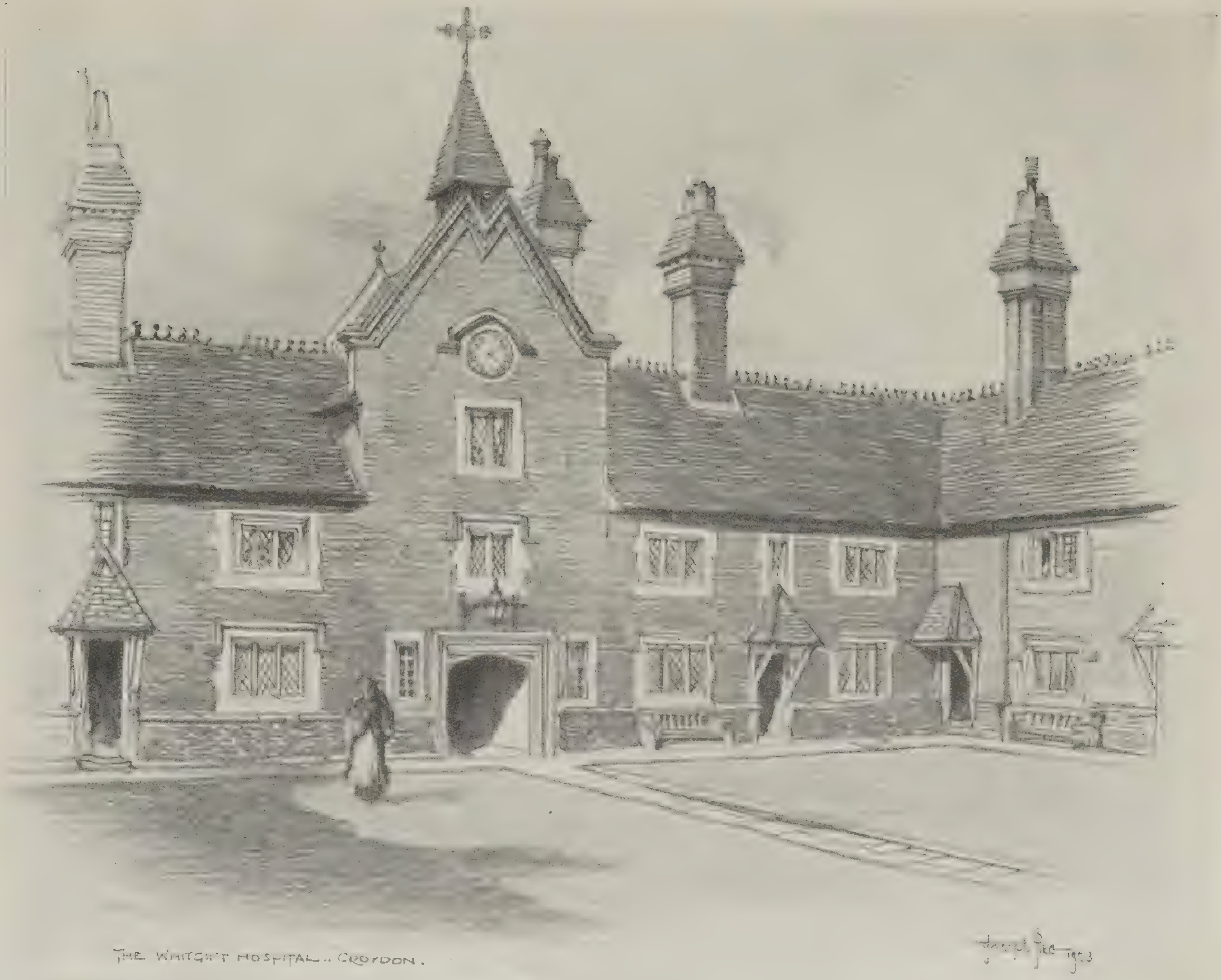
* The Manchester and District Joint Town Planning Advisory Committee. A Record of the Town Planning Exhibition and Conferences, Manchester, October, 1922. The Town Clerk, Manchester. Post free 8s. 6d.

# The Whitgift Hospital, Croydon

From a Drawing by Joseph Pike



The artist has chosen a corner of the picturesque quadrangle, and has caught the air of quiet which pervades the place.

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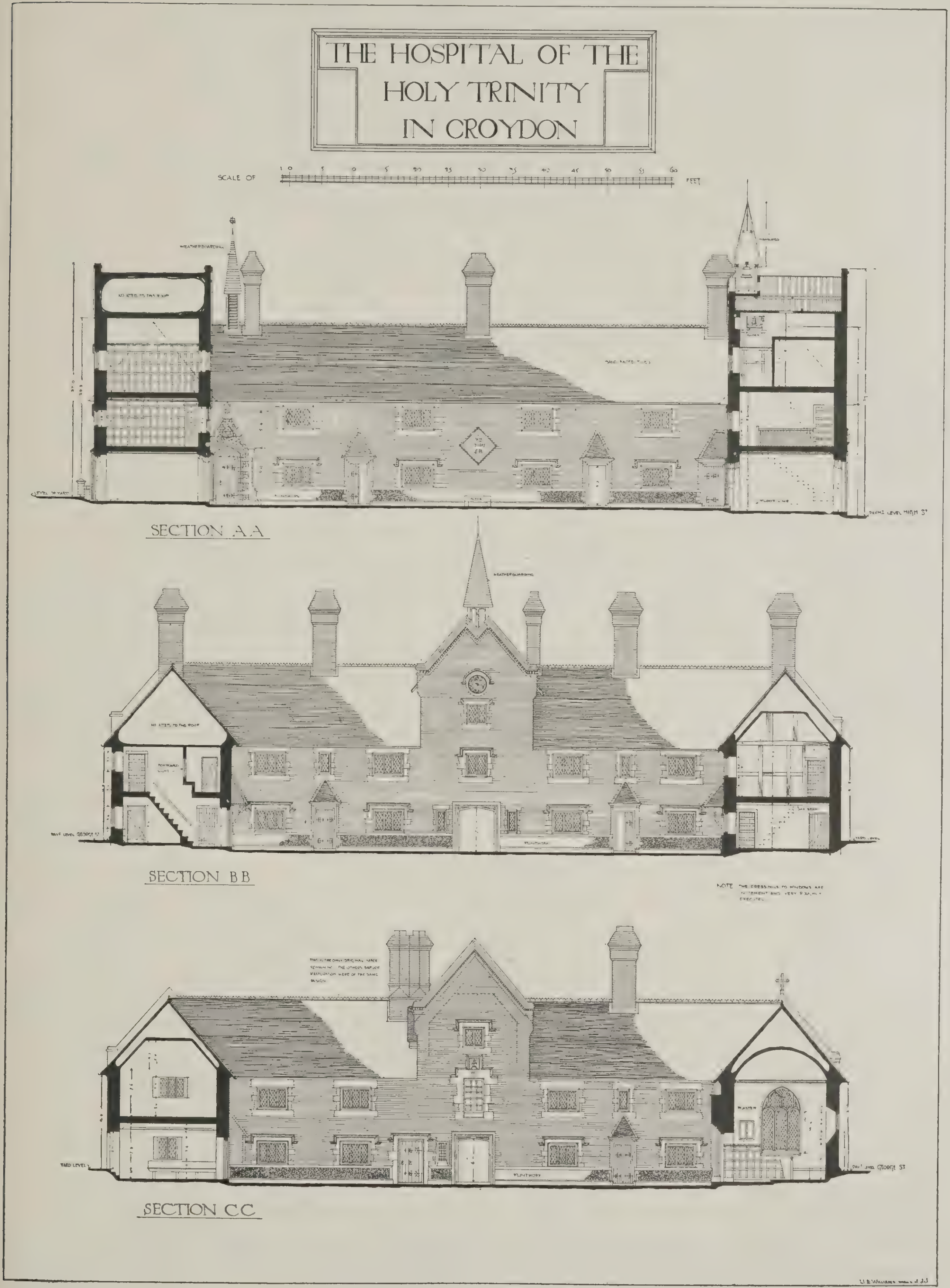
# Measured Drawings. 28.—The Whitgift Hospital, Croydon

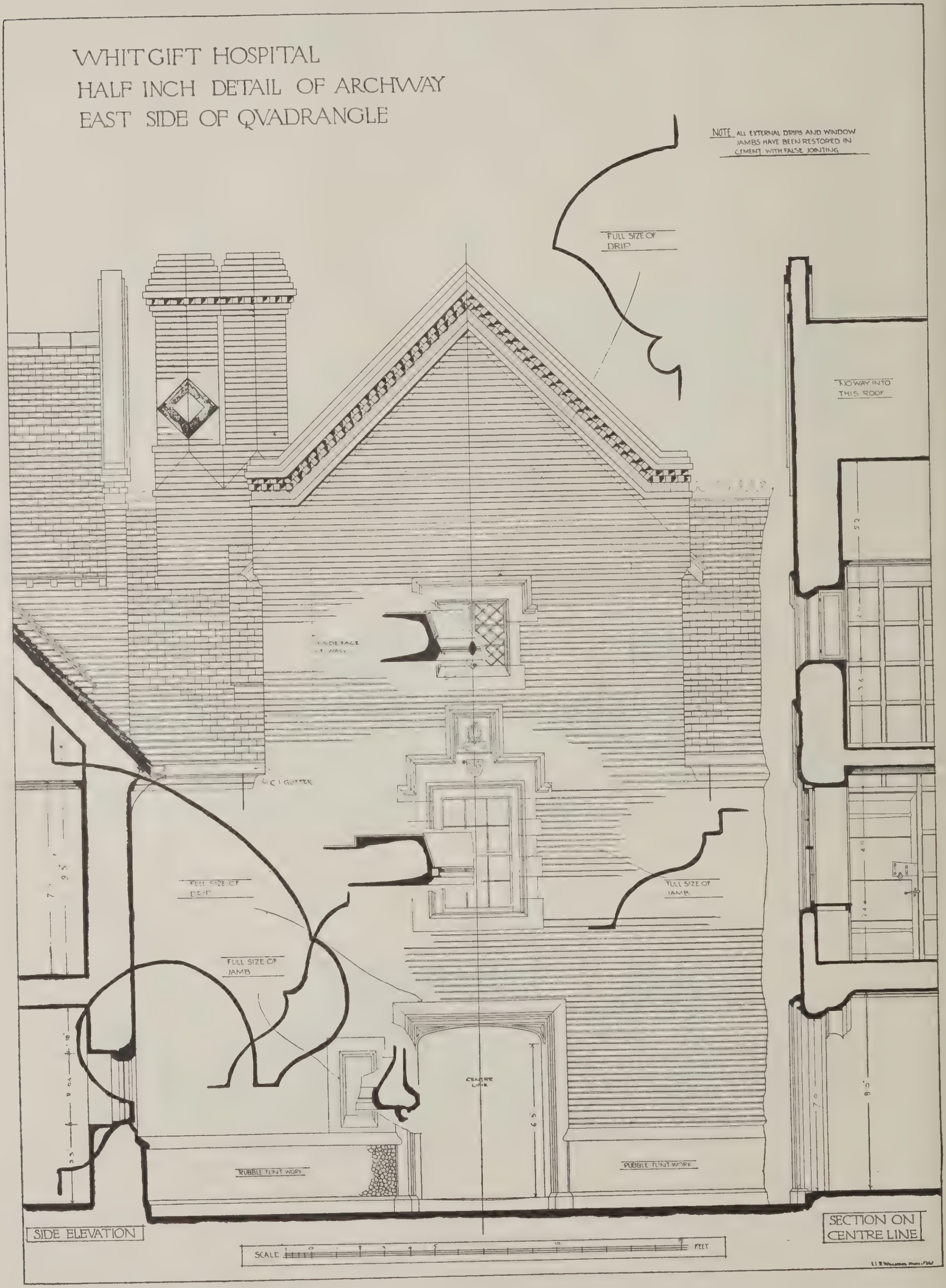
Measured and Drawn by Ll. E. Williams, A.R.I.B.A.



As announced last week, the House of Lords have removed from the Croydon Corporation Bill all powers relating to the compulsory acquisition of Whitgift Hospital. Thus the building is saved from demolition. The above drawings and those on the following pages should be studied in conjunction with the plans and elevations published in our last issue.

# Measured Drawings. 29.—The Whitgift Hospital, Croydon

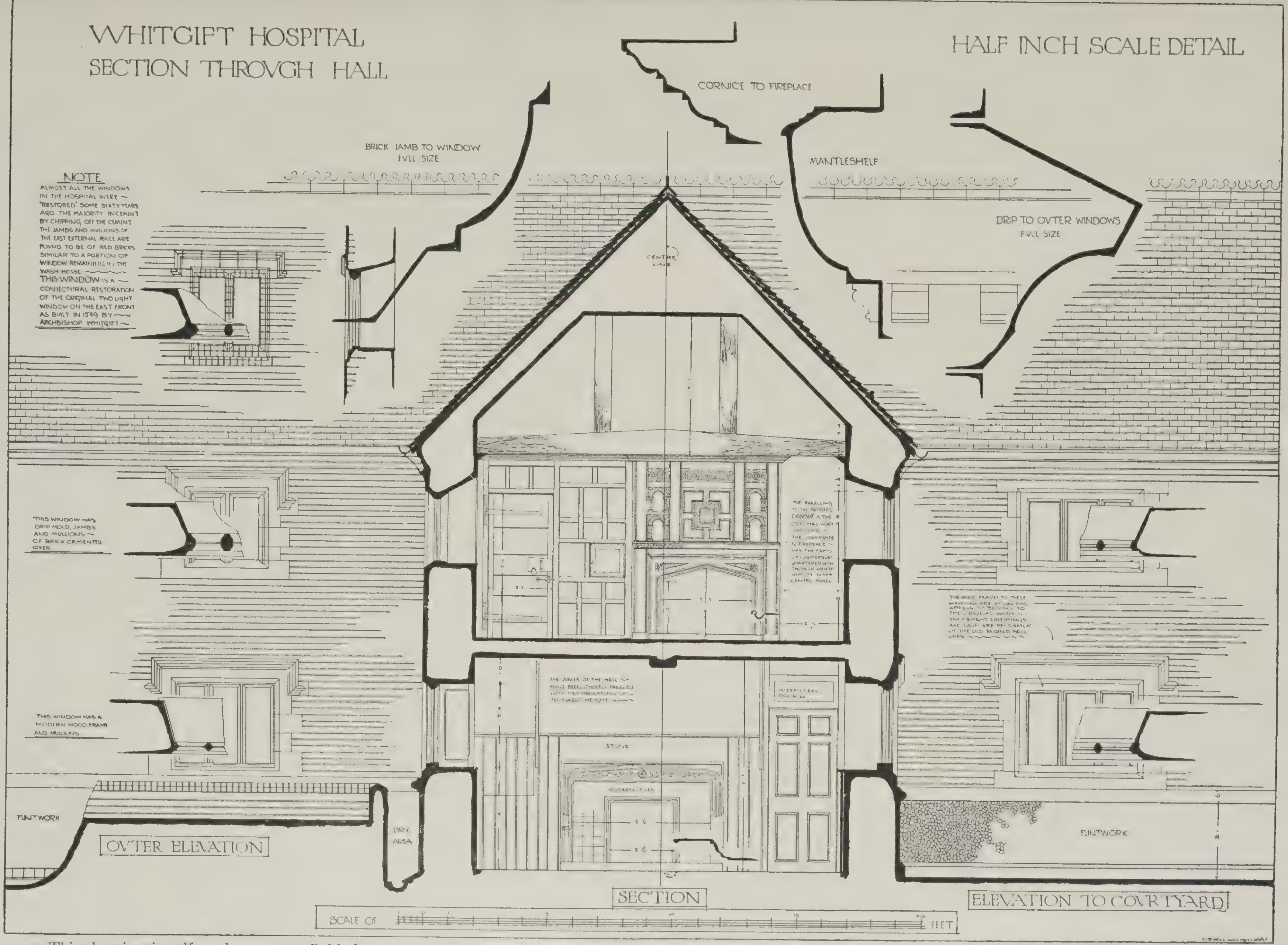
Measured and Drawn by Ll. E. Williams, A.R.I.B.A.



These details are of the archway on the east side of the Quadrangle. The elevation, of which it is the central feature, is shown on section CC on the previous plate.

## 30. The Whitgift Hospital, Croydon

Measured and Drawn by Ll. E. Williams, A.R.I.B.A.


WHITGIFT HOSPITAL
SECTION THROVGH HALL
HALF INCH SCALE DETAIL
CORNICE TO FIREPLACE
BRICK JAMB TO WINDOW FVLL SIZE
MANTLESHELF
DRIP TO OVTER WINDOWS FVLL SIZE
NOTE
ALMOST ALL THE WINDOWS IN THE HOSPITAL WERE "RESTORED" SOME SIXTY YEARS AGO THE MAJORITY IN CEMENT BY CHIPPING OFF THE CEMENT THE JAMBS AND MULLIONS OF THE EAST EXTERNAL FACE ARE FOUND TO BE OF RED BRICKS SIMILAR TO A PORTION OF WINDOW REMAINING IN THE WASH HOUSE
THIS WINDOW IS A CONJECTURAL RESTORATION OF THE ORIGINAL TWO LIGHT WINDOW ON THE EAST FRONT AS BUILT IN 1549 BY ARCHBISHOP WHITGIFT
CENTRE LINE
THIS WINDOW HAS DRIP MOLD, JAMBS AND MULLIONS OF BRICK CEMENTED OVER
THIS WINDOW HAS A MODERN WOOD FRAME AND MULLIONS
THE WALLS OF THE HALL HAVE BEEN CHEAPLY PANELLED
TO DADO HEIGHT
STONE
5 6
2 6
FLINTWORK
DRY AREA
OVTER ELEVATION
SECTION
ELEVATION TO COVRTYARD
SCALE OF FEET

This drawing is self explanatory. Behind the audience chamber shown on the first floor of the section is the small room, now occupied by the warden, where at times Whitgift himself used to lodge.

# Correspondence

## The R.I.B.A. Elections

*To the Editors of* THE ARCHITECTS' JOURNAL.

SIRS,—Mr. Perks's letter in your last issue is not convincing. Is it not a fact that the present Council, and not the old one, started the political controversy? Let us see. If my memory serves me well, the last Council proceeded on a policy of Registration which had been decided upon by the previous Council under the presidency of Mr. John W. Simpson. The general body backed this policy in principle only on one or two occasions, leaving the details to be considered at a later date. In due course the last Council, after a year's labour at least, were about to convey to the general body their detailed proposals when—just prior to the last election—the party led by Mr. Perks rushed into Press and circularized the profession against the proposals, as being designed to swamp with outsiders the then existing members of the R.I.B.A.

We received circulars almost daily and the Press was flooded with politics by those who now calmly state that "the old Council started this political controversy." Can it be that the present Council really have such short memories or is it that facts make no impression upon them?

The result of the election is well known. Following precedent the "destructionalists" were listened to and were given a chance. What use have they made of it? At the sacrifice of much urgent business—long agenda stood unreached for months—they produced their Registration proposals which were vetoed by the general body by a huge majority.

This was a vote of no confidence in the present Council. But did that convince our political friends? No! They still think the profession will return them at the coming election. I think not. What the profession needs is a Council determined to promote its best and widest interests, and not one which will spend a year promoting a Registration Bill which nobody wants, deleting from the Kalendar a "Code of Professional Conduct" which has stood for many years as a guide to the younger—and sometimes to the older—members of the profession, and neglecting to proceed with measures recommended by its responsible committees. All worthy members of the R.I.B.A. desire "to maintain our great Institute in the unique position it has gained," but many of us are unable to agree with the methods adopted by the Council during the past year to achieve this end.

HERBERT A. WELCH.

## The Society of Architects Dinner

The Society of Architects held their annual dinner at Prince's Restaurant on Wednesday night last week, Mr. E. J. Partridge, president, being in the chair.

Mr. A. J. Taylor, vice-president, proposed "The Guests."

Lord Onslow, in reply, said the House of Lords, in preserving to the nation the ancient and magnificent Whitgift Hospital at Croydon, had rendered a not inconsiderable service to architecture. There were many symptoms in the debate which were a very satisfactory augury for the future. Not one speaker dissented from the motion before the House, although they included some of quite opposite political views to his. When the Housing Bill at present under discussion was passed, the duties of architects would begin, and those duties would not be light. The problem was urgent, and future generations would judge the present by the way in which the housing problem was dealt with.

Mr. Paul Waterhouse, P.R.I.B.A., said that it had been said that their two societies moved on parallel lines. He would not say that, because they had it on the authority of Euclid that parallel straight lines might never meet, whilst he dared to hope that in the near future their societies would meet.

Viscount Leverhulme, in the course of a witty address, said that he was certain that in America architecture was making greater strides than anywhere else in the world.

Sir Philip Pilditch, M.P.; Mr. G. C. Lawrence, president of the Bristol Society of Architects; and Mr. W. H. Nicholls, president of the National Federation of Building Trades Employers, also replied.

Among those present were: Lord Leverhulme, Sir Kingsley Wood, the Mayor of Westminster, Mr. J. McClare Clark, Mr. Stanley Hamp, Mr. Charles Denny, Mr. F. Gill, Mr. H. Molyneux-Killik, Mr. H. V. Lanchester, Mr. J. C. Squire, Mr. A. B. Cowtan, Mr. W. E. Riley, Mr. W. T. Jones, Mr. P. E. Thomas, Mr. F. J. Gayer, Mr. H. N. Kerr, Mr. F. J. Walton, Mr. H. Marryat, Mr. W. P. Woodhouse, Professor A. E. Richardson, Mr. W. Reynolds-Stephens, Mr. E. J. Elford, Mr. E. Fiander Etchells, Mr. Ian MacAlister, Mr. F. R. Yerbury, Mr. Ivor P. Jones, Mr. E. J. Sadgrove, Mr. A. F. A. Trehearne, Mr. C. F. Norman, and Mr. C. McArthur Butler (secretary).

## The A. and S.A.P.U. and Salaries

Minimum salaries (based on the cost of living at December 31, 1922): 19 years of age and over, £3 8s. per week; 26 years of age and over, £5 11s. per week. These figures form the striking feature of a handbill issued by the Architects' and Surveyors' Assistants' Professional Union. It is stated on the handbill that the Union has decided that the salaries of all professional and technical assistants covered within its membership should be computed from the following July, 1914, basis, viz.: £2 per week, at 19 years of age; £3 10s. per week, at 26 years of age. To these is to be added temporary increment according to the Civil Service Award at present operating, viz.: 130 per cent. on the first £91 5s. per annum, 60 per cent. on the next £108 15s. per annum, *less* 1/26th of the total temporary increment for every 5 points fall in the Board of Trade index of the cost of living below 130 per cent. above the July, 1914, standard; thus, if the cost of living is 80 per cent. above that of July, 1914, 10/26ths of the total temporary increment is to be deducted. The handbill states, "Richer experience, unusual talent and higher office responsibility, however, entitle their owner to equivalent extra remuneration. Thi should in all cases be computed and adde to the above minima, which only represen the ordinary grades of service and are i no case meant or desired to fix a standard Any doubt as to the precise assessmen of a member's salary under this headin should be followed by an enquiry to th general secretary of the Union. Th co-operation of all members is invited t establish and maintain these scales. The head offices of the Union are a 36 Victoria Street, S.W.1.

## The Housing Bill

In the course of a letter to "Th Times" Mr. Paul Waterhouse, P.R.I.B.A says: The Government's Housing Bi contains many provisions which will b controversial, but there is one clause i the Bill to which I wish to draw atten tion, namely, Clause 13, since it dea with a matter of great interest to thos connected with any class of building an land development in a manner whic should not give rise to any controvers The proposed clause is as follows:—

"The Housing, Town Planning, et Act, 1909, shall have effect as if f section 44 thereof the following secti were substituted:

"'If the Minister is satisfied, by loc inquiry or otherwise, that the erection any buildings within any borough or urb or rural district is, or is likely to b unreasonably impeded in consequence any by-laws with respect to new stre or buildings in force therein, the Minist may require the local authority to revo such by-laws or to make such new b laws as he may consider necessary f the removal of the impediment. If t local authority do not within th months after such requisition comp therewith, the Minister may hims revoke such by-laws, and make su new by-laws as he may consider nec sary for the removal of the impe ment, and such new by-laws shall ha effect as if they had been duly made the local authority as confirmed by Minister.'"

This clause embodies no new princi it merely seeks to render workable principle adopted by Parliament fourt years ago, by re-enacting section 44 the Housing, Town Planning, etc., A 1909, in a form to render it applica to any building.

As the Departmental Committee Building By-laws state in paragraph of their Report (Cd. 9213 of 1918), section referred to "was undoubte intended by Parliament, and believed its authors, to give an effective remed where by-laws unreasonably impeded erection of buildings. It has, howe two defects of draftsmanship which Committee discussed at length. Th say the Committee,

"have rendered the section nugator practice. Very little amendment seem be required to make it satisfactor future . . . and we recommend that (Local Government) Board . . . sh at once seek from Parliament the re of the words which have led to difficul All building owners and architects k the kind of trouble which obsolete laws cause in practice, but (to quote Departmental Committee again):—

"Where old by-laws are in force are not only an obstacle to actual b ing and development; in the hands of an authority which is not inclined to progress they can be used as a weapon to secure the confirmation of fresh obstructive by-laws which would otherwise not be allowed."

Clause 13 of the new Housing Bill will remedy this situation by conferring on the Minister of Health a power in aid of building which the Departmental Committee unanimously urged he should possess. That Committee had as Chairman Mr. Stephen Walsh (now senior Vice-Chairman of the Labour Party); it comprised a Conservative Minister, a Liberal member and ex-member of the House of Commons, and direct representatives of the associations of municipal corporations, urban district councils, rural district councils, and municipal and county engineers. Other members represented housing and town planning associations and other expert bodies, so that the Committee spoke with exceptional and entirely non-party authority. It pressed the reform (which is at length embodied in Clause 13 of the Government's present Bill) as "an essential part of the work of reconstruction," and if that was true in 1918, it is certainly no less true to-day.

Fears have been expressed in some quarters that this clause in the Bill will permit erections of any kind in any place. This is not so, but it will enable the Minister to enforce the series of model by-laws approved by the Departmental Committee and allow these to be revised from time to time, and kept in accord with the progressive science of building.

## Parliamentary Notes

[BY OUR SPECIAL REPRESENTATIVE.]

*Housing Progress.*

In the House of Commons Mr. N. Chamberlain informed Mr. Turner that he total number of houses to be provided nder the late Government's housing chemes was 176,000, included in over ,500 schemes. In addition, 39,181 houses had been provided under the builders' subsidy scheme. The total number of houses completed on April 1 was 198,183.

Answering other questions, Mr. N. Chamberlain said the number of houses completed up to April 1 by building uilds under the State-assisted scheme was 1,900, and 301 remained unbuilt or nfinished. The average number of working-class houses built during the last our years was approximately 50,000 a ear. The greatest number of houses completed in any one year since 1918 nder the State-assisted schemes was ,964 in the year 1922. According to e survey made by local authorities in ngland and Wales at the end of 1919, e gross estimate of shortage of working-ass houses due to over-crowding was 6,700. For purposes of calculation nder the new Housing Bill the average st of a non-parlour house had been timated at between £300 and £345.

*The Housing Bill.*

Mr. N. Chamberlain, who moved the cond reading of the Housing Bill, aditted that, in spite of prodigious efforts, e result of the building endeavour was leave us little better than we were. t the expansion of dwelling-houses ould begin on lines which were capable growth and development, and as far possible artificial devices should be oided. Private enterprise, he was glad to say, was beginning to function once more, and he was surprised to find how many houses had been built without any assistance from the State or local authorities. During the last six months upwards of 12,000 of these houses had been completed, and another 16,000 were in course of erection. It was true that most of these houses were of a type suitable for the middle class, but they were being built and sold to people who desired to occupy them, and as costs came down there had been a gradual extension of the operation of the private builder. The more work the private builder undertook, the greater would be the attraction to labour to enter the building trade, and the greater the capacity of the building trade to undertake fresh enterprises. As to the problem of the parlour-house, he contended that there was nothing in the Bill to prevent a parlour being included in a subsidy house provided it could be done within the limitations of the size laid down. Dealing with the clause concerning slum areas, Mr. Chamberlain said his proposal was not the last word on the subject, but it would enable a considerable amount of work to be done in the next few years. The only thing that could prevent this desired consummation was a great rise in prices, but in this connection a committee had been appointed, and he should not hesitate to apply for more drastic powers if necessary.

The Bill was criticized in many quarters of the House, and its rejection was moved by the Labour party, but after a debate lasting two days the Bill was read a second time by 340 votes to 140—a Government majority of 200.

## Law Report

### Dilapidations—Interesting Point

*Calthorpe* v. *McOscar and Another.*

April 16. King's Bench Division.
Before Mr. Justice McCardie.

This matter came before the Court in the form of a special case stated by Mr. Arthur F. Brown, of Little College Street, Westminster, and raised an interesting point on the question of dilapidations on the expiry of a lease.

Mr. F. Hinde appeared for plaintiff and Mr. Banks for the defendants.

Mr. Hinde said the plaintiff was the Hon. Anstruther Gough-Calthorpe, and the premises in question were Nos. 17, 19, and 21 Calthorpe Street, Gray's Inn Road. They had been let on lease from June, 1824, for ninety-five years, and the point for his Lordship's determination was on what principle damages for dilapidations ought to be assessed on the expiration of the lease.

The arbitrator stated that it was not disputed that the measure of damages to be recovered by plaintiff for breaches of the covenant to repair was the cost of the repairs rendered necessary when the term ended in June, 1919, by reason of the defendants not having performed the covenant, but the parties differed as to the nature and expenditure of the repairs that were necessary for the due performance of the covenant. Defendants contended that the effect of the covenant was limited to the extent of imposing an obligation to carry out such repairs only as, having regard to the age, character, and locality of the premises, would make them reasonably fit to satisfy the requirements of reasonably minded tenants of the class that would be likely to occupy them, and that the cost of the work necessary for that purpose was the measure of damages. Plaintiff, on the other hand, contended that the true effect of the covenant was to render defendants responsible to do all needful and necessary acts, well and sufficiently to repair the premises, in the words of the covenant, without limitation of such repairs as would satisfy the requirements of reasonably minded persons of the class likely to become occupiers of the premises. The arbitrator found that the tenants likely to occupy the premises would only take the house separately or only part of a house for short terms (weekly, monthly, or quarterly tenancies) and would not accept any repairing obligations, and that the requirements of reasonably minded tenants of such class would not include many repairs which, in his opinion, were needful and necessary for the repair of the property. If plaintiff's contention was correct he estimated the cost of the repairs needful at £586. If defendants' contention was correct he estimated the cost of repairs at £220.

Mr. Hinde contended that in this case the outgoing lessee was liable to do all the repairs provided in the covenant, and that the fact that the neighbourhood had changed since 1825 made no difference.

Mr. Banks contended that this was just the ordinary repairing covenant, and that the outgoing lessee was only liable to repair in such a way as would satisfy the person who was going to live in the house.

His Lordship reserved his judgment.

## Proposed Hotel for Maritzburg.

H.M. Senior Trade Commissioner in South Africa reports that a company is being formed in Maritzburg for the purpose of erecting an hotel. United Kingdom firms interested can obtain further particulars on application to the Department of Overseas Trade, 35 Old Queen Street, London, S.W.1. (Reference 10997/E.D./M.C./(2) should be quoted.)

## The Cenotaph.

A proposal has been laid before the Works Committee of the Westminster City Council that the roadway by the Cenotaph in Whitehall should be paved with rubber blocks. The suggestion was made that "the noise of passing vehicles militates very seriously against the solemnity of the pilgrimages made to this shrine from all parts of the world, and that if rubber paving blocks were utilized visitors would be impressed by the hush, and the public at large receive a reminder that they are approaching this great national monument." The Works Committee, having considered the suggestion in connection with the repaving of Whitehall, which is included in the list of thoroughfares to be dealt with as a whole, decided to leave the matter in abeyance pending further developments in rubber-paving experience. With regard to the noise of traffic at the Cenotaph, that was more or less accentuated by the present state of the roadway, which would be relaid this year, and this would materially reduce the noise of traffic.

# List of Competitions Open

| Date of Delivery | Competition. |
|---|---|
| June 1 | New Municipal Buildings and Town Hall, Cork. Total cost not to exceed £120,000, Assessor Mr. Lucius O'Callaghan. F.R.I.A.I., A.R.H.A. The successful competitor will be appointed to carry out the work. Second and third premiums £200 and £100 respectively. Apply Mr. William Hegarty, Town Clerk, Cork. The competition is limited to architects living and practising in Ireland. |
| June 12 | Concert Pavilion, Bournemouth, to seat 2,000. Estimated cost £100,000. Assessor, Sir Edwin Cooper, F.R.I.B.A. Premiums: £300, £200, and £100. Apply Town Clerk, Municipal Offices, Bournemouth. Deposit £2 2s. (cheque). |
| June 30 | Bridge over Nygaardsstrommen in Bergen. Apply Department of Overseas Trade (Room 50), 35 Old Queen Street, Westminster, S.W. 1. |
| June 30 | National War Memorial at Melbourne to cost £250,000. Competition, in two stages, open to Australians, not necessarily residing in Australia, and British subjects resident in the Commonwealth. Preliminary designs to the Right Hon. the Lord Mayor of Melbourne, Chairman of the Executive Committee, Town Hall, Melbourne, Australia, by June 30. Apply Agent-General in London, Victoria House, Melbourne Place, Strand. Deposit £2 2s. |
| July 3 | Pavilion in Calverley Gardens, Tunbridge Wells. Assessor Mr. E. Guy Dawber, F.S.A., F.R.I.B.A Premiums £150, £100, and £50. Apply Town Clerk. |
| No date | The Crown Agents for the Colonies, acting on behalf of the Government of the Straits Settlements, invite competitive designs for the reinforced concrete work required in connection with the construction of a new general post office at Singapore Tentative designs, for which no fees will be paid, are required in the first instance, from which it is proposed to select a design and specify its adoption in the contract for the construction of the building. The firm whose design is so adopted will be subsequently engaged to prepare full detail plans, specification, quantities, &c., for an approved fee. Drawings can be seen and further details of the competition obtained rom the Crown Agents for the Colonies, 4 Millbank, Westminster, S.W.1, quoting Z/Straits Settlements 5664. |
| No date | The Crown Agents for the Colonies invite Architects in Britain and the British Dominions to submit designs for the new Raffles College, to be erected at Singapore as the Singapore Centenary Memorial. Premiums: £300, £200, and £100. Mr. John Begg, F.R.I.B.A., late Consulting Architect to the Government of India, has been appointed Assessor. Apply Crown Agents for the Colonies, 4 Millbank, London, S.W. 1. Deposit £2 2s. |

# Competition News

### *The All-Electric House.*

Following are the prize-winners in "The Electrician" all-electric house competition: first, Mr. P. E. Peronne (London); second, Mr. W. M. Craufurd (London); third, Mr. E. Whytock (Glasgow). A second competition for the design of an electrically heated hot-water installation for a middle-class house is now in progress, the first prize being twenty-five guineas.

### *The Qasr-el-Aini Hospital.*

The committee appointed to consider the question of the Qasr-el-Aini Hospital and School of Medicine, in connection with which an international competition was held, has issued its report. The result of the competition was announced in our issue for March 14, and the designs of C. Nicholas and J. E. Dixon-Spain, FF.R.I.B.A., and of Lanchester, Rickards, Lucas and Lodge, FF.R.I.B.A., placed first and second respectively, were illustrated in our issue for March 21. Mr. John W. Simpson, PP.R.I.B.A., was the assessor. The committee recommend that the most urgent portions of the project, particularly the out-patient department and the dental school, should be undertaken at once.

### *Tunbridge Wells Pavilion Competition.*

Owing to an inadvertence Clause E of the R.I.B.A. Regulations was omitted from the conditions of this competition. The R.I.B.A. and the Assessor have been in consultation with the promoters, and it has been decided that in view of all the circumstances members and licentiates may compete on the conditions as published.

The Society of Architects is informed that the ground of objection to this competition has been removed. Members of the Society are therefore free to compete if they desire to do so.

### *Bournemouth Pavilion Competition.*

The following additional questions have arisen with regard to the Bournemouth competition:—

Q. 202. May the accommodation described under "Main Floor" be arranged on more than one floor?

A. No, except that three administration offices near the entrance may be placed on an entresol instead of main floor if desired (see Q. 166).

Qs. 66 and 186. Can the billiards-room and reading-room be on the first floor level, Westover Road side?

A. Left to competitors, but would be preferred on main floor.

Q. 115. Whether the balconies asked for, for lounge and for tea and refreshment rooms, are to be on a Mezzanine floor as that described round ground floor refreshment room?

A. See answers to questions Nos. 160 and 299.

### *Infant School at Fauldhouse.*

The following notice has been issued by the R.I.B.A. in connection with the competition of the Linlithgowshire Education Authority: "The Competitions Committee desire to call the attention of Members and Licentiates to the fact that the conditions of the above Competition are not in accordance with the Regulations of the R.I.B.A. The Competitions Committee are in negotiation with the promoters in the hope of securing an amendment. In the meantime Members and Licentiates are advised to take no part in the Competition."

Members of the Society of Architects are notified that the conditions of this competition are not in accordance with the regulations, and they are requested not to take part in the competition without first ascertaining that the conditions have been approved by the Council.

# Westminster Bank, Ltd.

Westminster Bank, Ltd., announce that they have acquired the business of the old-established firm of Messrs. Stilwell and Sons, bankers and Navy agents, of No. 42 Pall Mall, S.W., and it has been arranged to transfer the business on an early date to Westminster Bank, Haymarket Branch, 26 Haymarket, S.W. Mr. W. C. Hodgson and Mr. G. H. Stilwell have been appointed joint managers and Mr. W. B. Stilwell, assistant manager.

# The Ecclesiastical Art and Crafts Exhibition

A most attractive feature of the Ecclesiastical Art and Crafts Exhibition, now being held at the Central Hall, Westminster, is the exhibit of stained glass by Mr. James Ballantine, F.S.A.Scot., whose work is well known here and in various parts of the world. A large window of superb colour, leaded and constructed in the manner of the mediæval craftsmen, has been completely fitted up, together with colour-sketches and photographs of a large variety of treatments. Mr. Ballantine's exhibit gives the impression of a master's knowledge of the essentials of the craft, such as one might expect from so earnest an artist and student.

# "The Daily Courier Commercial"

"The Daily Courier," which for over a century has faithfully served the trade of Liverpool and Lancashire, has published a supplement—"The Daily Courie Commercial"—containing a reflex o what may be called the official estimat of the capacity of the Merseyside. Th supplement occupies a unique position It does not concern itself with the fluctuations of trade over a given past period o with deductions as to the progress o business over an immediate future. I deals only with the interests and capacit of Merseyside. It is the ambassador o Liverpool's commerce. Among the contributions are many distinguished personages. The supplement should be o great value to merchants, manufacturers shipowners, and consulate staffs all th world over.

# The Late Mr. M. Drake

As we go to press we deeply regret t learn the death of Mr. Frederick Morri Drake, better known as "Maurice Drake," who had achieved great distinction as a expert in stained glass and as a novelist

His best-known novels were "Wrack," "The Salving of a Derelict," "W.O.2," and "The Doom Window." He als wrote two standard volumes on ol stained glass: "Saints and their Emblems," and "A History of English Glas Painting," in conjunction with h brother, Mr. Wilfred Drake. Mr. Drak was hon. secretary of the British Societ of Master Glass Painters, which came int being a few years ago largely owing to h personal efforts. He served in the war i the Dorset Regiment, the D.C.L.I., an subsequently was attached to the Roya Air Force, holding the rank of captain o demobilization.

# Coming Events

### *Thursday, May 3.*

R.I.B.A.—Dance in the galleries of th Institute. Dancing from 10 p.m. till 5 a.m

### *Friday, May 4.*

Art Workers' Guild.—"Cézanne." 8 p.m

Town Planning Institute.—"Law Relating to Town Nuisances." By M Warwick Draper.

### *Monday, May 7.*

University College.—Lecture on "Dutc Architecture." 5.30 p.m.

# The Week's News

### *Memorial Hall for Bridgwater.*

At Bridgwater, new Sunday schools and nemorial hall are to be built.

### *Bandstand for Herne Bay.*

An £8,000 bandstand is to be built at rne Bay.

### *Felixstowe Pier Gardens.*

Felixstowe Urban District Council is to y the pier grounds and pavilion for 500.

### *By-Road Scheme for Penzance.*

t is proposed to reconstruct the Lands d to Penzance road at a cost of about ,000.

### *Newington Institution Repairs.*

Southwark Board of Guardians propose spend £27,000 on repairs at Newington stitution.

### *New Lecture Hall for Reigate.*

t is proposed to erect a new lecture l in connection with St. Mark's, igate, at an estimated cost of £3,500.

### *New Bridge for Hereford.*

new bridge is to be erected by the reford County Council at Little Hered. The cost is estimated at £5,000.

### *Watford Infirmary Extensions.*

Watford Guardians are carrying out an ension to the Workhouse Infirmary at ost of £4,240.

### *Birmingham and House Building.*

Birmingham City has entered into gagements for house building to the ue of £800,000, which it expects rtly to increase to £1,000,000.

### *Southsea Golf Course.*

The Portsmouth Corporation have ided to spend £8,000 on the laying- of a new public golf course and £2,000 buildings, etc.

### *New Public Hall for Goldthorpe.*

lans have been approved for the erec- of a public hall at Goldthorpe, under miners' welfare scheme, at a cost of 000.

### *Cowes Sea Front.*

he Cowes Urban District Council have lertaken to widen the sea front. A posal is also being considered to end the parade at East Cowes as far Old Castle Point.

### *South African Ports.*

ir George Buchanan, engineer, in his liminary report on the harbours of the ion, recommends an expenditure of 750,000 for the development of that Table Bay.

### *A New Main Road.*

scheme for a new cross-road from enford (on the main Oxford road) to rrow, at an estimated cost of £160,555, been passed by the Middlesex County ncil.

### *Freemasons' Hall at Darlington.*

he reconstructed Freemasons' Hall in her Street at Darlington is to be ned by Lord Ravensworth. Much ration has been made to the interior he building, and the ground floor has n so arranged that it can be used for ate functions without interference h the Masonic portion, which is on upper floor. The banqueting room is a spacious apartment, measuring 48 ft. by 36 ft. The architects are Messrs. Kellet and Clayton.

### *Private Building at Blackpool.*

This year the Blackpool Corporation have already passed plans for the building of 700 houses by private enterprise. In addition, many important municipal works are in progress.

### *Model Dwellings for Islington.*

It is proposed to erect, as soon as practicable, on the site of the Church Missionary College, Upper Street, Islington, model working-class flats to accommodate 1,000 persons. The college was vacated some years ago.

### *Professional Practice.*

Mr. J. Norman Harber has commenced practice as an architect and surveyor at 63 Temple Row, Birmingham. Although conducting an independent practice he will still maintain collaboration with his father as heretofore.

### *More Houses for Swansea.*

Subject to the approval of the Ministry of Health the Swansea Housing Committee propose to erect another fifty houses on Town Hill. 565 houses have been completed under the Government assisted scheme.

### *New Tobacco Factories.*

It is understood that Messrs. W. D. and H. O. Wills, Messrs. John Player and Sons, and Messrs. William Clark and Son, the manufacturers of tobacco and cigarettes, have decided to establish factories in the Irish Free State.

### *More Houses for Whitehaven.*

The Whitehaven Town Council and the Whitehaven Colliery Company are to co-operate in a scheme for building 1,000 houses. Each will build 500 and take advantage of the Government subsidy. The cost of the scheme is estimated to be £500,000.

### *New Hotel for Manchester.*

Steps are being taken for the erection, in Manchester, of an hotel which is to consist of twenty stories and will be 136 ft. high. The Improvements Committee has agreed to pass the plan on to the Council provided that every precaution is taken against fire.

### *Rugby Housing.*

It has been resolved to develop a portion of the Eastlands Building Estate (Rugby), and to sell it in plots at the lowest possible price to prospective builders of houses. In this way the Rugby Urban Council hopes to provide 195 houses.

### *New Kensington Arcade.*

What is claimed to be one of the finest shopping arcades in the world will be built shortly by Messrs. John Barker & Co., in Kensington High Street. It will run behind the present line of buildings for their entire length, and will cross the railway station.

### *The Condition of a Limehouse Church.*

The roof beams of the Church of St. Anne's, Limehouse, a landmark in Dockland, has been eaten away by beetles. The damage already done amounts to more than £1,000, and the rector is applying to the Ecclesiastical Commissioners for assistance.

### *New Stained Glass Window at Leeds.*

A single-light window has been placed in the north transept of St. John's Church, Roundhay, Leeds, in memory of Second Lieutenant Tom Willey, of the Leeds "Pals," the 15th Battalion of the West Yorkshire Regiment. The window, the work of Mr. Chas. E. Steel, of Leeds, is carried out in antique glasses in fifteenth-century style.

### *New Partnership.*

Mr. F. Broadhurst Craig, M.A.S.H.V.E., M.I.H.V.E., and Mr. W. T. W. Ching, A.R.I.B.A., formerly registrar of the Architectural Association, have entered into partnership as consulting and contracting engineers, specializing in central heating, hot-water supply, ventilation, air conditioning, drying, dust removal, fuel economy, laundry and cooking appliances. Their temporary address pending acquisition of new offices is 14 Gray's Inn Square, W.C.1. Telephone: Chancery 8058.

### *Sheffield and South Yorks Architects.*

At the annual general meeting of the Sheffield, South Yorkshire and District Society of Architects and Surveyors, held at Sheffield University, the following officers were elected: President, Mr. J. R. Wigfull; vice-president, Mr. H. L. Paterson; hon. treasurer, Mr. R. Fowler; hon. secretary, Mr. H. B. S. Gibbs. Council: Fellows—Messrs. E. M. Gibbs, W. C. Fenton, W. J. Hale, C. B. Flockton, A. F. Watson, W. G. Buck, F. E. P. Edwards, C. M. Hadfield, J. R. Hall, E. M. Holmes, H. I. Potter. Associates—Messrs. J. M. Jenkinson, J. C. P. Toothill, F. H. Wrench.

### *Gothenburg Town-planning Exhibition.*

To celebrate the three hundredth anniversary of its foundation the city of Gothenburg will hold a great jubilee exhibition from May 8 to September 30. In conjunction with this exhibition an International Cities and Town-planning Exhibition will be held in that city. During the exhibition a series of about twenty meetings and congresses will be held in Gothenburg, arranged as "The Municipal Week," organized by the Swedish Town Association, and "The Engineer's Week." During the "Municipal Week" there will be an International Town-planning Conference organized by the International Garden Cities and Town-planning Federation.

### *York and East Yorkshire Architects.*

At the council meeting held at Hull of the York and East Yorkshire Architectural Society, the suggestion to alter the boundary of the society was approved in view of the recent formation of a "Tees-side" branch by the Northern Architectural Association, so as not to interfere with its activities in that district. The following members were elected to serve on the advisory committee in connection with the York School of Arts and Crafts: Representing the architects, Messrs. Geo. Benson, A.R.I.B.A., and H. Monkman; representing the assistants, Messrs. J. S. Syme, Licentiate R.I.B.A., and E. A. Pollard, Licentiate R.I.B.A.

# New Infants' Baths at King's College Hospital

## An Ingenious Innovation

Except in the matter of funds, King's College is one of the most fortunate hospitals in London. It occupies an ideal site at Denmark Hill; it possesses one of the most modern buildings in the country; and it has a keen and capable medical, nursing, administrative, and maintenance staff, to be compared with any in the United Kingdom. In the administration of a hospital, as in everything else, it is the little things that count.

No matter what method is used efficiently to carry on any undertaking there is always some detail which can be further improved. A recent example which may illustrate this is connected with the bathing of the infants in the maternity ward.

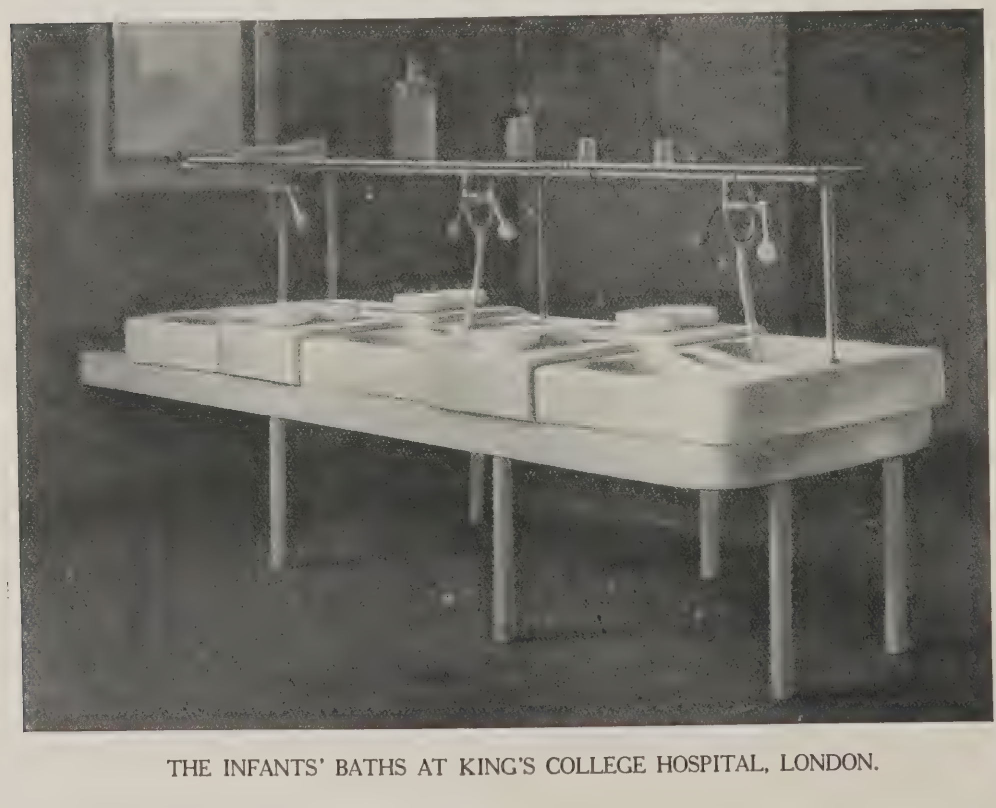
Following upon the large increase in the number of cases treated a new labour room had to be provided and the number of baths increased and accommodated elsewhere.

It was considered that the work of the nurses would be facilitated by arranging the baths back to back and well into the middle of the room. This method presented difficulties if the standard of King's College Hospital's system of hygiene was to be maintained. This system embodies the open discharge channel whereby all bent or fixed waste pipes, the inner surfaces of which cannot easily be kept with that degree of scrupulous cleanliness necessary in hospitals, are eliminated.

These difficulties have now been overcome by the ingenious baths, shown in the accompanying illustration, which have been devised by the Leeds Fireclay Company, Limited, and Mr. E. W. Johnston, chief engineer of the hospital, working in collaboration. These baths, together with the other equipment in the room in which they are placed, were installed through the great kindness of the Sister Matron and the nursing staff in providing the necessary funds.

As will be seen from the illustration there are six baths, three on each side and spaced apart by fixed slabs at a distance to allow the nurses to work comfortably. Hot and cold water supplies are provided by means of special valves having a rubber tube attached to the outlet. This tube can be placed in either of the baths facing each other, and when not in use hangs in the open channel running down the centre. The valves have specially designed porcelain enamelled lever handles which automatically shut off the supply when not operated by the nurses. One of each pair of handles is "red" to denote hot water and the other "white" to denote cold. The supplies to the valves form a support for an overhead shelf. The waste hole for each bath is glazed, and is provided with a rubber plug attached to a cord. Down the centre between each row of baths is a continuous open channel which takes the waste from the baths and acts as an overflow. On the intermediate slabs are portable bowls for the use of the nurses, so fixed that they can be easily removed, but cannot be accidentally swept on to the floor. The baths and slabs are of white glazed fireclay ware. The baths are supported on a wrought-iron stand and the whole of the glazed ware is tied together by means of two tie-rod bolts.

These baths are the finest that have come to the writer's notice. The mass of plumbing found under many baths of this description is swept away, every part is easily accessible to prevent the accumulation of germs and dirt, there is no metalwork to come into contact with the infant, and the whole forms a strong, rigid and efficient installation. A tablet erected in the room reads: "The baths and other equipment were provided in this room by the Sister Matron and the Nursing Staff 1922." E. R.



THE INFANTS' BATHS AT KING'S COLLEGE HOSPITAL, LONDON.

# New Inventions

*Latest Patent Applications.*

9953.—McCulloch, H.—Instrument fo
ascertaining stresses on der
ricks, etc. April 12.

*Specifications Published.*

195427.—Archer, A. G., and Stevens
C. J.—Contrivances or device
for binding or connecting toge
ther scaffold posts, steel tube
or pipes, and the like.

195489.—Needham, C. W. C.—Sectiona
model buildings.

195502.—Annison, R. H.—Apparatus fo
supplying or forcing cemen
grout, or other materials c
mixtures into the interstices c
structures or soil.

183457.—Preuss, E. V.—Device for th
production of concrete con
structional elements.

195570.—Leaver, H. A.—Roads an
pavements.

*Abstract Published.*

193769.—Moulding floors in situ.—
Rios., and Soc. Aragonesa d
Cemento Armado, of 46 Serran
Street, Madrid.—Shutters f
floors comprise sheet met
panels with flat tops and curv
sides which are provided wi
ribs to form recesses in the ca
girders for supporting the ce
ing. The ends of the shutte
are inturned for strength. T
shutters are supported by pro
and bearers. Specificati
5146/05 is referred to.

The above particulars are specially prepared
Messrs. Rayner & Co., registered patent agents,
5 Chancery Lane, London, W.C.2, from whom reader
the JOURNAL may obtain all information free relatin
patents, trade marks, and designs. Messrs. Rayner
will obtain printed copies of the published specificati
and forward on post free at the price of 1/6 each.

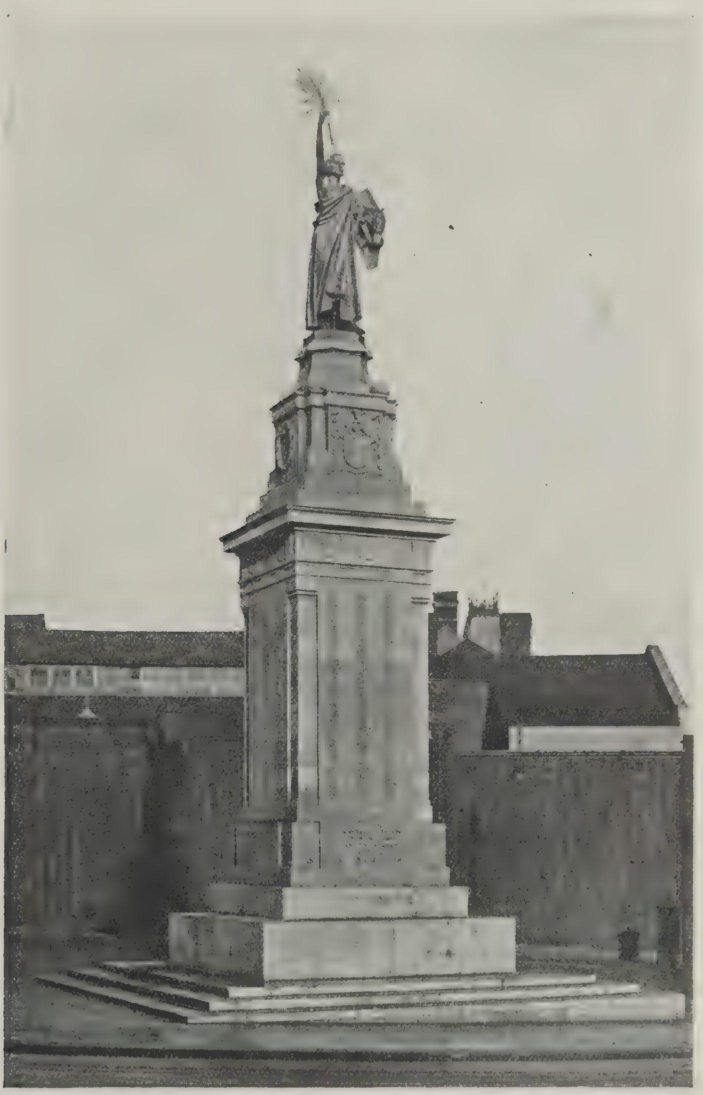
# Green Tennis Courts

Tennis enthusiasts should take t
opportunity to try the green and r
hard courts at the Gazeway, Surbit
Here they can be tested either by day
when lit for night play by a paten
electric system. Long and exhaust
experiments have been made by Mess
W. H. Gaze and Sons, Ltd., with
result that they claim to have at l
succeeded in manufacturing a green h
court as near perfection as ingenuity
devise. Play, it is claimed, can take pl
during a frost or even when a thaw s
in, and after a snowstorm play
proceed as soon as snow is swept off
court. Among the many other adv
tages claimed are that the court requ
no upkeep, that the colour is ingrai
through the whole depth of the mater
and that the white markings are in
and permanent, and while giving
same bound to the ball as the co
always retain their distinctness. Des
the fascination of the new green c
the advantages of the red "All-weath
hard court must not be overlooked.
better testimonial to this type of c
can be given than the steady numbe
"repeat" orders from clubs and priv
owners. An appointment to visit
courts may be obtained from Mr.
Gaze, 19 to 23 High Street, Kingston-
Thames. An illustrated tennis boo
may be obtained from that addres
from the firm's London office, 10 Con
Street, W.1.

ednesday, May 9, 1923 Vol. LVII. No. 1479

# THE ARCHITECTS' JOURNAL & Architectural Engineer

*With which is incorporated "The Builders' Journal."*



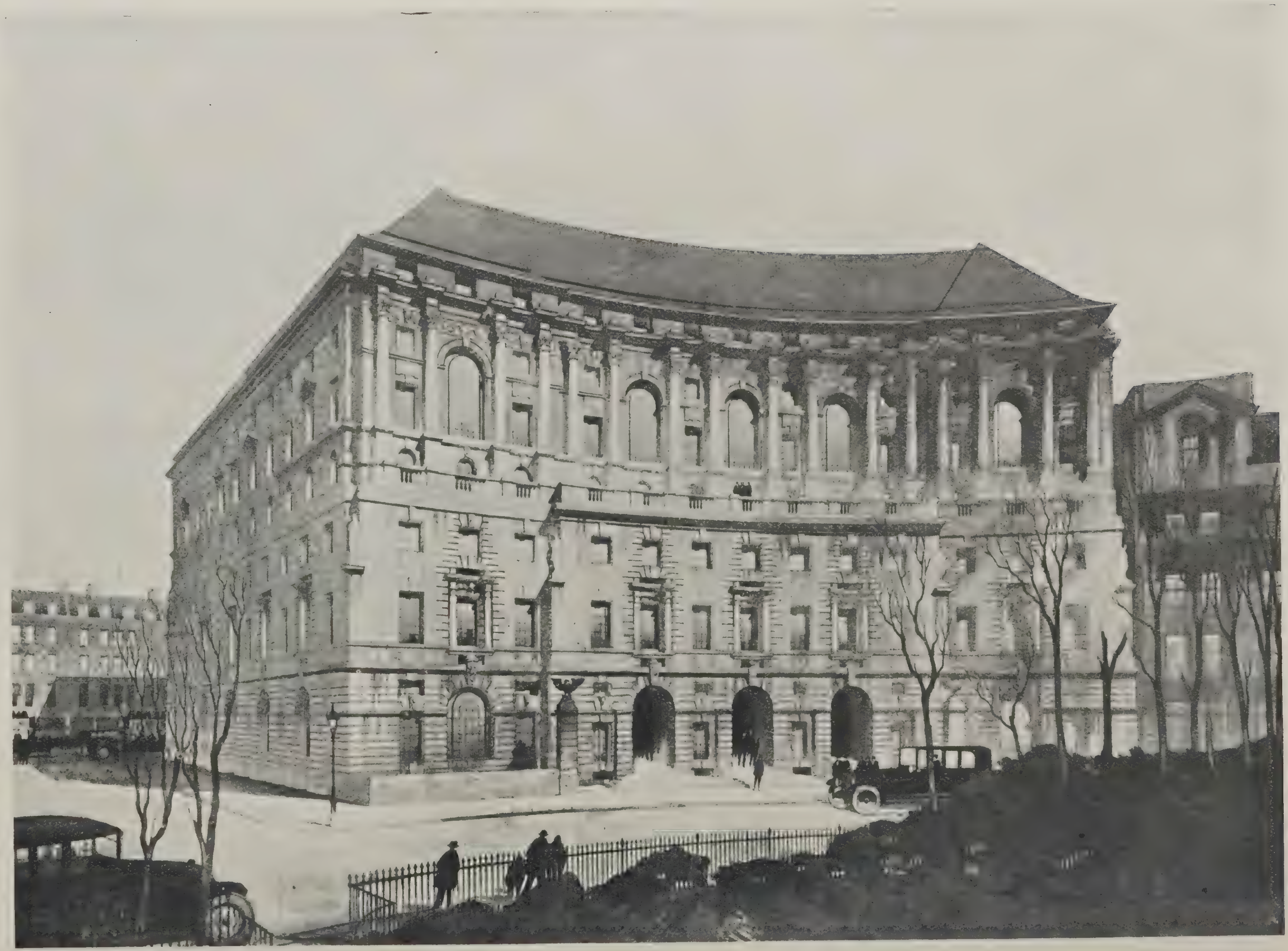
WAR MEMORIAL, LUTON.

*Designed by Sir Reginald Blomfield, R.A.*
*Figure Executed by Sir Hamo Thornycroft, R.A.*

27-29 Tothill Street, Westminster, S.W.1.

# The New Offices for the Anglo-Persian Oil Co., Britannic House, Finsbury Circus, London

Sir Edwin L. Lutyens, R.A., Architect



This drawing is one of the most arresting exhibits in a Royal Academy that, in architecture, at any rate, surpasses most others of recent years. A notice of the exhibition appears on a later page.

THE

ARCHITECTS' JOURNAL

27-29 Tothill Street, Westminster, S.W.1.

ednesday, May 9, 1923

Volume LVII. No. 1479

# London Squares and Garden Enclosures

THE questions put to the Minister of Health in the House of Commons by Mr. Ammon, on April 18, with reference to the fact that the garden enclosures of both Mornington Crescent and ndsleigh Gardens were in the market, drew attention once ore to a matter that is becoming increasingly urgent, i.e., he position of the gardens and enclosures that are so striking feature of the squares in certain districts of London. During st autumn, at the request of the Garden Cities Association, he London Society invited representatives of that body, gether with others from the Metropolitan Public Gardens ssociation, the Town Planning Institute, the Commons nd Footpaths Preservation Society, and the R.I.B.A., to conference on the situation, with the result that memorials ere sent to the London County Council urging that body take steps (on the lines followed in 1905–6) to secure ermanently these open spaces that are so valuable an asset ot only to their owners but to the health and amenities f London as a whole.

Ever since 1883, which saw the foundation of the etropolitan Public Gardens Association, that body has nsistently urged the great importance of these square ardens and enclosures, and it is incontestable that whether ey are actually open to the public or not they form breath-g spaces of inestimable value in the midst of buildings nd provide one of the most striking features of London -a feature which scarcely any other city possesses to an ual extent.

In 1905 a Bill to prohibit the erection of buildings nd structures on certain lands in the administrative ounty of London was introduced by the London County ouncil, but was not proceeded with. The schedule attached it contained a list of some 430 open spaces denoted as rden squares or enclosures.

In the following year another Bill was introduced result-g in the passing of an Act entitled : "An Act for prevent-g *by agreement with the present owners* of certain lands in e administrative County of London, the future erection buildings and structures on such lands." The schedule tached to this Act contained a list of sixty-four garden uares and enclosures, although it appeared that some rty-eight of these were already in the authorities' hands. nce the passing of that Act efforts have been made to t the scope of it extended to more of the enclosures that e still in private hands, but without avail.

The present position, whereby no notification of the nger of an open space being built upon is given to the blic until the site is advertised for sale or even until ilding operations have actually commenced, is intolerable. results in the public having to pay an exceedingly gh price for the land, while in the built-up area the figure so great as to make it almost impossible for much more be done by voluntary effort. It is particularly important at further steps should be taken without delay. In e case of many enclosures the time is approaching when e leases that control their present uses will come to an d and the freeholders may be tempted to put them to what, at first sight, may appear to be more remunerative uses, in spite of the fact that owing to the far-sighted action of public-spirited landowners in the past they have been able to receive a sum far exceeding the original value of the garden site owing to the increased rentals obtainable from the houses surrounding it.

There is no necessity to purchase the freehold of these enclosures. All that is suggested is that fair compensation (having regard to the increased value just referred to) should be offered in exchange for the prohibition of building. There would be no interference with the ownership of the property, although it is not impossible, seeing how times have changed, that if the various owners were approached, some might be found willing to hand over the enclosures to the care of the public for ever simply because of the increased value of the houses round the gardens.

The London County Council and local authorities already possess powers under the Act of 1906 to undertake the maintenance and control of enclosures by agreement or lease or by the purchase of freehold, while in cases where through neglect of the owners the gardens have become or are likely to become a nuisance, the authorities have power (under the Gardens in Towns Protection Act of 1863) to take possession of and maintain them, and in certain cases to open them to the public.

While the matter was under consideration the London Society prepared a résumé of the situation with reference to the 430 enclosures included in the schedule of 1905. A number of them, of course, had since been purchased, while some were so small that they could not be considered to possess any commercial value whatever. Consequently it was resolved to confine attention for the present to actual square enclosures in private hands, that is to say, broadly speaking, to those gardens which are more or less surrounded by public roadways. Private gardens in joint ownership of the houses abutting upon them were omitted from the schedule attached to the memorials forwarded to the L.C.C. The total number of enclosures affected was found to be 140, with a total area of about 160 acres. This may not sound a great deal, but any view of London, particularly from the air, will bring home the extraordinary value of these spaces to the amenities of the capital city, while their contiguity to public thoroughfares enables a vast number of people to enjoy their beauty.

A study of the map of London shows that such areas have been already built upon in the past to the great detriment of the districts in which they are situated. If the process should continue the loss to London will be irreparable and will relate not only to health and amenity, but also in the aggregate to the value of the property, so that it will be felt by owners in general as well as by the local authorities and the public. No effort, therefore, should be spared to secure the retention of these valuable spaces that have been handed down to us by a former generation of town planners, London landowners to whom we owe an immeasurable debt of gratitude.

# Notes and Comments

## The R.I.B.A. Elections

It is a matter for astonishment that so many members of the R.I.B.A. fail to realize their duty at election times and give so little thought to the election of a new Council that fully half of them do not take the trouble to vote. It is this apathy which makes it so easy for a section of the members, such as the so-called "Defence League," to organize a campaign and turn out a Council whose policy they choose to attack. Fortunately the rude awakening that closely followed the election of the present Council had its effect, with the result that a committee was formed under the name of the "1922 Emergency Committee," which included among its members the recognized leaders of the architectural profession, who pledged themselves to endeavour to secure the election of a new Council which would not only represent the interests of all sections of the Institute, but would advocate a government on statesmanlike lines and not upon a party programme. The first fruits of this movement were garnered at the special general meeting of the Institute held in January last, when the proposal of the present Council to rush a Registration Bill before Parliament without first securing the co-operation of all interested parties was disapproved by a large majority. This fact alone should be sufficient to condemn the policy of the present Council. Registration can only be secured by years of patient preparation. This has been proved again and again by other bodies that have secured it. The Council who were turned out of power by the Defence League had a large conception of what was required to be done before any measure could be brought before Parliament, as the Emergency Committee appear to have realized, and it is evident from the list of nominations supported by them that a broad statesmanlike policy would be pursued by such a Council if elected. It is obvious that the new Council, whatever its composition, will have to devote time and energy to the cause of Registration next session. If this time and energy are to be wisely employed, it is important that the old bogey that any section of members wishes to throw open the doors of the Institute indiscriminately to all who apply for admission should be laid for good and all. The promoters of the Defence League, in their policy of misrepresentation which was so largely responsible for the election of the present Council, claimed for themselves, by implication, that they were the only persons with a real concern for the interests of all sections of the members—an assumption which would be laughable if its effect were not so serious. Can any sane person believe that those men who have proved their devotion to the Institute by long service in its cause, and who now support the nominations of the Emergency Committee, would yield to any in their regard for the rights of all classes of member? We would suggest to the supporters of the Defence League the desirability of meditating upon this point before filling up their voting papers. We would also call attention to the letter from Mr. Paul Waterhouse, P.R.I.B.A., which appears on our Correspondence page.

## The Stadium and Its Critics

The very unfortunate inauguration of the Wembley Stadium has prompted many correspondents of the daily Press to suggest that the building is badly designed, and comparisons have been made with great football arenas, like Stamford Bridge, where immense crowds are dealt with without any of the unhappy occurrences of Wembley. These critics do not realize the fundamental difference between the Stadium and the Chelsea football ground. The former, of course, is a self-contained structure with internal access to the seating, whereas Stamford Bridge, like most football arenas, is merely an elliptical earth mound with external access from a number of points, the only structural part of the arena being the grand stan To build such an arena you require a good deal of eart Stamford Bridge, we believe, is largely made of eart excavated during the construction of the early tube rai ways in London. Perhaps it is merely owing to the fact th tube railways are not now being constructed on a sufficientl large scale that we do not find an earth arena at Wemble There is, however, nothing wrong with the design of th Stadium; what is wrong is the ineffectiveness of the barrie at the entrances. When these are replaced by others stron enough to resist assault there will be no repetition of th scenes of last Saturday week.

## Academic Dress for Architects

We cannot believe that the R.I.B.A. will be complete happy in its academic dress. This kind of thing is all ve well when it has a venerable tradition behind it; but invent it deliberately, and at this late time of the day, surely an anachronistic procedure. The argument th academic dress confers dignity on the wearer is, we thin unsound; in our experience it is much more likely to evo ribald remarks from unsympathetic onlookers. He will a brave man who first appears in public in skirts and birett

## The Royal Academy

The cramped accommodation of the Architectur Room at the Royal Academy is used to rather bett purpose than has been the case for some years past. T standard of design is higher than usual and there a fewer of those pretty trivialities that one year mov a distinguished architect to exclaim that the Acade was "full of rotten little cottages." The two "pictur of the year" are undoubtedly Sir Edwin Lutyens's Angl Persian Building and Mr. Herbert Baker's Porch Prince's Chambers, Legislative Buildings, Delhi—bo remarkable in design and draughtsmanship. Apart fro these two drawings, and one of Mr. Austen Hall's ne building for Piccadilly, there is nothing to excite o overmuch; and perhaps this is all to the good. A f average level of achievement is a much more healthy si than a few *tours de force* amid a welter of mediocre effort.

## The Work and the Man

The opening of the Royal Academy Exhibition reca again a little poser of custom that must have set many head ruminating; that is, Why is it that, among all the ar only in painting is the work known by the artist's nam Why do we always refer to a Rembrandt, a Reynolds, a Turner, and never to a Wren, a Chambers, or a Smirk In naming the work of a poet we never talk of a Shak speare, a Pope, or a Shelley, nor, in the case of a pr writer, of an Addison, a Goldsmith, or a Lamb. N should we think of calling a piece of sculpture a Cibb a Banks, or a Bacon, nor a piece of music a Handel, Purcell, or a Beethoven. Clearly the painter recei preferential treatment. It would be interesting to kn the cause of this peculiar custom. The painter of pictu is certainly more closely identified with his work than, f example, is the architect, who, to realize his designs, h to call in the help of others; but painting is no more p sonal an art than sculpture, yet the sculptor has not t same nominative distinction. Perhaps some explanati of this peculiar anomaly may be found in the fact that t painter of pictures has taken exclusively to himself t term "artist"; architects, poets, musicians, are not pop larly regarded as such. Hence the painter becomes apart from his fellows; he and his work are indivisible, a a painted canvas becomes naturally enough a Murillo a Van Dyck.

*MONTHLY CAUSERIE*

# Joking Apart

## Uses and Abuses

WHEN London architects raised complaint at the employment of Captain Fowke, R.E., to design the buildings of the Great Exhibition in 1862, they were asked to define what an chitect was. This seems a perfectly fair question to ask architect. The authorities had been charged with rongly employing upon architectural work a man who as not an architect, and then found they had no idea hat an architect was. In order to know where they ood it was necessary for them to get a definition, and they rned naturally to architects for information upon a bject upon which—if upon no other—architects might eak with authority. There can be no question that by e time a barrister is launched on his career he is quite ear in his mind as to who he is, how old he is, and what he ; and the same must be true of most doctors, engineers, ntists, and farriers: but the London architects of 1862, though no doubt well able to give ready answers to the st two questions, not only had no established ideas upon e third but, after frenzied deliberations against time, had ankly to admit that they were unable to say *what* they ere—that is to say, they could not define an architect so to include themselves and exclude those who were not themselves. They had probably reached the position ich, as Lord Grimthorpe years ago pointed out, is in-itable, namely, that an architect can only be defined as man whose designs are adopted by others. Captain wke, who is remembered by us as the designer of the bert Hall and of the block of buildings adjoining e Art Museum in Exhibition Road, having found rsons willing to adopt his designs became, by that t, accredited as an architect by the only test that can be plied, and the protest of the London architects of 1862 re no result.

* * * * *

Captain Fowke was, in fact, no trained architect, but, ether he was aware of it or not, he could in this par-ular claim kinship with some of the leading architects the Renaissance, such as Giotto, Michael Angelo, and onardo da Vinci, for instance, and with some of our own; , if I am not mistaken, Inigo Jones, Wren, Vanbrugh, nt, Chambers, and Dance—to name no others—all longed to the class of untrained architects. In these ys our provincial towns and suburbs are full of un-ined, self-accredited architects, who are accepted at eir own valuation by a public whose fatuous simplicity only find comparison in that of a child which, having lped to make a mud pie, should solemnly proceed to eat The identification of many such architects with the fession they practise often arises, not by desire or from bition, but fortuitously. The presence of many of these n in architecture is an accident nearly as appropriate as presence of flies in a bun—I say "nearly," for the fly is ter placed in relation to his surroundings since he more sely resembles in appearance, flavour, and nutritive ue the thing he stands for, and is less discreditable to ns than the fortuitous architect is to architecture. We e, for instance, a foreman plumber thrust up among his ows to a position of practising architect in the sudden tion of finding himself appointed surveyor of drains and ter-spouts to a lunatic asylum; and a house-agent uptly hoisted by providence to like eminence by family erest on a Town Council presenting him with a commis- to design new public offices. We may experience a tain mental resistance to accepting such men as accre-ed architects, but that difficulty will speedily disappear when the smoke-rocket expert and the municipal squirt have been: (1) Unified; (2) Enrolled; (3) Registered; (4) Licensed; and (5) Academically Robed. Who can raise a whisper against the professional repute of an architect wearing a biretta? English architecture, indeed, may be expected to take a new lease of life when eighty thousand glorious beings gowned in orange and black infest the countryside like a hatch of monstrous bumble-bees. I first wrote "humble-bees," but the word did not look right. The most startling quality of the impending new hatch would certainly be the loudness of its buzz.

* * * * *

The position of the untrained architect in this country is much strengthened by the fact that not only are the leaders of the profession unable to give a salutary definition of what an architect is, but they are still undecided how he should be trained in order to qualify him to defy definition. I do not for a moment suggest that a well-practised skill in designing mausoleums for emperors does not eminently qualify a young architect to succeed in explaining to a mature maiden lady why her stairs creak at night and in curing the defect; I only say that the question is not yet firmly decided, and it must still be many years before it can be known whether the preparation of book-plate compositions in the orders of architecture will produce a greater architecture, and more eminent architects, than did the system of self-training which belonged to the eighteenth century and the system of articled pupilage which was general in the nineteenth. The pupilage system had much to recommend it—to architects. It enabled those of them who were capable of ideals to realize, to the full, one practical ideal in all its splendour.

* * * * *

To get people to pay us for the work we do is an ideal common to all of us. To induce people to work for nothing is an ideal the pursuit of which engages many. The architect of fifty years ago, however, reached out to higher things. His aspirations soared to those realms of attained ideals occupied with such success by the late Sarah Thorne of respected memory, who enjoyed the rare felicity of taking money at the box-office of her theatre from those who came to see the performance of actors who had already paid at the stage-door to be allowed to perform. The ideal, as realized by architects, permitted the architect to occupy a central position which was entirely impartial. With one hand he received payment from those who did his work for him; with the other he received payment for the work they did. It was an admirable arrangement. The fathers of expensively-educated sons approached the architect (after, of course, securing a proper introduction), and the architect agreed to accept from two to five hundred pounds on the understanding that the son should give his services for three or five years. In return the son had the privilege of discovering how the architect liked his work done and what were his ideas on the subject of the lunch-hour and overtime. The son discovered this, not from the architect, but from his chief assistant—a grey-haired man with a grown-up family who answered to the name of "Tadpole" or "Old Top." The pupil might enjoy yet another privilege in addition to those embodied in the articles of indenture or letter of contract. He could, by keeping a sharp look-out, often catch sight, through the window, of his chief's back as the great man went off to his club at one o'clock.

KARSISH.

# The Royal Academy Exhibition

## I.—Architecture

THE exhibition this year at the Royal Academy instantly raises the old question as to whether this is an exhibition of draughtsmanship or of architecture, and whether those buildings, in most cases beautifully rendered, will, in reality, appear as well when built. Architecture, unlike painting and sculpture, does not depend for its beauty on its artistic representation but depends entirely upon its conception and the care and thoroughness with which it is carried out. The perspective representation is the oratory of architecture, and care has to be exercised when criticizing works in an exhibition such as this, to decide whether any beauty which they may have is due to the facility of the draughtsman or to the soundness of conception of the design.

Take the drawings by Mr. Hepworth. He seems to be able to express himself in any fashion. His drawing of Mr. Herbert Baker's design for the porch of Prince's Chambers, Legislative Building, Delhi (disguised as a Walcot) gives us a brilliant blue sky, sunshine, and happiness, whilst his rendering of Mr. Guy Dawber's house at Stowell Hill, Somerset, with its rather muddy clouds and starved trees is sombre and depressing. Who would not be in India?

His slashing charcoal drawing after the rendering of Mr. T. S. Tait, of Mr. Austen Hall's design for new buildings, Piccadilly, is another expression and ought to impress any business client.

Mr. Cyril A. Farey is another draughtsman who holds the field, and he has surpassed himself in his drawing of Sir Edwin Lutyens's design for the new offices for the Anglo-Persian Oil Company, Finsbury Circus. Mr. Walcot and his followers are still there, but when Walcot speaks, it is difficult to know whether Lutyens is Baker, or Baker is Lutyens.

Two other methods of representing a design are expressed by:—

First.—Messrs. Mewès and Davis's elevation for the Westminster Bank, which is an architect's drawing pure and simple, beautifully and carefully rendered with the voids and solids definitely stated, with no camouflage. To my mind this is the most sane method of representation, the method adopted by the old masters. After all, the others are merely froth and emptiness, useful, certainly, for Academicians and the lay public.

Second.—Sir Reginald Blomfield's perspective for the refacing of the Carlton Club in Portland stone. It has neither the care and delicacy of the Mewès and Davis, nor the imaginative treatment of a Walcot.

Having got rid of the crust and often deceptive side of our art, let us consider the fundamentals of architecture—conception and design.

Undoubtedly the best piece of architecture in the exhibition is Sir Edwin Lutyens's design for the Persian Oil Company's new building. It has the quality of an old Florentine palace façade, with the interest and detail of a Wren and an Inigo Jones. The composition is faultless; notice the spotting of the windows, enriched where required for his pattern and kept plain where prominence is not required.

Mr. Herbert Baker's design for the Prince's Chambers, Delhi, is another excellent piece of architecture, with its playful and delicate detail of cupola and window contrasting well with the strong, well-modelled, sculpturesque base. Architecturally, his other exhibits are difficult to judge. The drawings are by Walcot and a follower—Wilson.

Mr. Gilbert Scott's drawing and design for a memorial chapel, St. Mary's College, Chesterfield, may have been influenced greatly by existing work. Its design is neat and, perhaps, a little too hard; has the emotional quality of a lily, and gives one the impression of a nunnery, but a fit place for the purification of thought and for religious feeling. The repetition of the blue of the frieze under the dome seem however, to be rather weak in idea.

His design for the memorial entrance archway, Cla College, Cambridge, is timid in draughtsmanship, but good in composition and will look well in execution.

Mr. Stanley Hamp's design for the first-class dinin saloon, P. & O. "Naldera," is difficult to judge archite turally, as it is skimpingly drawn and may be anything.

Messrs. Mewès and Davis's design for the Westminst Bank is sure in composition, but despite the cartouch over the doorway is weak in the centre. The sculptu work could have been drawn better.

Mr. Macdonald Gill's chancel of St. Bartholomew Church, Chichester, is dramatic in colour, but one feels th it requires the burning of incense to give it atmosphere ar make it less obviously artistic and theatrical.

Messrs. Clarkson and Hall's design for the entrance the new premises in Oxford Circus is rather empty for store entrance, and is too vaguely drawn to be of much u to either the architect or the client.

Mr. Harold Tarbolton's design for the Village Chur Mental Hospital, Bangor, is a good piece of stone chur architecture—one would think more suitable for a sun country where windows were not required, but for a n thern country dark and mentally depressing.

Mr. Herbert Baker's design for the Foreign Office bloc Delhi, drawn by Wilson, might be mistaken for a desi by Lutyens drawn by Walcot.

Messrs. Thompson and Hepworth's design for the develo ment of West Cliff, Ramsgate, is beautifully drawn, but is unfortunate that the small cottages behind the lar blocks of flats should not get a view of the sea.

Messrs. T. H. Mawson and Son's design for a sunk gard in the south shore improvement may be required as protection from the west winds, but is too small in sc to be good architecturally.

The Textile Trades' War Memorial design by Sir Ast and Maurice Webb is nice, but is too small in scale, a shows fear both in design and in draughtsmanship.

Mr. Chalton Bradshaw's design for the Guards' Memor is dignified and impressive, but the sculptor will ha difficulty in getting a sculpturesque quality into the figu of the soldiers, if they are executed in bronze.

An inspiring little drawing is Messrs. Simpson and Kirb design for the Dundee War Memorial. The effect is sole and the pylon is well placed on the terrace.

Sir Robert Lorimer's design for the Naval War Memo is rather gentle, and one would have expected more fr him. The base seems too high and does not spread enou on to the ground. The little bronze angels at the apex, su porting a ball, seem too playful for a Naval memorial.

Mr. Robert Atkinson's design for colour decoration St. Catherine's Church, Hammersmith, might be very use as a suggestion for the decorator, but is too slight to be any use as an exhibit to the Academy. His sketch for garden at Cherkley Court, on the other hand, has that ar tic quality which we usually associate with him.

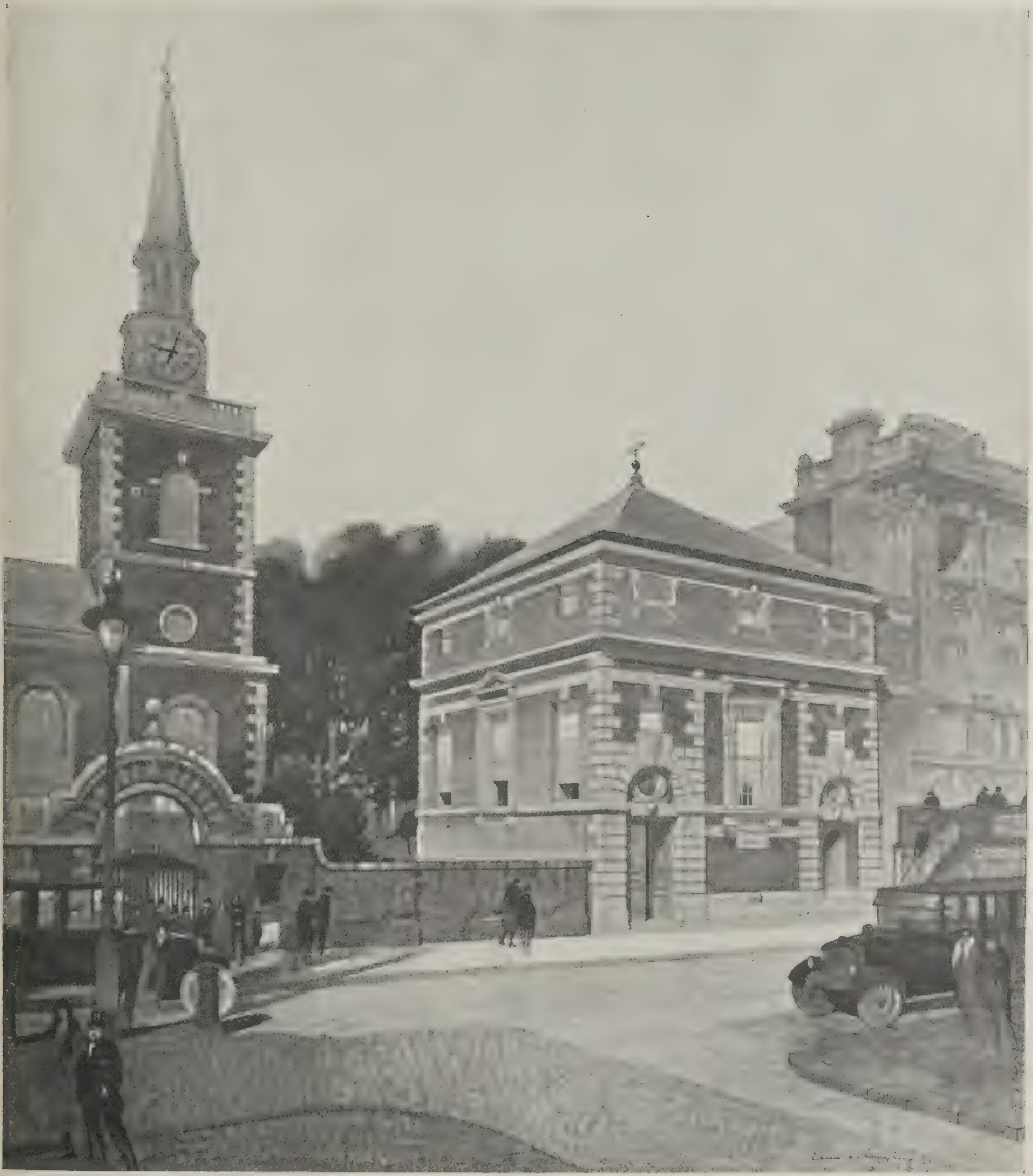
The exhibition, as a whole, is of a very high standa and we shall look forward with interest to seeing th buildings which show so much promise as exhibition dra ings in their concrete form, which after all is the only st worth considering.

T. S. T

Sir John Burnet has four drawings in the exhibition, showing the architectural setting of the war cemetery Jerusalem, and another the proposed Indian War Memo at Port Tewfik. The most interesting of his works is Second Church of Christ Scientist at Palace Gard Terrace, shown in a careful water-colour drawing.

# New Bank Premises, Piccadilly

Sir Edwin L. Lutyens, R.A., Architect



The little bank building shown in the above perspective is now being erected in Piccadilly. In architectural character and materials it harmonizes perfectly with Wren's adjoining St. James's Church. The drawing is by Mr. Cyril Farey. (*Royal Academy Exhibition.*)

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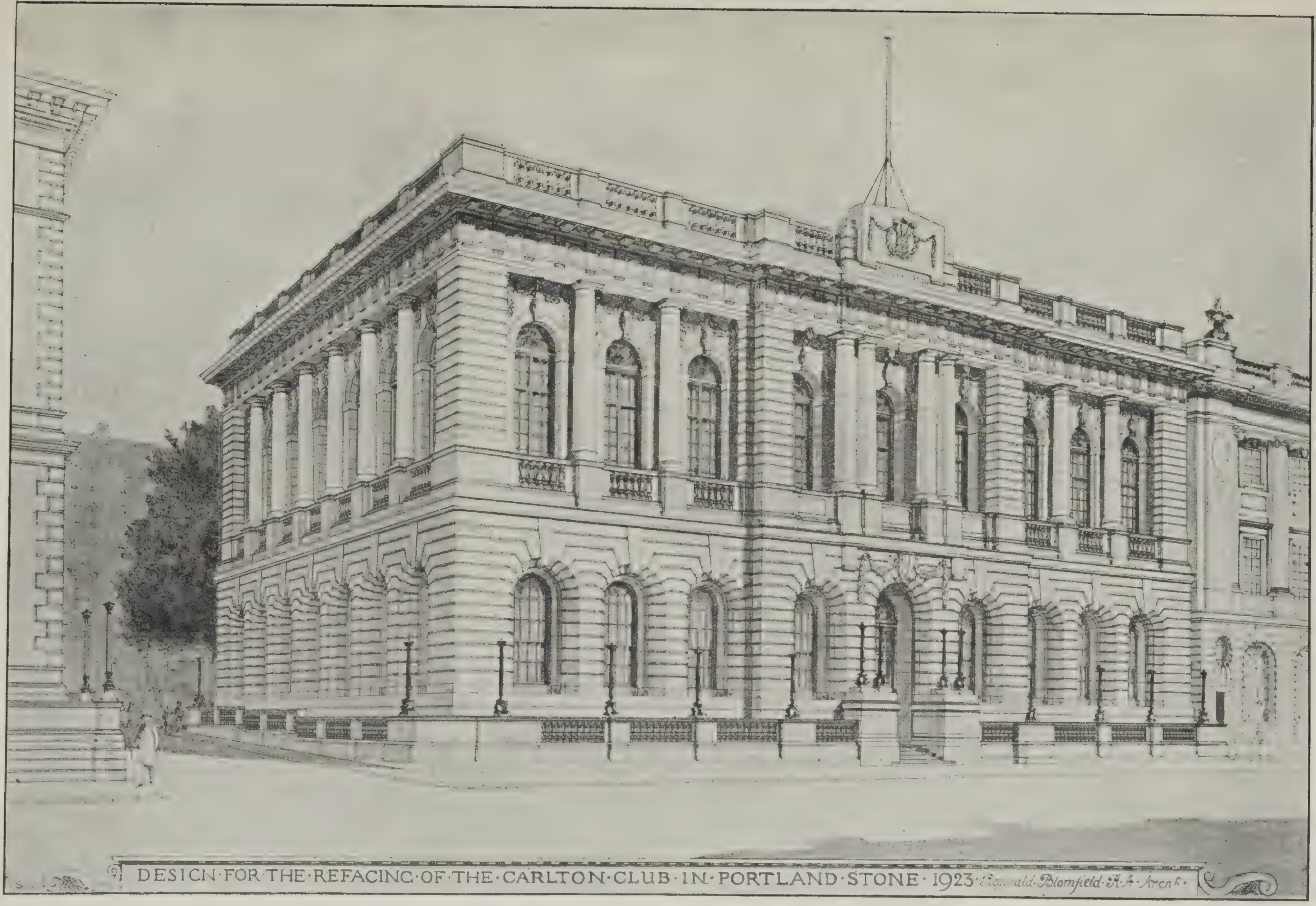
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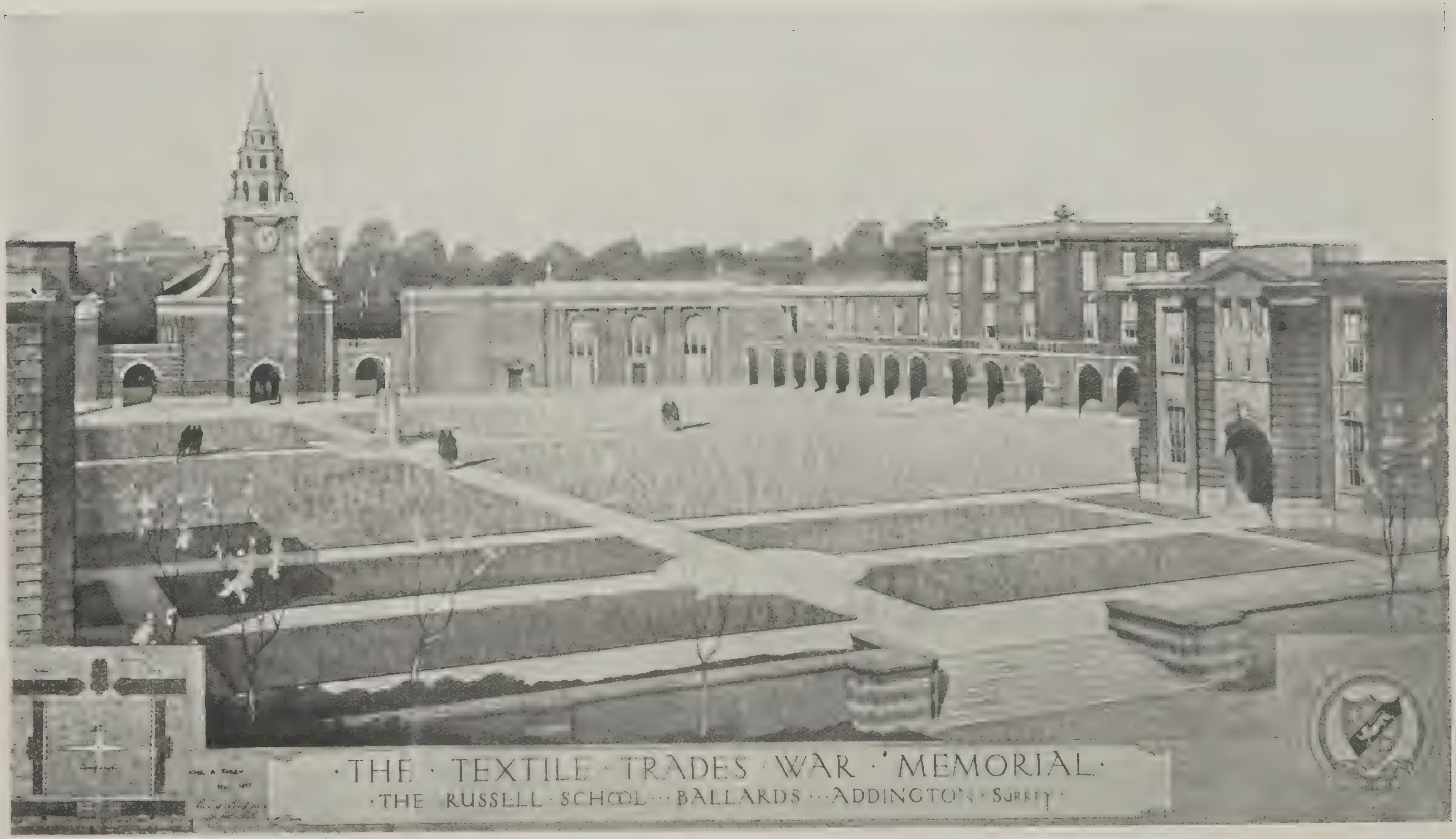
Reginald·Blomfield·R.A·Archt.

DESIGN FOR THE REFACING OF THE CARLTON CLUB IN PORTLAND STONE.
SIR REGINALD BLOMFIELD, R.A., PP.R.I.B.A., ARCHITECT.

(*Royal Academy Exhibition.*)

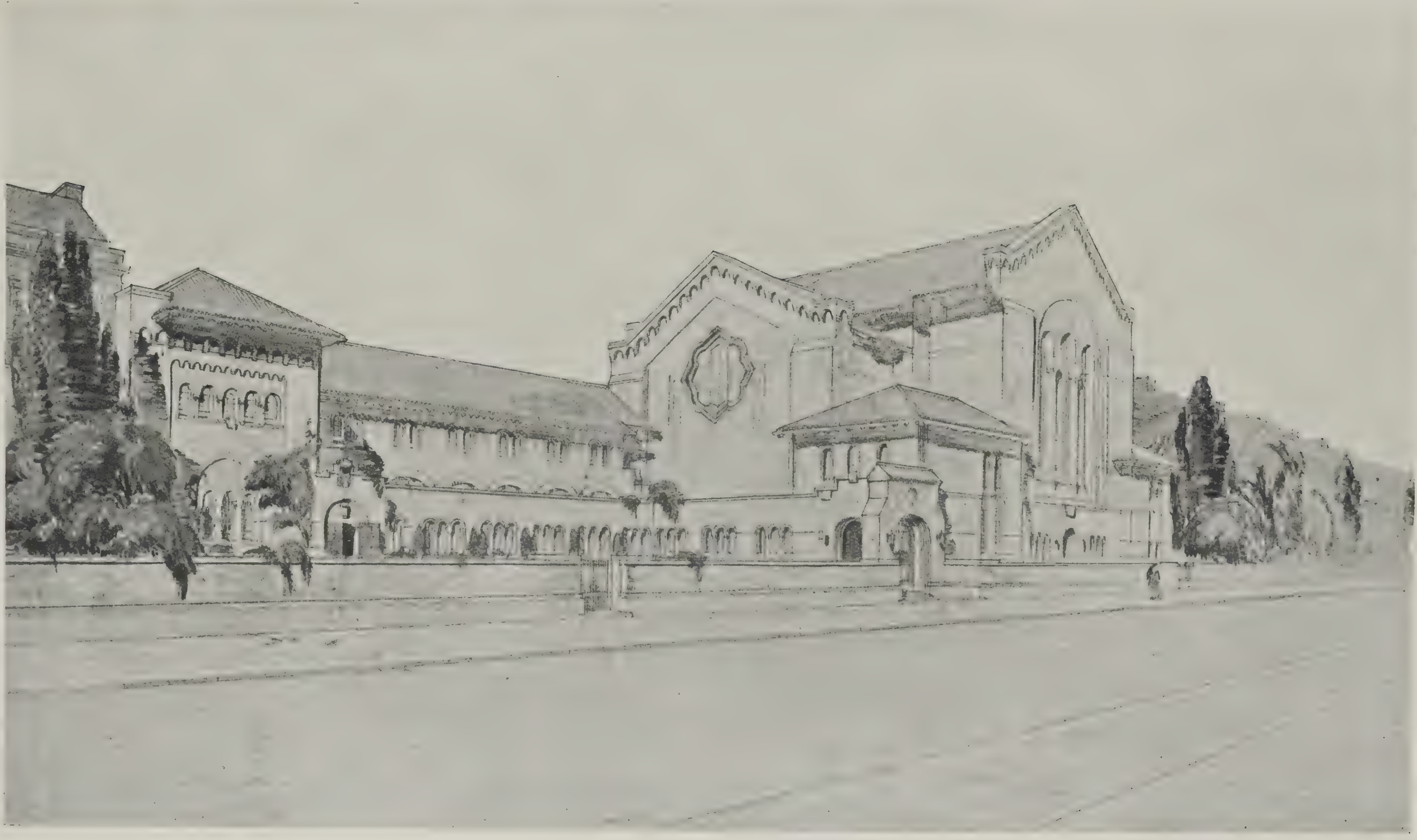

·THE · TEXTILE · TRADES · WAR · MEMORIAL·
·THE · RUSSELL · SCHOOL · · BALLARDS · · ADDINGTON · SURREY·

THE TEXTILE TRADES WAR MEMORIAL, THE RUSSELL SCHOOL, BALLARDS, ADDINGTON, SURREY.
SIR ASTON WEBB, P.R.A., PP.R.I.B.A., AND MAURICE WEBB, M.A., F.R.I.B.A., ARCHITECTS.

*(Royal Academy Exhibition.)*

# The Second Church of Christ Scientist, Palace Gardens Terrace, London, W.

Sir John Burnet, A.R.A., Architect



An interesting application of Romanesque forms to a modern building. The drawing is one in which clarity of outline is not sacrificed to picturesque effects of draughtsmanship.
(*Royal Academy Exhibition.*)

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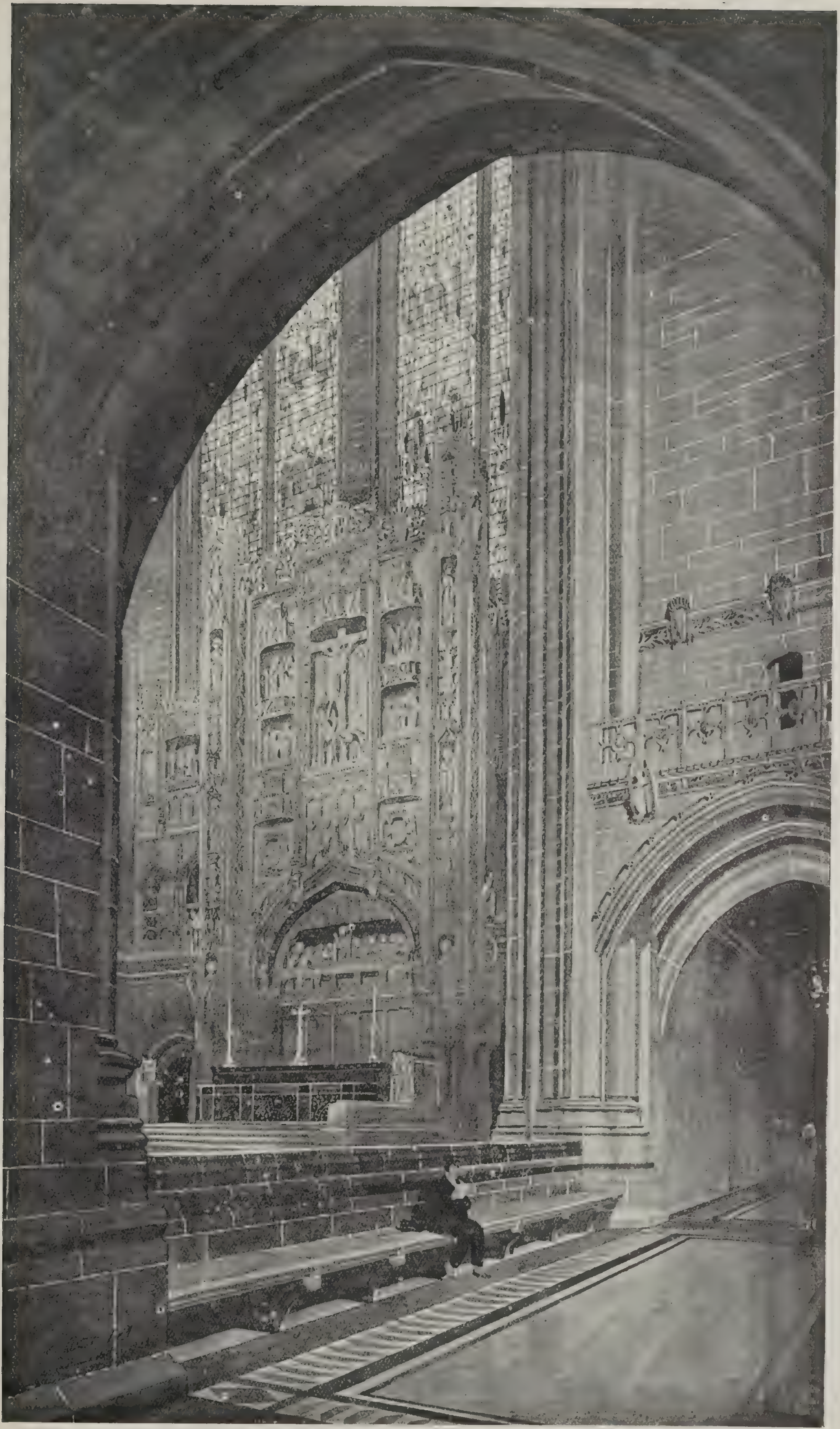
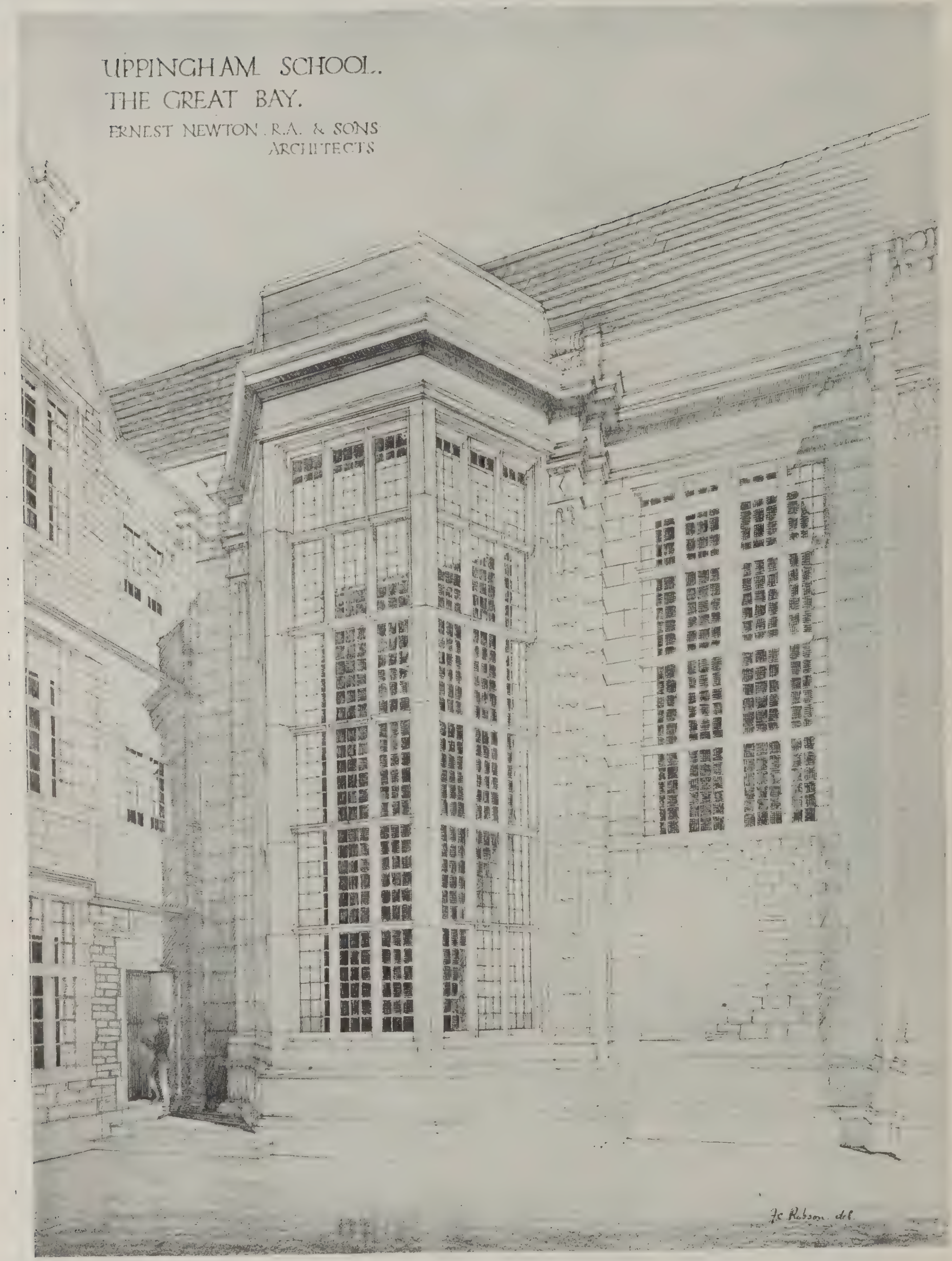
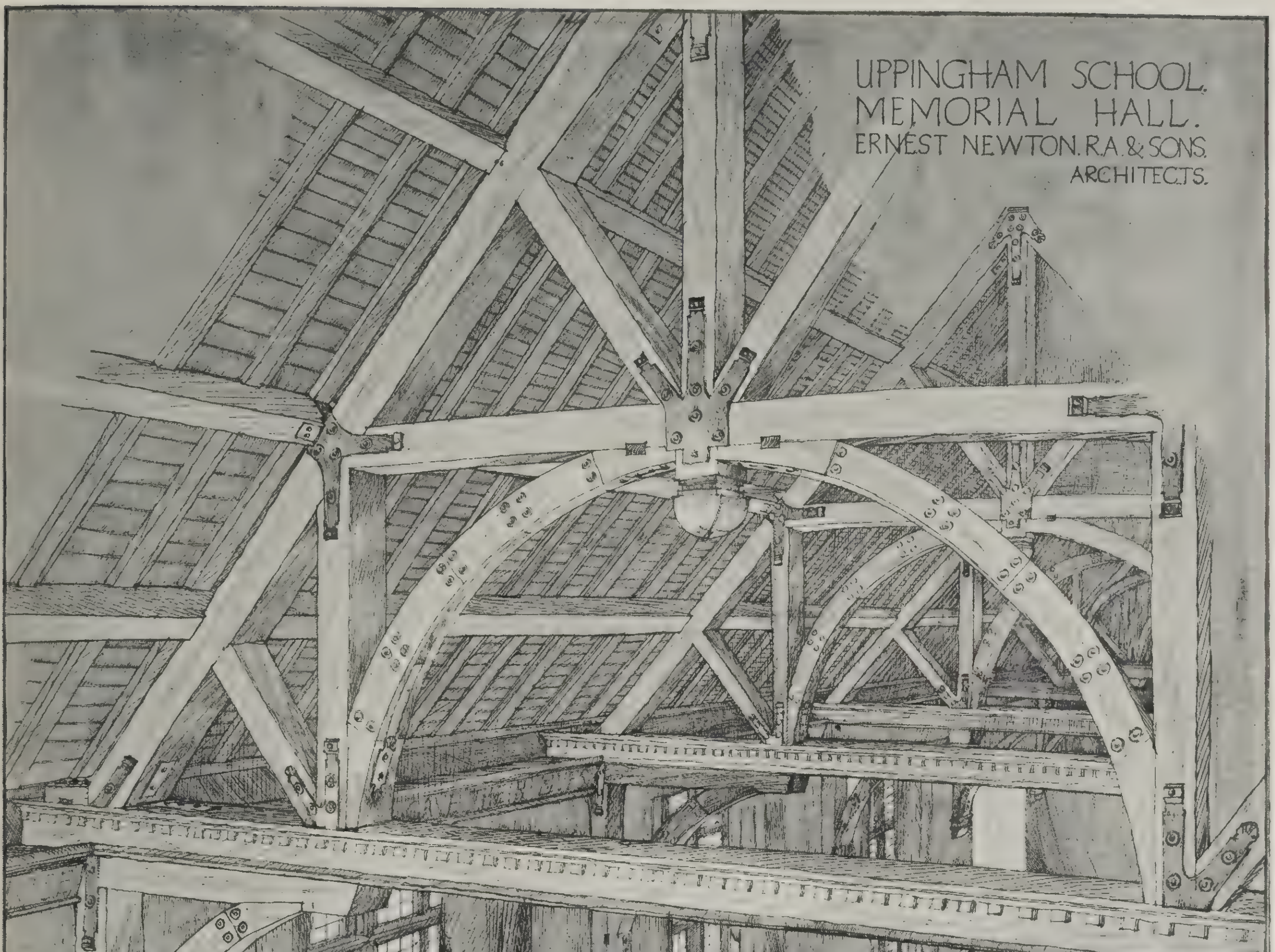


LIVERPOOL CATHEDRAL: INTERIOR VIEW OF EAST END, FROM THE SOUTH CHOIR AISLE.
G. GILBERT SCOTT, R.A., ARCHITECT.

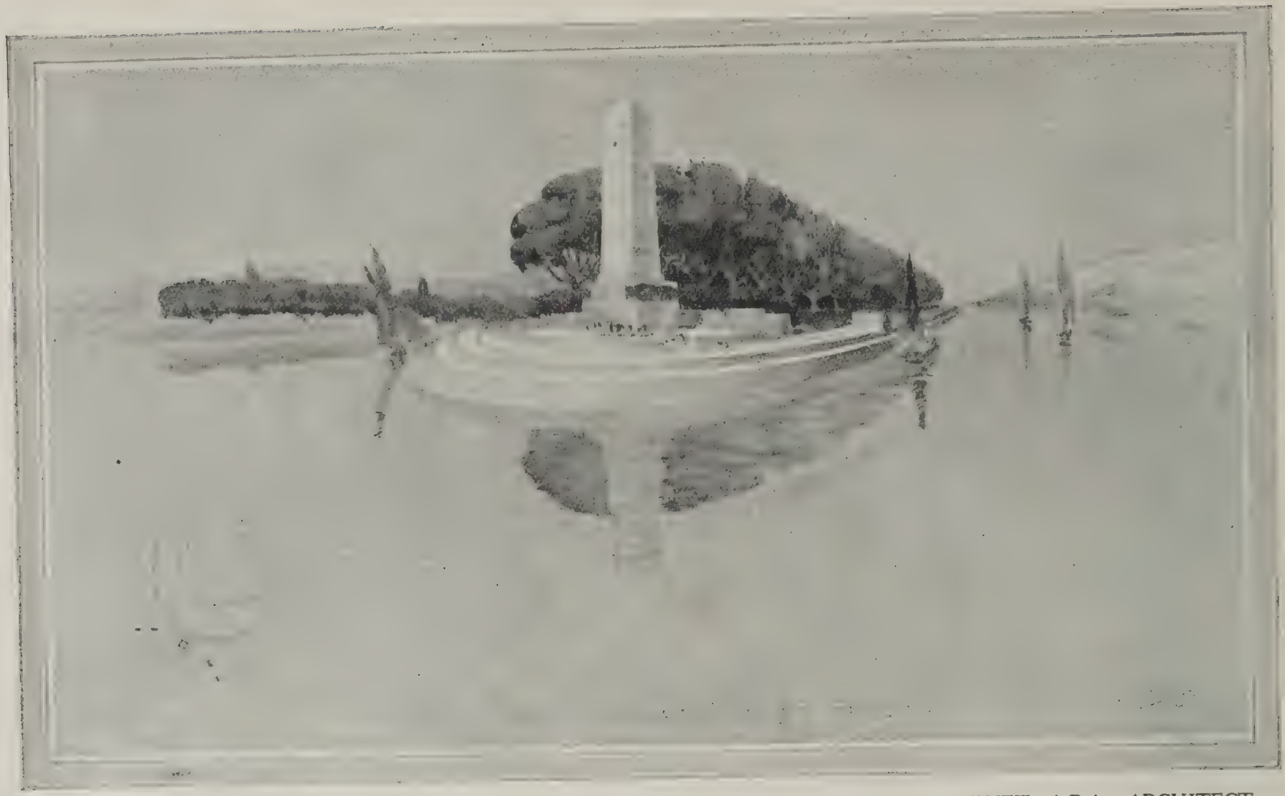
*(Royal Academy Exhibition.)*


UPPINGHAM SCHOOL.
THE GREAT BAY.
ERNEST NEWTON. R.A. & SONS
ARCHITECTS
J.C. Robson. del.

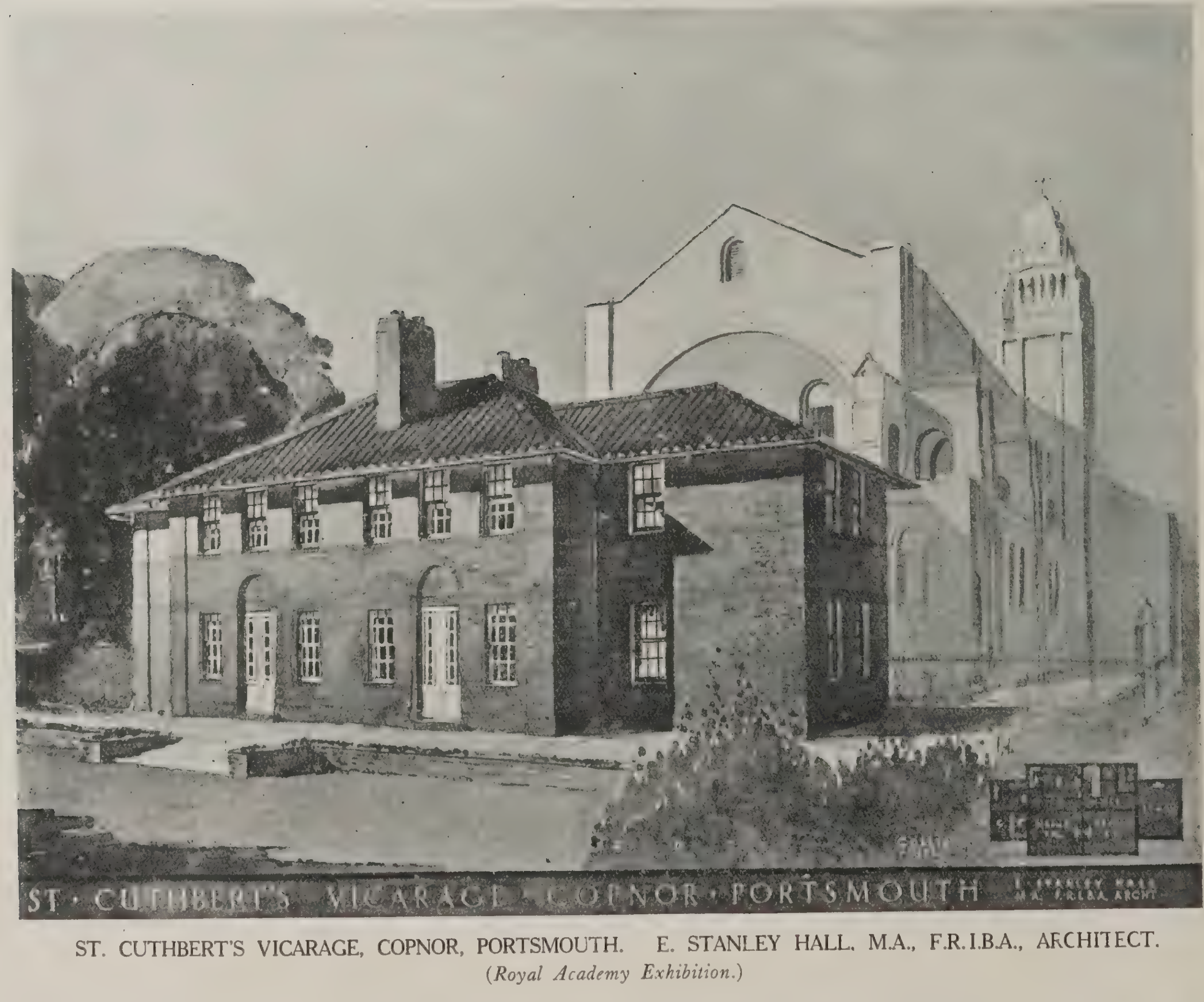
UPPINGHAM SCHOOL: THE GREAT BAY.
ERNEST NEWTON, R.A., AND SONS, ARCHITECTS
*(Royal Academy Exhibition.)*


UPPINGHAM SCHOOL.
MEMORIAL HALL.
ERNEST NEWTON. R.A. & SONS.
ARCHITECTS.
W.G. Newton
Feb 1923

UPPINGHAM SCHOOL MEMORIAL HALL.
ERNEST NEWTON, R.A., AND SONS, ARCHITECTS.
*(Royal Academy Exhibition.)*



PROPOSED INDIAN WAR MEMORIAL, PORT TEWFIK, SUEZ CANAL. SIR JOHN BURNET, A.R.A., ARCHITECT.
*(Royal Academy Exhibition.)*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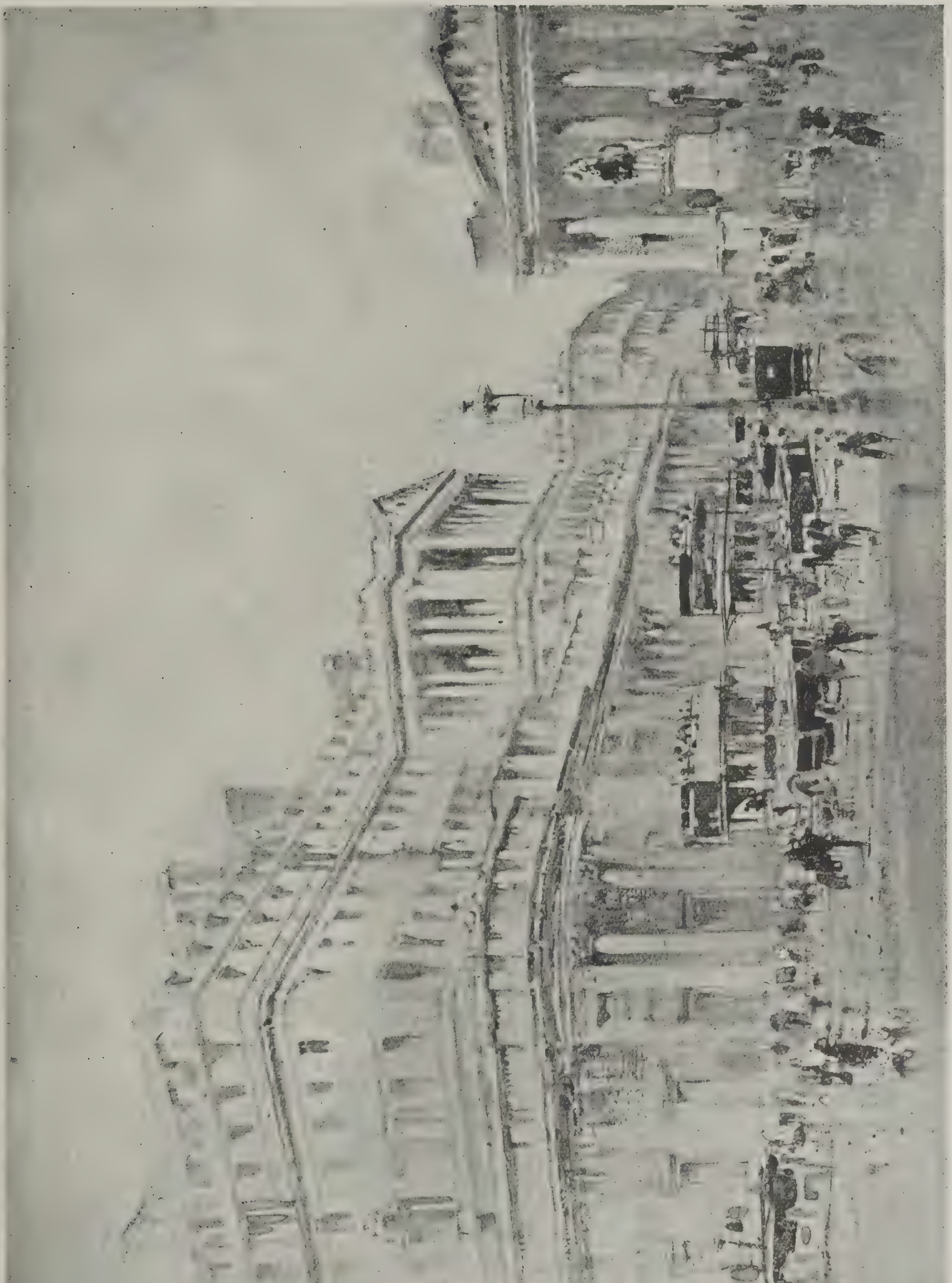
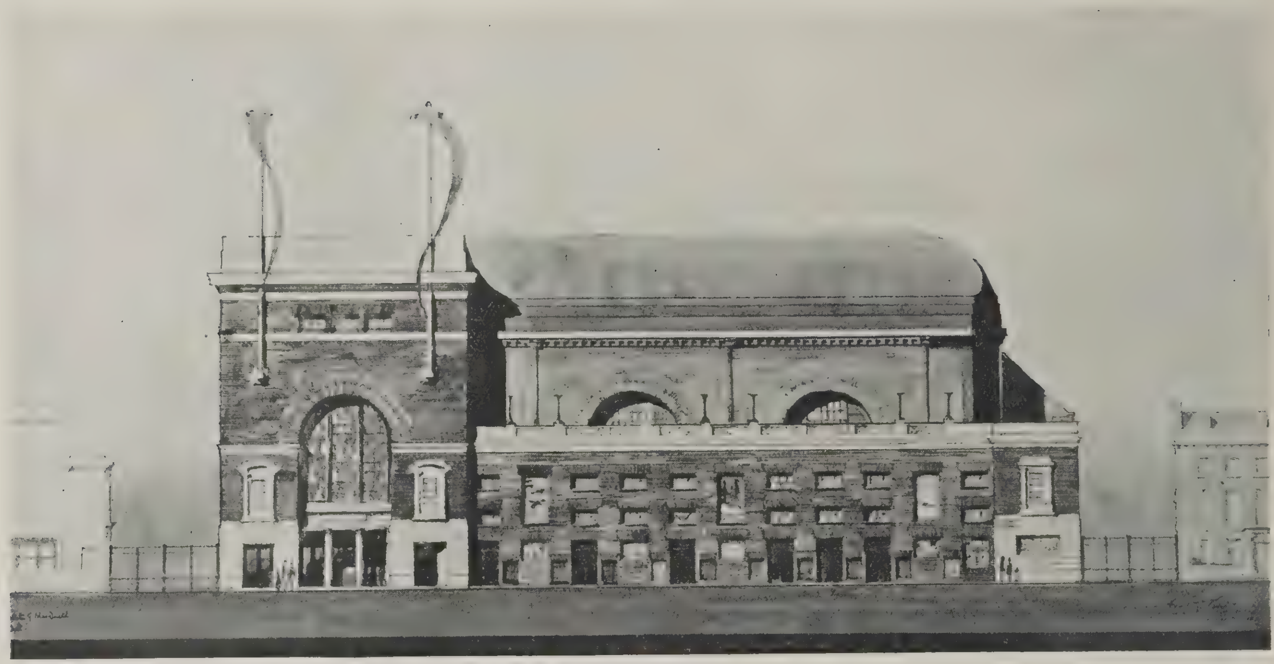
E. STANLEY HALL
M.A. F.R.I.B.A. ARCHT

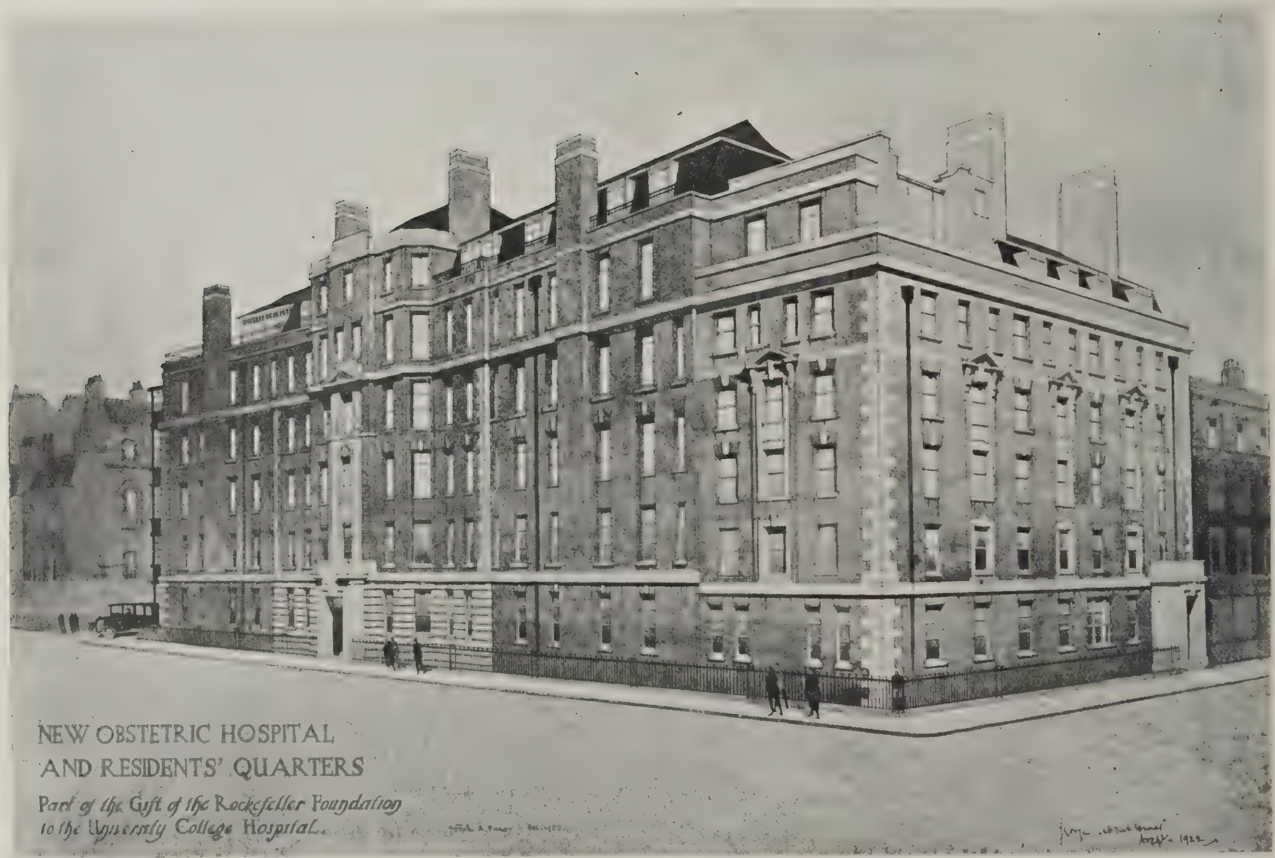
ST. CUTHBERT'S VICARAGE, COPNOR, PORTSMOUTH. E. STANLEY HALL, M.A., F.R.I.B.A., ARCHITECT.
*(Royal Academy Exhibition.)*



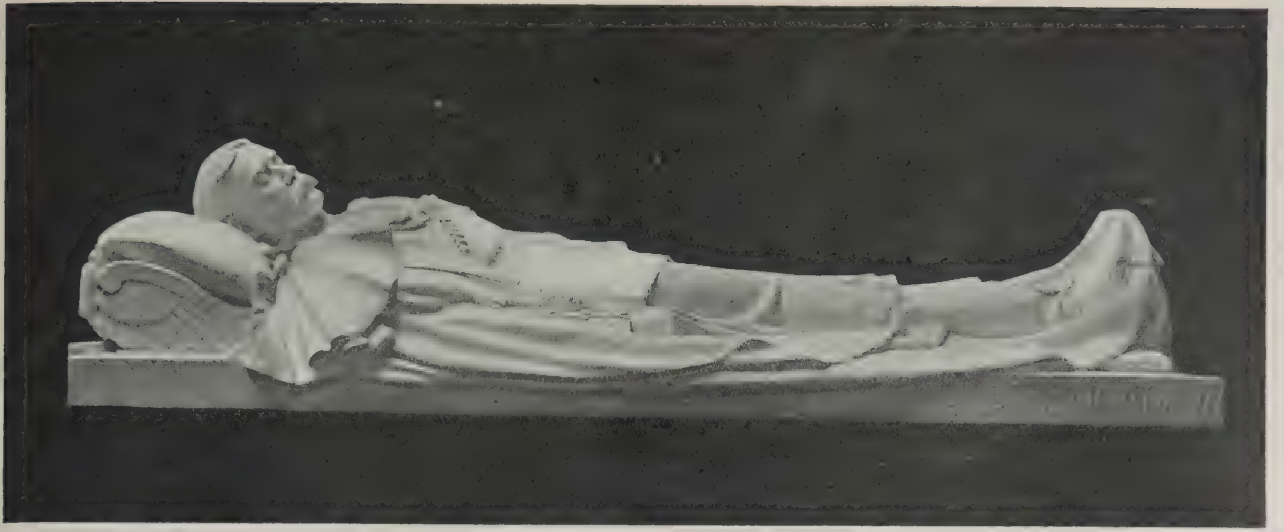
SKETCH DESIGN FOR THE NEW BANK OF ENGLAND.
HERBERT BAKER, A.R.A., ARCHITECT.
*(Royal Academy Exhibition.)*



FAÇADE OF THE PAVILION, SHEPHERD'S BUSH, W
FRANK T. VERITY, F.R.I.B.A., ARCHITECT.
*(Royal Academy Exhibition.)*


NEW OBSTETRIC HOSPITAL
AND RESIDENTS' QUARTERS
Part of the Gift of the Rockefeller Foundation
to the University College Hospital.

NEW OBSTETRIC HOSPITAL AND RESIDENTS' QUARTERS, UNIVERSITY COLLEGE HOSPITAL. ROCKEFELLER GIFT.
GEORGE HORNBLOWER, F.R.I.B.A., ARCHITECT.
*(Royal Academy Exhibition.)*



EFFIGY OF LORD KITCHENER FOR MEMORIAL CHAPEL, ST. PAUL'S CATHEDRAL: TO BE CARVED IN MARBLE. BY W. REID DICK, A.R.A. (*Royal Academy Exhibition.*)

# The Royal Academy Exhibition

## 2.—Sculpture

### By KINETON PARKES

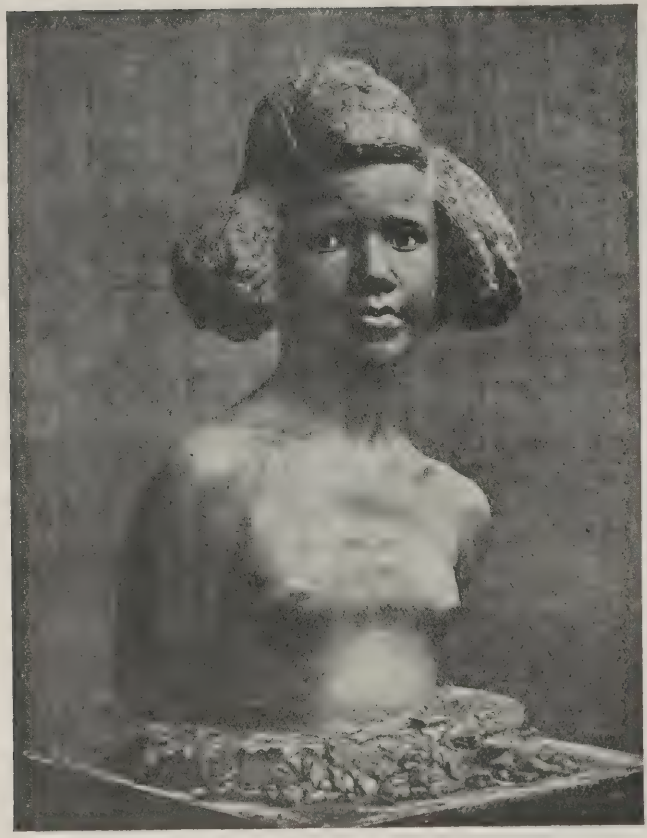
As is right and proper, war memorials are the chief subjects in the sculpture section, and the big ones are very big indeed. Realism is rampant, and the startling "Response, 1914," of Sir Goscombe John, for Newcastle-on-Tyne, is absolute realism, and so is C. Sargeant Jagger's figure for Paddington Station. Neither of these is relieved by any touch which would have stirred the imagination and rendered them great works of art. In the figure for Hoylake Memorial Mr. Jagger has became decorative, partly by means of unreally disposed drapery, but has not succeeded in becoming idealistic. Sir Hamo Thornycroft in his "Courage Bringing Victory" has infused an idea into his classic figure, and Gilbert Ledward has tried to do the same in the model for the marble group for Stockport. In Henry C. Fehr's "St. George" the saint is completely lost in his armour, a fate which has not been accorded to Arthur G. Walker's "Sir Philip Sidney," whose dress is only a picturesque adjunct of a picturesque figure.

In the lecture room there are two imaginative memorials; the popular one of the nude youth offering himself in the nation's need, for Eton College, by Sir Bertram Mackennal, a very finely conceived and modelled work epitomizing the characteristics of the young man of to-day, and "Sir Galahad," the statue by Alfred Turner for Victoria College, Jersey, a work of real insight with sculptural feeling of an unusual character. No satisfactory presentation of Lord Kitchener has ever been made, and as a subject for sculpture, even in the hands of W. Reid Dick, in the model for the marble effigy for St. Paul's Cathedral, he has proved inadequate. Here again realism, or at all events a literalism carried to excess, has marred the work, and Tom Clapperton's marble recumbent effigy of an officer for St. John's Church, Lee, Hexham, has almost succeeded

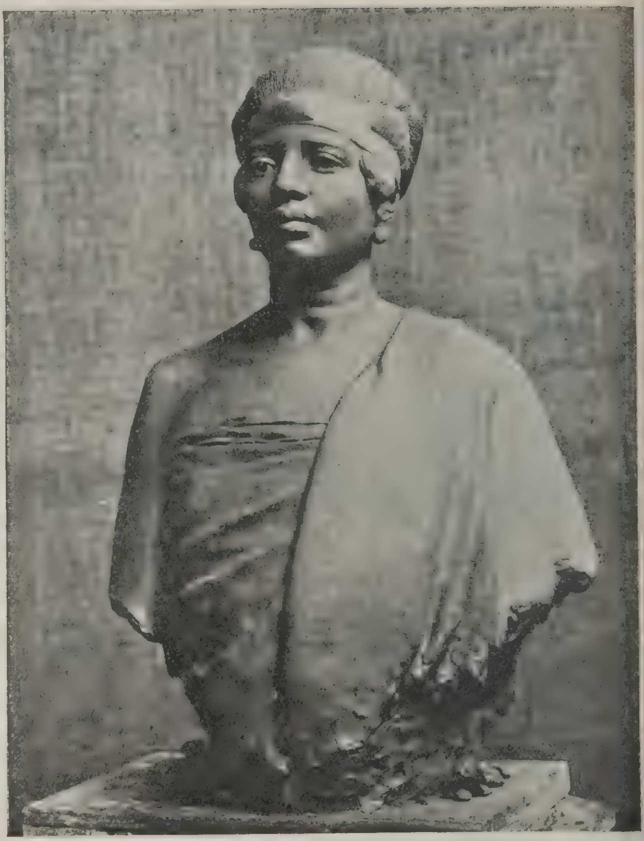
MARY.

PASTORAL.

BY W. REID DICK, A.R.A. (*Royal Academy Exhibition.*)



SYBIL OF THE GOLD COAST.

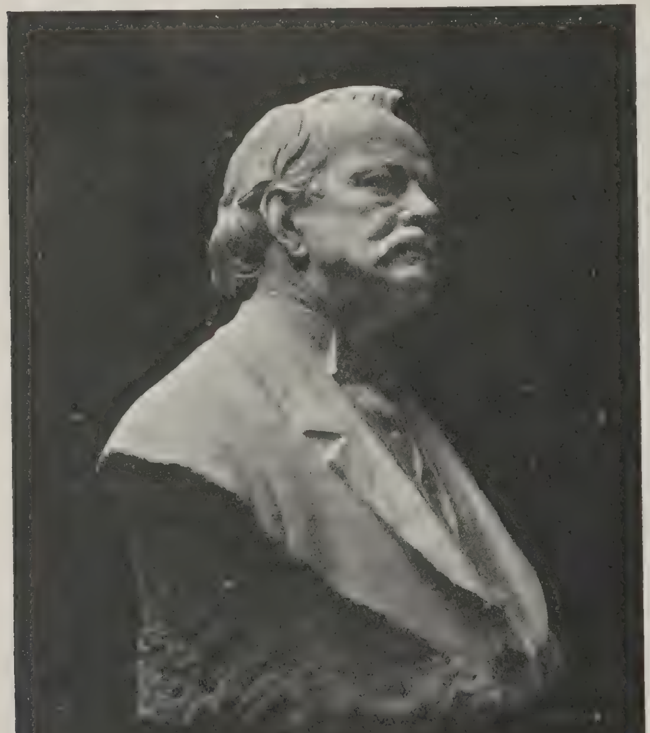


A DAUGHTER OF KINGS.

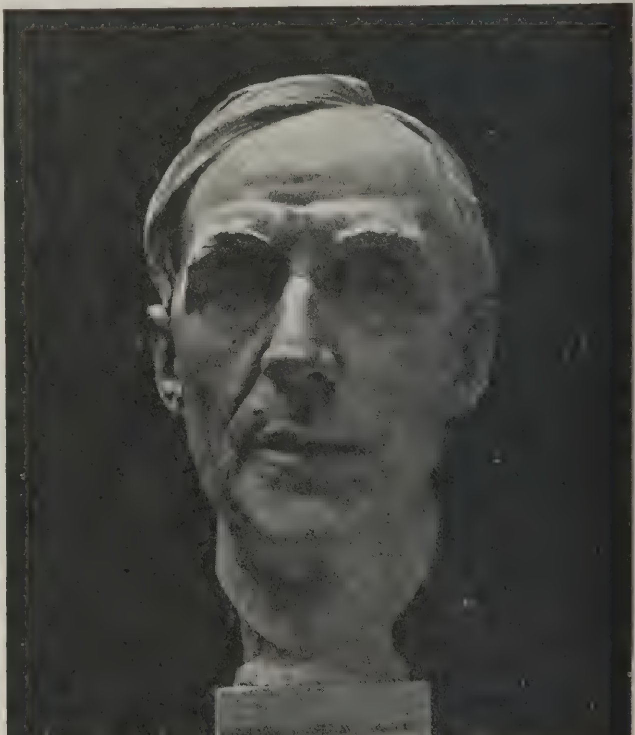
BY E. WHITNEY SMITH, R.A.

in transgressing in the same direction. Ferdinand Blundstone's central figure for the Folkestone Memorial is another with an abundance of decorative detail.

It is in portraiture that English sculpture best maintains itself rather than in great monumental work, the taste and faculty for which we seem to have lost, perhaps partly because a great sculptural war memorial scheme has never been tackled. F. Derwent Wood's bronze head of Walter Russell, A.R.A., is a most accomplished piece of work, an his marble, Sir J. J. Thomson, O.M., a fine portrait of great scientist. John Tweed contributes three busts, which Captain Louis Paget is the most characteristi George Thomas, the son of that great sculptor, the la Havard Thomas, shows a beautifully finished study i Miss Mave Wolfe; Frederick Wilcoxson has two go portrait works; Burlika Kosminski contributes two of h



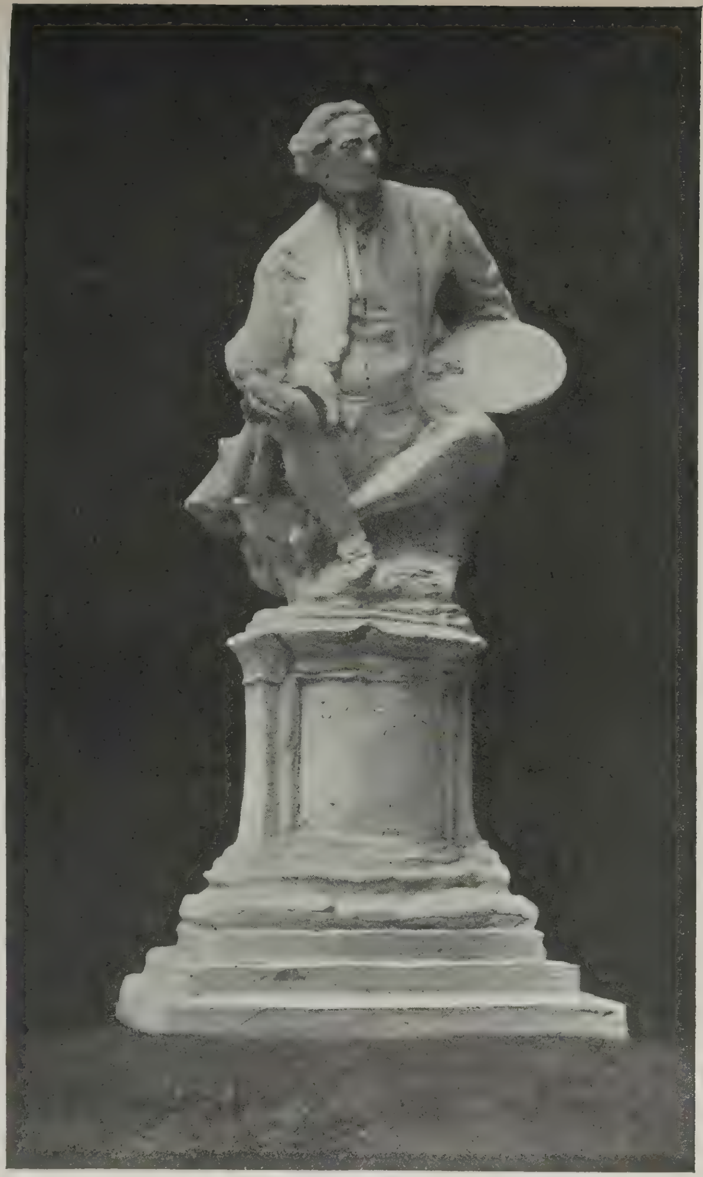
SIR JOSEPH J. THOMSON, O.M., F.R.S.: MARBLE.



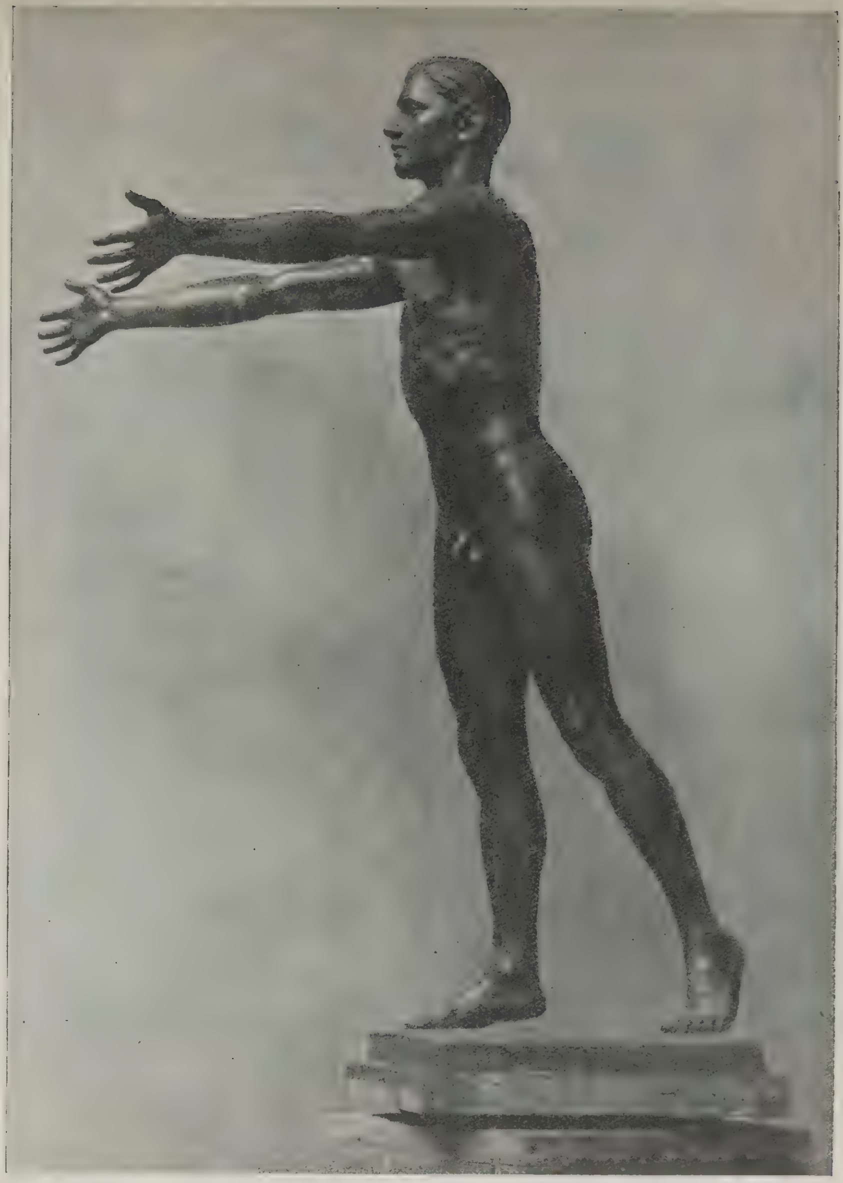
WALTER W. RUSSELL, A.R.A.: BRONZE.

BY F. DERWENT WOOD, R.A.

*(Royal Academy Exhibition.)*



SKETCH FOR STATUE TO A PAINTER: BRONZE.
BY F. DERWENT WOOD, R.A.



BRONZE STATUE FOR WAR MEMORIAL TO BE ERECTED AT ETON COLLEGE.
BY SIR BERTRAM MACKENNAL, K.C.V.O., A.R.A.

*(Royal Academy Exhibition.)*

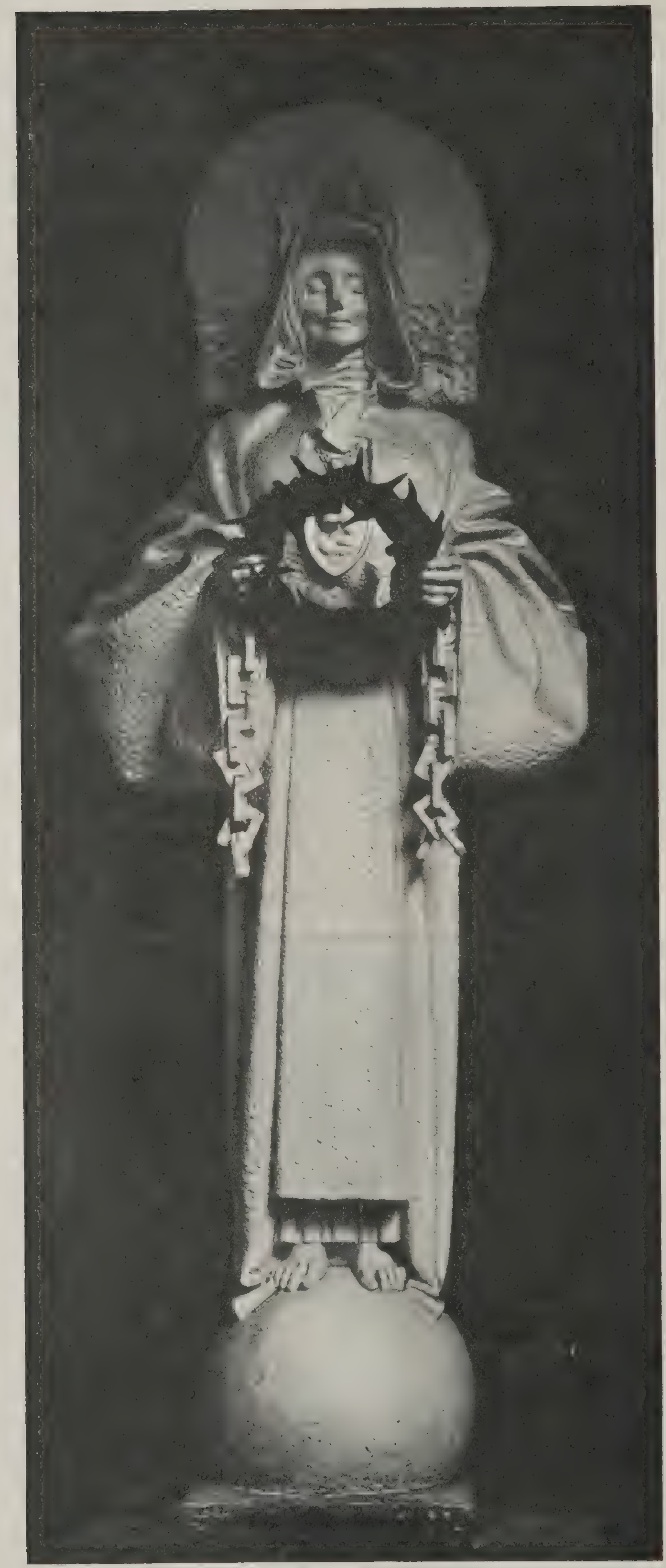
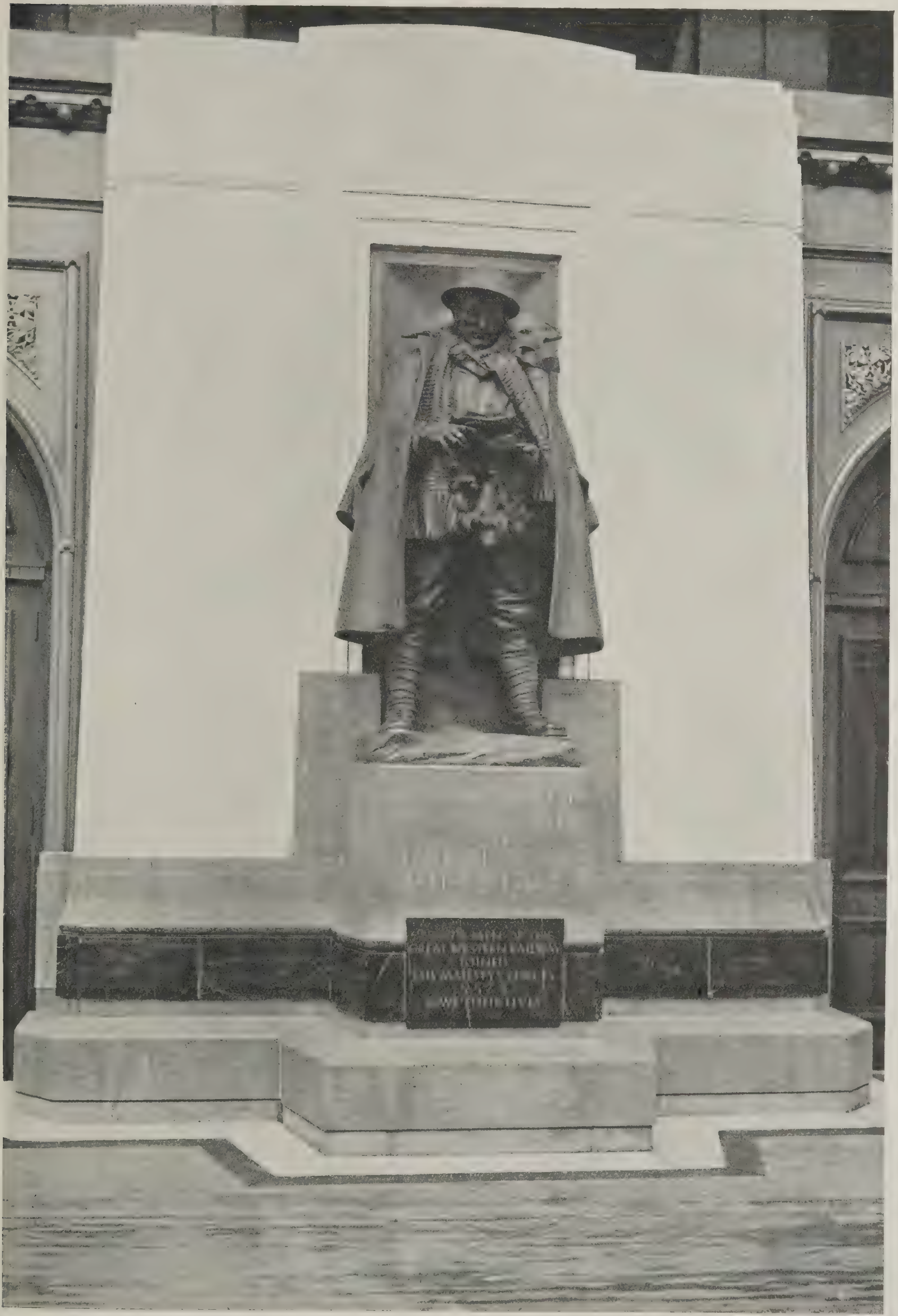


FIGURE ON HOYLAKE WAR MEMORIAL.
BY C. SARGEANT JAGGER.
*(Royal Academy Exhibition.)*

# Figure on the Great Western Railway War Memorial, Paddington Station, London

### By C. Sargeant Jagger



The War Memorial figures illustrated on this and the previous page are typical of the strength of Mr. Jagger's work. There is tremendous power in every line.

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finished studies, and Edgar S. Fritti a good portrait. It is interesting to note that the well-known bust in bronze of the late Mr. Ludwig Mond by the celebrated Polish sculptor, Henry Glicenstein, is included, and Eleuterio Riccardi, the accomplished Italian artist, sends an admirable portrait of the Rt. Hon. E. S. Montagu. A bronze bust that dominates the gallery is Sir George Frampton's "Sir John Bland-Sutton," an incisive work well worthy of Sir George's reputation.

E. Whitney-Smith is represented by three works, two of which are of unusual subjects, unusually treated, and with great success. They are portraits of a Gold Coast woman and girl, and the hair of the latter is a fine example of plastic technique. Francis Sargant's study of an old man in marble is interesting, and Charles Wheeler's small decorative work, "Dream Babes," a small bronze group on a blue base, is noticeable, and another small thing that is very attractive is Gilbert Ledward's bronze statuette on a decorative capital as base. Derwent Wood's small gilt-bronze figures are altogether charming. Animal sculpture is not great in number, but it is conspicuous in the big bronze hart, which is to surmount Alfred Drury's war memorial for Hertford. The small animal bronzes of Frank Lutiger are well-observed studies. It is only a little contribution, but one to be welcomed, that the majolica figures of Charles Vyse and Henry Parr make: we need more of this kind of work in England, as well as more wood-carving. There seems to be only one piece of the latter, the statuette in white chestnut by Alec Miller.

Applied sculpture is sadly neglected in England. Apart from the war memorials, there is very little of it, but what little there is is very good. Henry Wilson's silver memorial altar cross, for Exeter Cathedral, richly and unusually encrusted and otherwise enriched with diamonds and other precious stones in settings, is exceptionally interesting; George Jensen's silver bowl is good, and Richard Garlie's lead fountain is so good that architects can have no excuse for not employing more of our sculptors' time and energy in this class of work. In this exhibition alone, in the sculpture only of the women, there is much to encourage the architect to include applied sculpture in his design: Phyllis Clay's statuettes and Edith Gabriel's and Anne Acheson's lead garden figure. Kathleen Hilton Young's bronze lifesize figure of a young man, "Offering," should be seized on by some committee of war memorials, it is a fine one all ready to hand.

There are several ideal works that are deserving of notice: there is William McMillan's "Nature" group of a youth reclining and a girl standing, her face expressing wonder; it is a naturalistic study, as is also the same artist's sketch group, "Cement Breakers." As if to prove that classicism, and even ornamental sculpture, can never be outmoded, Gilbert Bayes sends his beautiful crouching woman in marble, "The Unfolding of Spring." There is some slight very low relief ornament, scarcely more than incised work, on the base, and some fruit and flowers to assist the subject. but otherwise the nude figure is naturalistically treated, Nearby is a large bronze seated male statue called "The Victor," by David McGill; this too is intended to convey an idea, but good as the statue is, the idea of it seems rather to be Despondency.

From a survey of the big war memorials here shown, the conviction that they are spiritually worthy of the occasion does not irresistibly force itself upon one. On the other hand, there is some fine work to be seen this year in various directions and there is promise of more to be obtained from a study of that offered by such young artists as Michael Katz, Conrad Buhrer and Eric Schilsky, to name only three of the newcomers to the Academy.

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# The Business of an Architect

## 5.—The Staff

### By C. MURRAY HENNELL, F.S.I.

HAVING set up in practice, obtained our offices and furnished them, we have now to think about the staff that is to help in carrying out the commissions entrusted to us. If the practice is a small one, we can possibly get along with no staff at all, or with one boy or girl who will relieve us of minor clerical duties. However, this will not take us very far, and as soon as there are large works or a multiplicity of jobs in the office assistants become essential, but I would say at once that with a view to getting things done, as well as from the economical standpoint, it is better to be under-staffed than to have too many assistants about. This, of course, must be construed reasonably, but in many offices, especially public ones, much time, paper and patience, to say nothing of salaries, are wasted by a staff which has not really enough to do. This also breeds discontent for which the fully occupied brain has no room.

The busy architect's staff is divided into two separate sections, the clerical and the technical, and their duties should not overlap in any way. They are quite distinct, though it often happens that a boy is brought into an office as a junior clerk with the proffered hope that he will have some drawing to do, and will even perhaps become an architect—in time—owing to the insight he will have into the profession. What a hope! If the boy is worth having at all as a clerk, and the practice is good enough for his engagement as such, his clerical duties will take him all his time, and he will not have much more to do with drawings than to roll them up and send them away. On the other hand, if he expects or is expected to become an architect, the whole of his time, including overtime and "spare" time, are little enough in which to gain sufficient knowledge of the profession, and useful though experience in clerical work would always be to him, he cannot afford to spend his early days as a clerk.

I will deal first with the clerical staff, whose principal, and perhaps only member must be a really good shorthand typist. Bad or indifferent ones, however low their wages, are sheer waste of time and money, but a good and intelligent clerk is worth a great deal to an architect. The world is overcrowded with clerks, male and female, who are seeking new berths or change of appointments, and hosts of them hold certificates for many words per minute in both shorthand and typewriting, but there are not an appreciable number of those seeking employment who can really use their brains as well as our pencils and typewriters. Intelligence and its application are far rarer and more precious than "a hundred and fifty words a minute." The training in most of the commercial schools is thorough and of the right sort, but even that will never make a silk purse out of a sow's ear, and it is the sow's ears that are of no use to the architect, for the very nature of his business renders it necessary that his clerks shall be something more than human shorthand and typewriting machines, and their duties will, or should, inevitably assume those of private secretaries who can think for themselves.

The good shorthand writer not only saves time by the speed at which he can take down what is said, but will also become the trainer of his employer in gradually and almost unknowingly making him a fluent and rapid dictator. This is of enormous importance to an architect, whose correspondence too often seems to be either a heavy burden or is seriously neglected. It is extremely difficult for most men at first to dictate long or important letters, but with practice and a good clerk this is transformed into an easy and pleasant duty, and in one hour a day it should be possible to dispose of all the correspondence that previously took most of one's time to draft or dictate, go over, and correct. An architect's letters should be as neat, clear, and concise as his drawings and specifications, and neglect or slovenliness in regard to letters are severe handicaps to the success of a practice.

But, to return to our clerks. Although shorthand and typewriting will frequently occupy the whole of their time on some days, these are not the only things that they should be expected to do, either for their own or their employer's good. They must attend to all the other clerical work, such as filing and records, etc., also book-keeping. Books of account should, of course, be kept by all architects, although there are many in the profession who carry on in a happy-go-lucky way with no other book than a pass book. However, the book-keeping required in an architect's office is very much simpler than is necessary in a commercial concern, and most clerks with any training in the principles of book-keeping can soon learn to make the proper entries in the books and to compile such records as are required.

The technical staff is for the most part confined to the drawing office, and ranges from the chief assistant down to articled pupils. In some practices engaged upon varied kinds of work, including the development of estates and the surveys of property, it is necessary also to keep a surveying staff, which will spend much of its time out of doors.

I began the first chapter of these articles by stating: "The training of the man or woman who contemplates architectural practice must be thorough, practically as well as academically," and it is to be assumed that every architectural assistant aspires to be "on his own" at some future time. If he has no such ambition he is not likely to be an energetic and useful assistant, but in any case he should be thoroughly trained or be in the process of securing a proper training.

The chief assistant ought to be a man capable of carrying out works, at any rate of minor proportions, from commencement to completion entirely "on his own," but he should at all times remember that he is paddling someone else's canoe, and that his ideas must be subservient to the wishes of his employer. Generally the best chief assistant is one who has risen from a junior position in the same office. He is now on the top rung of the ladder of assistants and it is only one step, though a big one, to the bottom rung of the ladder of practice. It is for his employer to give him every chance of fitting himself for practice on his own account, but the chief assistant must safeguard himself against contracting that distressing complaint "swelled head," which, unfortunately, attacks a large proportion of men when they first find out that a job which they have done, or imagine they have done, from A to Z, is successful.

This ailment, like many others, goes through a stage of incubation, during which a certain amount of discontent is the only symptom, and then it breaks out into a more or less acute form. However, in an architect's practice, there is usually an effective antidote at hand, and that is a really difficult job, preferably somewhat different in nature to the work of which the assistant has a very fair knowledge, with a free hand to make what he can of it; then a careful and thorough correction of what he has done. The correction must be made with considerable tact and in a kindly way. Impatience or a high tone are seldom of use and will certainly not have the desired effect in this particular case, in which, as always, it should be remembered that a human being, the most delicate and perfect piece of mechanism that has ever been made, is being dealt with. A firm hand is essential for the control of any staff, but rough handling is stupid and effective only in the wrong direction.

Architectural draughtsmen are mostly good fellows and hard workers with a genuine interest in their work, but they are also the most difficult set to control in an office and in whom to instil the proper order and methods of business. This, of course, is temperamental and is enhance by the happy and care-free days of studentship in the architectural schools.

My feeling towards the unruly young architectura assistants is much the same as that of a Divisional General who, on meeting a section of Royal Engineers coming dow an "up" trench in France in 1916, halted them and aske what they meant by it. The corporal who led them replie that they always came down that way as it was shorte The General spluttered, and then said: "You are Tunnellers aren't you? Well! You are the most undisciplined crow I ever met, but I take off my hat to the lot of you." H then stood back and let them pass.

However, discipline must be maintained, and punctualit and orderliness enforced, or the drawing office will soo become a bear garden, where the occupants are not to b discovered until long after the opening hour, and wher suddenly-required drawings will seldom be found at al This does not mean that one has to adopt a sergeant-majo attitude. The feeling throughout the office should be on of good fellowship and ease of mind, the principals bein regarded both as comrades and as chiefs.

Articles of pupilage have now been replaced to a considerable extent by training in the architectural schools, bu many parents still prefer the older method, and there i much to be said for and against both systems. An article pupil should never be taken on unless: (1) the architect ha a sufficient practice and can give an adequate training t the pupil; (2) the boy shows such aptitude and liking for th work as to lead one to expect that he will make an architect, and not be merely a hack draughtsman all his life It is a good plan to take a likely youngster into the offic for six months on trial before any articles of pupilage ar entered into, and at the end of that time to tell his parent frankly whether or not he has given the impression of bein suitable for the profession. The term of pupilage shoul not be less than four years, and if of five so much the bette

These are days of specialization, carried more to extreme in the United States than in this country, but too muc specializing in an architect's office kills interest and initiative. To retain a man's keenness about a job let him hav dealings with it right through. If he has drawn or trace the small scale drawings let him draw or trace the detail Let him read, even if he takes no part in writing, the spec fication, and allow him to visit the works during progress.

Every assistant should also have some interest in th practice itself, and although one cannot make them a partners, a bonus proportionate to the year's profits money well spent.

The engaging of the staff should not be entered upo lightly, and the American expression, "slow to hire an quick to fire," is worthy of consideration, although the la part of it should be interpreted in the following manne Don't sack a fellow hastily because he happens to have di pleased you, but when you have made up your mind th you really must get rid of him do it at once and pay him week or month's salary, as the case may be, in lieu of notic A disgruntled employee is a drag on the wheels of the who office, and both he and the employer will be happier ar better off when they have parted.

Men who are earning their living must work hard for i and this is especially the case in the practice of archite ture, but the work should be confined to reasonable hou when both body and brain are fresh and active. I am not believer in overtime, except on occasions of extreme pre sure when it becomes absolutely essential. In some offic overtime appears to be the rule rather than the exceptio and I can only say of these that they must be either gross understaffed or badly organized. Any attempt to get mo than one day's work out of one man per day, and with on one day's pay, is reprehensible. A staff is composed human flesh and blood, and needs humane treatment.

(*To be continued.*)

[The previous articles in this series appeared in our issu for April 4, 11, and 25.]

# Correspondence

## The R.I.B.A. Elections

*To the Editors of* THE ARCHITECTS' JOURNAL.

SIRS,—The general body of the Insti-ute, by persuasion or by conviction, lected a Council a year ago of which he majority was admittedly and avowed- selected for a special line of action. To at Council they attached me as Presi-ent, and I need hardly say that whatever y failures as a chairman may have been, have striven to conduct the delibera-ons and resolutions of the Council with yalty to the Council itself and to the ectors to whom both the Council and were responsible.

Like others, I am deeply interested in e current elections; like others, I am lly sensible of the responsibility which es in the hands of *every* voter; and as y duty *qua* Chairman of Council dies ith the expiration of the present session, do not feel that there is any disloyalty my venturing to express a view and a pe as to the personnel of next session's ministrators.

I have, I am glad to say, so many rsonal friends among those with whom do not always see eye to eye on the esent Council, that they at least will t misunderstand me if, in loyalty to the stitute as a whole, I speak quite ankly.

It is better to do so than to be mis-derstood; and I therefore take this portunity of declaring quite definitely at I propose to vote for the list of names t forward by the 1922 Emergency mmittee. I do so partly because I am tisfied that the policy of the present uncil, however well intentioned, was a istake as well as a failure, and perhaps iefly on the ground that I believe it to wise that our Council should be com-sed of men whose title to be placed ere as representatives does not depend o exclusively on attachment to a party ue.

It is unusual for a President of the stitute to write such a letter as this; t the circumstances are unusual. I ite it deliberately, conscientiously, and th a sense that without making some ch expression of my views I may be faithful to certain electors, who would k to me for guidance.

PAUL WATERHOUSE,
*President, R.I.B.A.*

aple Inn Buildings,
High Holborn, W.C.

*To the Editors of* THE ARCHITECTS' JOURNAL.

SIRS,—May I be allowed space to refer Mr. Perks's interpretation of my letter ich you kindly published in your issue April 18?

I then advised members to elect men y knew and could trust instead of ck lists pledged to a policy. May I nind members of the Institute that present Council nominations are, as . Perks himself explains in his letter, nominations of a Council whose mbers were, with rare exception, cted solely to oppose the policy of ification proposed by the previous Council whose members were entirely elected as free and independent men.

I, at any rate, hope that in the interests of freedom and of architecture members will abstain from voting solidly on the present Council's list.

S. D. ADSHEAD.

*To the Editors of* THE ARCHITECTS' JOURNAL.

SIRS,—The appearance of the 1922 Emergency Committee upon the scene of this year's Council election is, I hear, not altogether understood by some members of the R.I.B.A.

The reason for this committee's existence is that, at the last Council election, persistent canvassing methods were employed to elect a new Council on an entirely political issue.

The 1922 Emergency Committee was spontaneously formed immediately after the occurrence of this event. It consists of many representative architects in London and the provinces.

It was decided at the first meeting, many months ago, to submit to the electorate on the occasion of the next election a list of candidates for the Council whom the committee believed would carry the confidence of the profession and the public by their representative and non-political character.

The Emergency Committee has nothing but regrets for the unfortunate political aspect which the so-called defence league gave to the last election, and, in submitting its list of nominations, only desires to give the electorate a chance of casting their votes for men whom they consider most fitted to uphold the interests of the Institute, and who, except in the cases of Mr. Gotch and Mr. Keen, are by the action of the present Council excluded from the official "House List."

If the committee's nominees are elected the Council of the R.I.B.A. will, for the first time, contain a proper representation of the allied societies all over the kingdom.

I venture to think that the 1922 Emergency Committee has rendered a real service to members of the Institute in adding some of the most honoured names in the profession to the list of nominations for the next Council.

I should add that the "House List" issued by the present Council was so limited that it did not even include the requisite number of Fellows laid down in the by-laws as necessary to form a "House List"!

MAURICE E. WEBB.
Hon. Sec., 1922 Emergency Committee.

*To the Editors of* THE ARCHITECTS' JOURNAL.

SIRS,—The political controversy was started by the Unification Committee, who were supported by the late Council in their desire to make all the architects of the United Kingdom members of the R.I.B.A., and many of us were naturally alarmed, and, at our own expense, we placed our views before the members, with the well-known result. If your readers wish to refresh their memories and see how the late Council supported unification and appealed to the electorate, I refer them to the statement in the "Journal" of March 25, 1922, pages 308 and 309, signed on behalf of the Council by Mr. MacAlister. Again, on the eve of the elections, another appeal for the so-called unification scheme was made; this was printed in the "Journal," May 6, 1922, and signed:

> "Paul Waterhouse, President of the Royal Institute of British Architects (Chairman);
>
> "Edwin J. Sadgrove, President of the Society of Architects (Vice-Chairman);
>
> "Arthur Keen, Hon. Secretary, R.I.B.A. (Hon. Secretary)."

In face of the above facts Mr. Welch writes to you "Is it not a fact that the present Council, and not the old one, started the political controversy?"

Mr. Welch states that his friends were just about ready to let us have "details" of the unification scheme; but the R.I.B.A. did not want any "details" from Mr. Welch or his friends; the preliminary sketches were quite enough.

I ask your readers not to be misled by vague statements that our opponents would promote the "best and widest interests" of the R.I.B.A. Let them tell us definitely what they mean; our policy is perfectly clear.

Objection is made to the removal of the Code of Professional Conduct from our Kalendar. During the years 1916 to 1922 the Practice Standing Committee passed four resolutions against a Code; most, if not all of them, were unanimous, and the present Council was no doubt influenced by those resolutions; but they were of small importance compared with the advice of the President of the Law Society, who most carefully considered the legal point of view, and strongly advised the Council that, in the interests of architects, it would be a very dangerous thing for us to have a Code. In the face of the best legal opinion we could get I submit the Council would have acted improperly if they had not been guided by that advice.

SYDNEY PERKS.

*To the Editors of* THE ARCHITECTS' JOURNAL.

SIRS,—Everyone who is interested in the well-being of the Royal Institute will be seriously disturbed at the unfortunate impasse which has now been reached upon the question of registration. If this situation continues, infinite harm will be done to the prestige and influence of the R.I.B.A.

We believe that there must be a *via media* between the opposing schools of thought upon this question, and that there must be, if all will unite to try and find it, a reasonable basis upon which an agreed measure of registration can be put forward without dividing the Institute, as the present proposals have done.

We attach the list of candidates put forward by the 1922 Emergency Committee (published in our issue of last week), and have read their address, and intend to support them for the following reasons: Because we believe that, as representative of the art and practice of architecture in London and the Provinces, they will do all in their power to safeguard the highest interests of the R.I.B.A.; and because we believe that they will endeavour, if elected, to ensure a satisfactory solution of this very difficult problem of registration by agreement between the various interests concerned, without which nothing effective can ever be done. Yours, etc.,

FELLOWS.

Arthur, J. Maurice.
Awdry, Graham C.
Barker, Roger Bradley.
Beaumont, J. W.
Beaumont, W. S.
Bidlake, W. H.
Black, O. D.
Blain, William J.
Blomfield, Reginald
Bluhm, Q. M.
Boardman, E. T.
Bone, Charles Belfield.
Boswell, George A.
Bowie, John M.
Bridgman, Norman.
Brown, H. H.
Brown, W. Talbot.
Butler, A. T.
Cole, R. Langton.
Coleridge, John Duke.
Collcutt, T. E.
Cox, Alfred.
Craigie, James H.
Crouch, J.
Cubbon, John.
Davy, C. R.
Dening, C. F. W.
Dunkerley, F. B.
Eccles, T. E.
Elcock, C. E.
Evill, Norman.
Fairweather, John.
Fisher, J. W.
Floyd, F. H.
Forbes, J. E.
Forsyth, W. A.
Fry, Peter G.
Fyfe, Theodore.
Gass, John B.
Gibbons, J. H.
Gotch, L. M.
Grayson, G. Hastwell.
Green, Mowbray A.
Groves, J. F.
Hall, E. Stanley.
Hall, H. Austen.
Hall, John.
Hall, L. K.
Hamp, Stanley.
Harris, C. W.
Harris, E. Vincent.
Harris, Sidney F.
Harrison, N. W.
Haywood, William.
Henderson, A. G.
Hennings, A. W.
Hewitt, Edward.
Higginbottom, W.
Hinde, E. P.
Hobson, L.
Hope, A. J.
Horder, P. Morley.
Hussell, A. T.
Hutton, David B.
James, R. C.
Jerman, James.
Jones, Francis.
Jones, W. T.
Kirby, E. B.
Kitchen, L.
Kitson, Sydney D.
Knott, Ralph.
Lanchester, H. V.
Lochhead, James.
Lorimer, Robert.
Lucas, John A.
Macartney, Mervyn E.
Mackenzie, A. G. R.
McNab, W. Hunter.
Malcolm, A. N.
Mansell, Edward.
Marwick, T. P.
Maufe, Edward.
Millard, W. J. N.
Miller, James.
Mills, John D.
Morley, Eric.
Morris, Percy.
Mould, J. D.
Moxham, Glendinning.
Munby, Alan E.
Murray, Albert E.
Neil, Hamilton.
Newman, F. Winton.
Nicholson, Charles.
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Oatley, G. H.
Ogden, Paul.
Osborne, J. P.
Paterson, A. N.
Paterson, G. A.
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Peacock, F. B.
Pinkerton, Godfrey.
Pite, Beresford.
Pite, W. A.
Powles, A. E.
Prentice, A. N.
Quiggin, Edgar.
Reavell, George.
Rees, T. Taliesin.
Reilly, C. H.
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Robertson, L.
Robson, P. A.
Salmond, David.
Shepherd, G. D. B.
Shires, B. Priestley.
Simpson, J.
Simpson, John W.
Skinner, W. S.
Skipper, G. J.
Slater, John.
Smith, C. S.
Smith, J. Arthur.
Soutar, C. G.
Spink, Herbert.
Steel, John.
Stewart, John.
Swarbrick, John.
Swarbrick, Joseph.
Swash, F. S.
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Tate, J. D.
Taylor, Isaac.
Taylor, T. L.
Teather, Harry.
Tench, E. J.
Thoms, P. H.
Thomson, James.
Thornely, Arnold.
Townsend, C. Harrison.
Traylen, H. F.
Troup, F. W.
Unwin, Raymond.
Wakefield, B. F. G.
Ward, C. F.
Ward, W. H.
Waterhouse, Paul.
Watkins, H. Garnham.
Watkins, W. H.
Watson, John.
Webb, Aston.
Webb, G. W.
Weston, T. H.
Wheeler, Montague.
Whitie, William B.
Willcocks, C. B.
Williams, R. J.
Willink, W. E.
Wills, Frank W.
Wills, J. B.
Wilson, Cecil L.
Wilson, Robert G.
Wilson, W. G.
Wimperis, Edmund.
Worthington, Percy S.
Yeates, Alfred B.
Young, G. P. Kennedy.

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Abercrombie, L. P.
Adshead, C. T.
Ainsworth, J. C.
Allen, Frank H.
Ansell, W. H.
Barker, P.
Barlow, Luke.
Baskerville, J. A.
Battiscombe, H.
Bewes, A. G.
Botterill, A. B.
Brazier, F. H.
Brewerton, F. A.
Brown, John.
Buckingham, E. H.
Bucknell, L. H.
Budden, Lionel.
Charlewood, G. E.
Clarke, J. A.
Cocker, J.
Cowper, J. F. B.
Cruickshank, H. W.
Cubitt, Horace.
Cummings, P.
Cundall, P. H.
Daft, W. A.
Dalrymple, H. A.
Dickie, A. C.
Dorman, Chas. H.
Dorman, F. W.
Earnshaw, H. H.
Elkington, G. Leonard.
Fouracre, J. Leighton.
Gammell, Kensington.
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Gray, J. H.
Gunston, E. L.
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Hesketh, Peter.
Hill, J. Harold.
Hills, G. P. G.
Hindle, C. A.
Hobbiss, H. W.
Holt, J.
Houston, James.
Howcroft, G. B.
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Johnson, H. A.
Jones, C. F.
Jones, Ivor P.
Kimpton, C. S.
Knott, A. J.
McGibbon, A.
Mackellar, R. N. H.
McKewan, A. E.
Mansell, T. Gildart.
Milburn, S. W.
Mitchell, W. H.
Moss, S.
Openshaw, F. E.
Passmore, Herbert.
Potts, W. E.
Price, H.
Price, W. H.
Purchon, W. S.
Rayson, Thomas.
Rowledge, G. H.
Salmon, N. T.
Sanville, G.
Scott, E. W. B.
Shrewsbury, E. J.
Skinner, C. G.
Skinner, T. A.
Slater, J. Alan.
Smith, W. J.
Snow, A. L.
Sutton, B. H.
Tanner, C. P.
Tasker, A. K.
Vey, George.
Wearing, S. J.
Whitehouse, A. E. M.
Williams, G. H.
Wills, G. Berkeley.
Wilson, H. A.
Woods, Frank.
Wornum, G. Grey.
Wylie, E. G.
Young, C. J. M.
Young, W. C.

*To the Editors of* THE ARCHITECTS' JOURNAL.

SIRS,—It was not until I received the list of candidates nominated by the Emergency Committee that I was aware that once again the R.I.B.A. Election was to be contested on Party lines. Previous to this, and at the invitation of the present Council, I had allowed my name to go forward on the House List as circulated.

I am so entirely in sympathy with the aims and ideals of the Emergency Committee and their supporters that I have taken the only course open to me, and withdrawn my name from the House List; I shall support in every way possible the candidates nominated by the Emergency Committee.

I shall feel grateful if you will allow me the courtesy of your columns to make clear my action, which might otherwise be misunderstood.

P. D. HEPWORTH.

## An Academic Dress

*To the Editors of* THE ARCHITECTS' JOURNAL.

SIRS,—It will be noticed that most of the ridicule which has been poured over the Academic Dress proposal has proceeded from those suffering from the disadvantages of a University education. These, having become Masters of the Arts of words, figures, and statistics, are evidently jealous that those who strive to be masters of a real, vital and living art should have an option, upon a ceremonial occasion, of wearing a hood and gown if they like—an option which most members of Royal Societies have created.

In any state of civilization which was anything better than a whole beehive gone mad, the words Master or Bachelor of Arts would mean what it says. Surely it is these graduates who have got a touch of the bee disease for pretending to be something which they are not?

It is quite extraordinary this mass of political opposition to those who are trying to advance architecture. What is the source of it? I fancy it must come from Masters of the Arts of words, figures, and statistics. I don't think it could come from Masters of the Art of Architecture.

In any case, it is highly probable that in fifty years' time some unfortunate individual will be accused of heaven knows what for suggesting that the Institute Academic Dress should be done away with.

W. W. SCOTT-MONCRIEFF.

# R.I.B.A.

### *R.I.B.A. Intermediate Examination.*

Arrangements have been made fo holding the Intermediate Examinatio (June 1 to June 7, 1923) at Birmingham in addition to London and Leeds.

### *Mr. William Walcot's Drawings.*

In view of the very great interest take in the exhibition of Mr. William Walcot drawings, "Some Great Temples of Ant quity and Roman Compositions," at th R.I.B.A. Galleries, arrangements hav been made to keep it open until furthe notice. The general public are admitte free from 10 a.m. to 6 p.m. (Saturday 10 a.m. to 1 p.m.).

### *R.I.B.A. Notice to Licentiates.*

The attention of the Council of th R.I.B.A. has been called to the growin use by Licentiates of the affix "L.R.I.B.A." and "Lic.R.I.B.A Licentiates are reminded that, on electio to their class, they signed a Form Declaration which contained the followin provision: "And I hereby agree th I will not use after my name any oth affix with reference to the Royal Institu than 'Licentiate R.I.B.A.'"

### *Academic Dress for Architects.*

The proposal for the adoption of academic dress for Members and Lice tiates of the R.I.B.A. was passed at special general meeting of the Institu held last week under the chairmansh of Mr. H. D. Searles Wood. The deta of the dress are to be considered by t Committee and submitted to a furth meeting of the general body to be call at an early date. Illustrations of t dress originally proposed were publish in our issue for April 25.

### *R.I.B.A. Council Meeting.*

Appended are notes from the minu of the last meeting of the Council of R.I.B.A.:—

Street Advertising.—On the reco mendation of the Art Standing Commit it was decided to approach the Lon County Council with a suggestion tha should take steps to obtain powers control street advertising generally, cluding the use of flashing and ot illuminated signs upon the exterior buildings and the disfiguring appara connected therewith.

Elementary Sub-Committee. — Council authorized the Practice Stand Committee to establish a Parliament Sub-Committee.

Fees of Expert Witnesses.—It was cided to publish a notice in the "Journ warning members that they sh obtain, if possible, a written underta from solicitors employing them as ex witnesses that the full fees will be irrespective of any reduction that be made by taxing masters or of the re of the case in the courts.

Annual Conference of the Nati Association for the Prevention of Tu culosis.—Mr. W. A. Pite was appoi to represent the R.I.B.A. at this co ence in place of the late Mr. Edwi Hall.

# Book Reviews

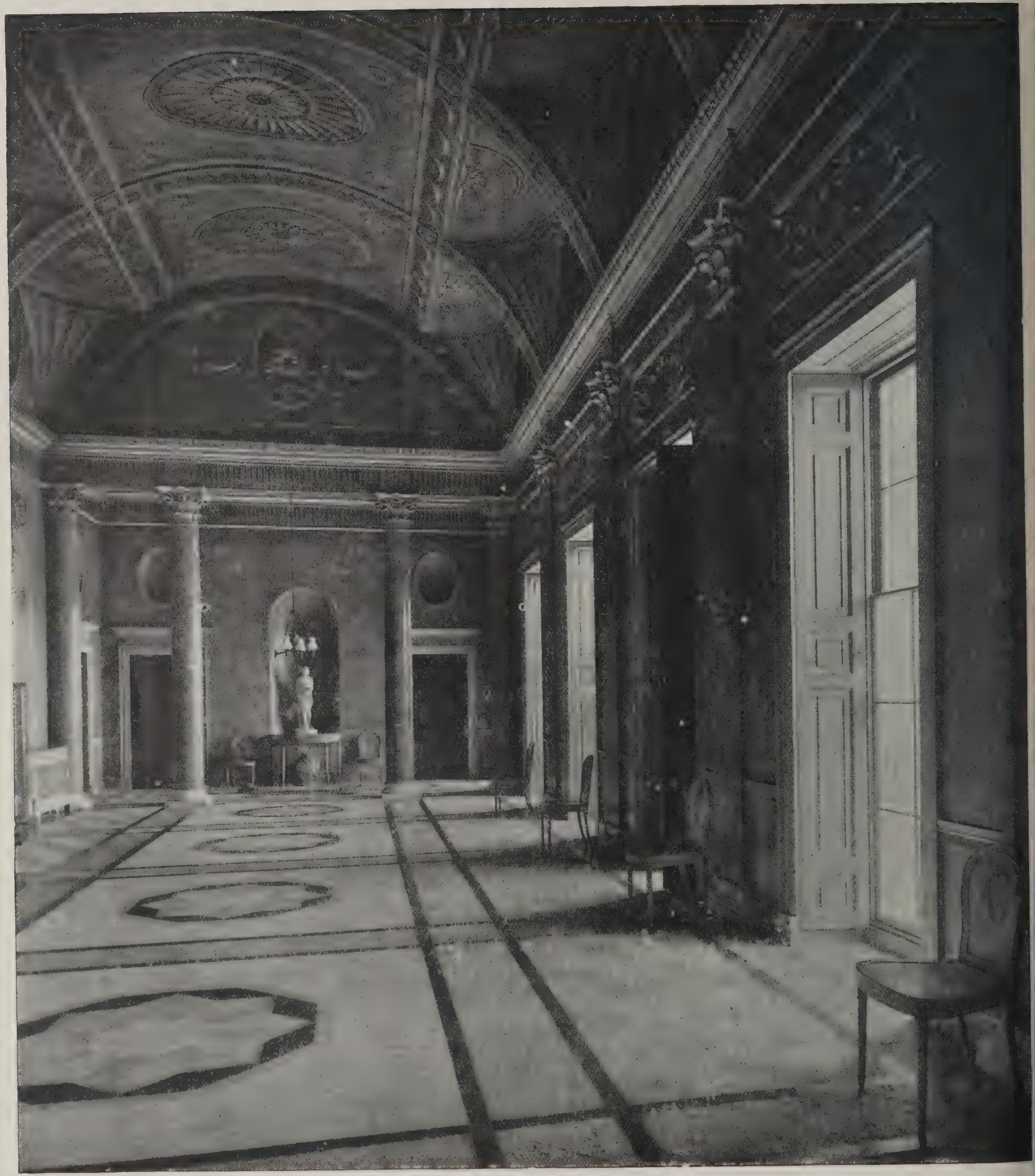
## ighteenth Century English ecoration and Furniture

The "decoration" of a building and "furniture" which it holds may be ated one to the other in any of several ferent ways. The inverted commas ween which I have put the word coration" and the word "furniture" meant to indicate that these words used here in a specialized, though comary, sense. I suppose that, ing exactly, one should not describe tewashing as "decoration," nor ex- e from the category of "furniture" such things as baths or kitchen-ranges. Generally, however, the "decoration" of a building is taken nowadays to signify the design and finishing of its internal surfaces, and its "furniture" the mobile objects put into it by man for his use. These convenient significances I shall adopt throughout this review.

THE DOMED VESTIBULE, MELBOURNE HOUSE, WHITEHALL.
HENRY HOLLAND, ARCHITECT. (*circa* 1786.)
(*From "English Decoration and Furniture of the Later 18th Century."*)

In the better styles of domestic architecture decoration and furniture have been closely interassimilated, especially in the size of their ornaments. Only in such styles as those of Louis Philippe or of Prince Albert can one find spindle-legged furniture grouped round a chimney-piece designed like a portecochère. The details of Gothic wainscot and of Gothic chests and cupboards are identical, so are those of the boiseries and of the furniture of the styles Louis XV and Louis XVI. Kent's tables and consoles are as colossal as his cornices and doorheads, Robert Adam's as light as his. Ormolu mounts of a uniform scale adorn alike the chimney-pieces and the sofas of the Empire.

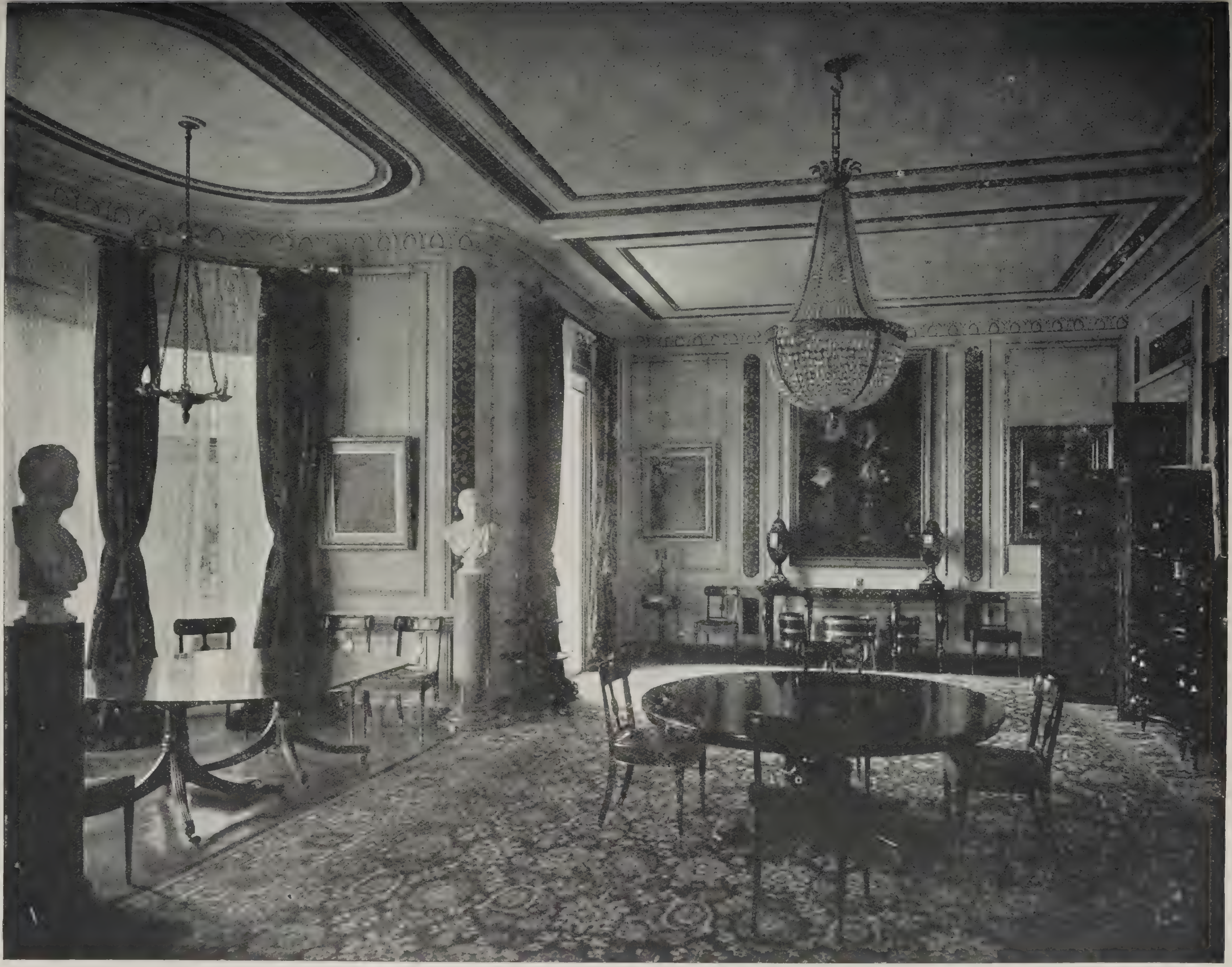
If from these precedents we infer—as I think we may—a rule that room decoration and room furniture should match each other in delicacy of design and of workmanship, we must not include in room-decoration structural features like



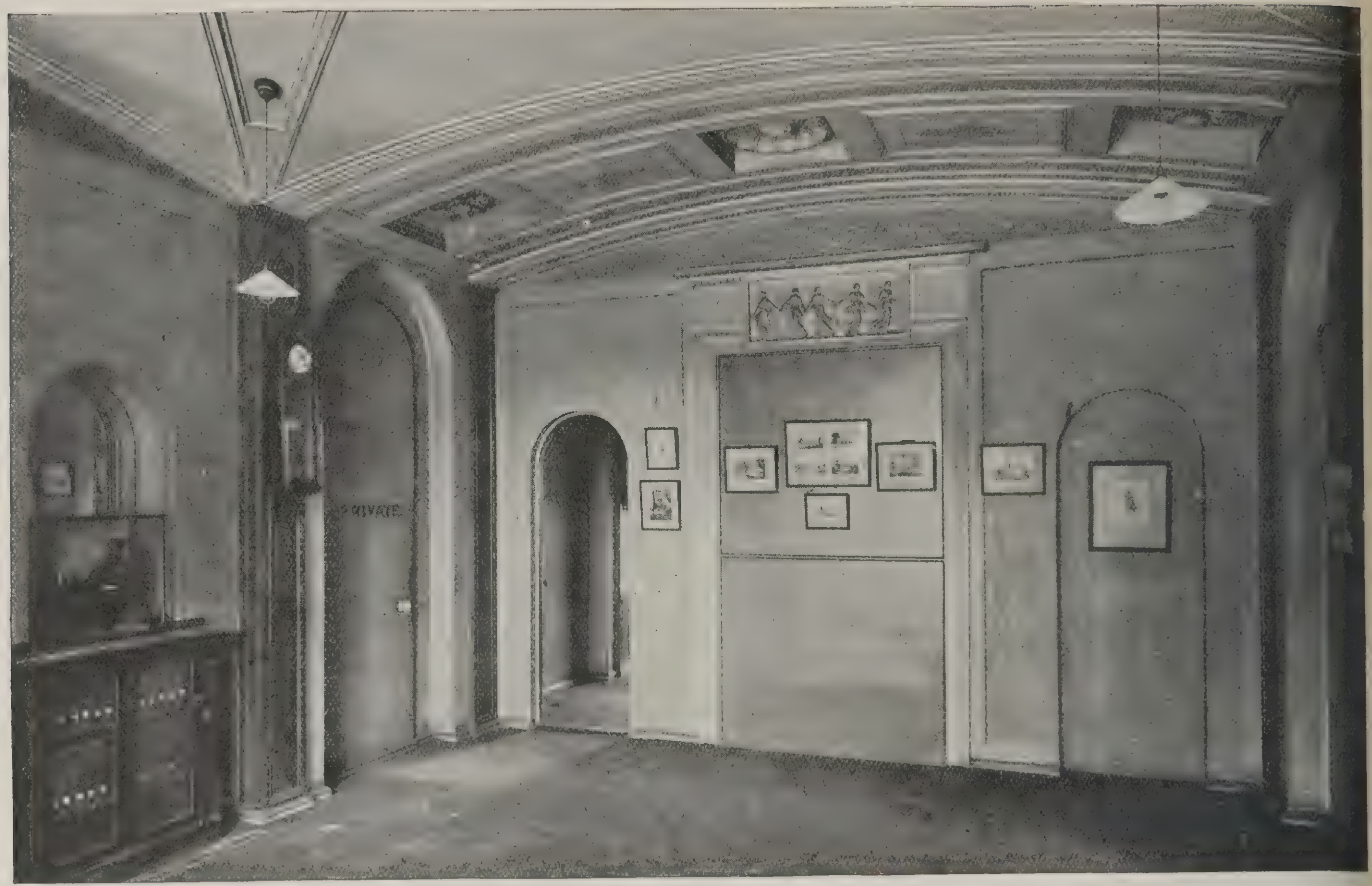
THE HALL, HEVENINGHAM HALL. SIR ROBERT TAYLOR, ARCHITECT, 1778.

*(Scheme modified by James Wyatt, 1797–1799.)*

*(From "English Decoration and Furniture of the Later 18th Century.")*



THE DINING-ROOM, SOUTHILL. HENRY HOLLAND, ARCHITECT (*circa* 1795).
(*From "English Decoration and Furniture of the Later 18th Century."*)



THE BACK PARLOUR, PITZHANGER MANOR.

SIR JOHN SOANE, ARCHITECT (*circa* 1802).

(*From "English Decoration and Furniture of the Later 18th Century."*)

columns and beams, or like openings made in walls for windows, doors or fireplaces. If such things be covered up, our rule will hold for their decoration; but if they be left bare they belong to the architecture of the building as a whole, and in ornamentation may conform with that, rather than with the design of the furniture which will neighbour them. But, except in architectural styles in which the details are delicate, these intrusions of out-of-doors into indoors are apt to be overpowering and to culminate in breaches of domestic peace. Though often handsome in themselves, the doorways and chimneypieces of the early Georges look boorish enough in boudoirs, only to be matched in bad manners by the bare brick fireplaces of modern times, or by the roughly adzed beams which nowadays often traverse a modelled plaster ceiling.

Kent, with his picturesque but preposterous furniture, attempted a reform, the need of which most of his contemporaries were too stupid to see. The Palladian jury of his time had crowded our little English rooms with all the cornices and pediments of Vicenza, amid which the furniture then fashionable, despite all its bold beauty, must have had little decorative value. Kent tried to regain harmony by making furniture as monstrous as his decoration. In a measure he succeeded; the ensembles of his rooms though overpowering are generally harmonious.

Our architects of the eighteenth century, however, when confronted with Kent's logical development of their malpractices, turned from them and decided to take another course. Rather than imitate the only furniture which could accord with their coarse decoration, they would attenuate their decoration to accord with reasonable graceful furniture.

It is of this effort which Miss Jourdain writes, an effort first fully apparent about the year 1760 with which her chronicle starts. This date is that of the beginning of Robert Adam's career, and was presumably chosen for that reason. The judgment of history has lifted Adam above all his rivals, but Miss Jourdain reminds us how greatly talented these rivals were. Every student of the period will remember that many of the best critics at the time placed James Wyatt as Adam's superior. Taylor was Adam's senior by fourteen years, Chambers his constant enemy. There was less to be feared from these men than from Wyatt; those who admired Adam's work would find Taylor's old fashioned, and would look in vain for what they cared about in the formal conceptions of Chambers. But in the province of decoration James Wyatt appears to have been Adam's equal in almost every respect save that of priority—Adam got there first. The world-famous decorations of the Pantheon in Oxford Street are no more, but the ceiling of the hall at Heveningham remains a convincing proof of Wyatt's genius (page 820). James Wyatt is known to have been as busy an architect as Adam, and it is probable there is enough beautiful work of his in England, awaiting description, to lift his name among our greatest. Unfortunately, that name is known to the majority of the public only as of the disfigurer of our ancient cathedrals, in which rôle he displayed regrettable activity.

Leverton may be regarded as a disciple of Wyatt, to whose work his bears strong resemblance. Samuel Pepy Cockerell was another architect of th same school; Miss Jourdain's attentio may, perhaps, never have been called his charming decorations at Normanto What remains of Soane's earliest work Mulgrave and elsewhere is of the Wya genre; and the designs of smaller me such as Stephenson of Newcastle, Geor Steuart, James Lewis and Robert Mi chell, all attest the universality of th Adam-Wyatt fashion. Despite certa particularities due to his Grecian studie James Stuart was also of this compan

If we examine such an interior that from No. 1 Bedford Square, v shall see at once that this school architects succeeded perfectly in the tas which they had set themselves. All th Palladian rigours have thawed; neith in cornice, nor in door, nor in chimne piece is there any moulding or ornamer which looks as though it had strayed from out-of-doors. Every detail of th decoration is tuneable to the pitch of th graceful furniture which that decoratic surrounds. (The denial by the ceiling the rounded angle of the room in th example is not a peculiarity which ca be defended.) This equilibrium betwe Decoration and Furniture was mai tained in the style following that of Ada and Wyatt, that of Holland and Geor Dance junior. Holland is an archite who has not received his due from mode critics; he designed in a style at on scholarly and extremely personal to hi The dining-room at Southill (page 821) a the hall of the Scottish Office (page 819) a characteristic examples of his work. M Jourdain gives as specimens of Danc ner only three illustrations from hanger, designed when he was twenty-n years old. These are already marked the individuality which was after-ds to develop so strongly at Laxton ise and elsewhere. The most fashion- architect of this period was Bonomi, although much of his work is not to locate, enough is accessible to and for this artist more than the e mention which Miss Jourdain rds him.

ir John Soane was a law unto himself can be classified with no other itect, save only with one or two ators, such as his pupil, George htwick. The room at Pitzhanger (page is typical enough of his originality, more work of his should have been trated in any account of his epoch. inally, at the end of the period red by Miss Jourdain's book, comes style of Percier and Fontaine, done English by the amazingly learned teur, Thomas Hope. These were the s of late Gillow, of latest Sheraton, of worth, of Tatham and of George th. Decoration and furniture put on ht tremendously under the régime of e designers, and by 1827 everything ready for the "Louis Quatorze" val with which the brothers Benjamin Philip Wyatt prepared the way for Prince Albert style of twenty-five s later.

iss Jourdain has collected much in-ation about the decoration and iture of the later eighteenth and y nineteenth centuries, and has en a fine series of illustrations. g the latter there are a few which should wish away, such as the doubt-ooking chimney-piece (Fig. 127) and handsome but too well-known stock erns of Messrs. Carron's hob-grates. write of three successive styles of ration as of one, dividing the com-te subject into sub-sections, such as terials and Processes," "the Door- and Door," etc., inevitably results e letterpress of each section degener-g into occasional notes and the trations into a scrap-book. This is Miss Jourdain's fault but that of the of the series of which her book forms one volume. There are not more than nty-five large pages of letterpress, in h compass it is obviously impossible ive anything but a general account subject which includes, among many r things, the lifework of Adam, plewhite and Sheraton.

s a picture-book with intelligent ginal notes the volume is admirable. ll fault finding is odious, but lest ne else imitate Miss Jourdain's se of the word "jib-door," that se must be noted. A "jib-door" is as Miss Jourdain appears to think, *nulated* door, but a *dissimulated* door; a sham door which won't open, but l door concealed by the wall decora- being carried across it.

H. S. GOODHART RENDEL.

nglish Decoration and Furniture of the Later eenth Century, 1760–1820." By M. Jourdain. n: B. T. Batsford, Ltd. £3 3s.

## Thackeray's London

ere is real affinity between archi-re and novel writing; the one acting tively to the other. Hence "Thack-'s London" may be taken in a larger than that which probably the author intended; and Mr. Beresford Chancellor is not to be held responsible for the fancy that Thackeray bore a considerable share in making London what it gradually became after his immortal works had set up certain strong preferences and predilections, certain pronounced prejudices, expressed or implied, certain standards of comport or of decorum in the habits, habitations, and resorts of Londoners, certain fashions, façades, even.

That, however, is but a passing fancy, and Mr. Chancellor is entitled to regard it, if he so chooses, as an unwarrantable extension of his plan, which is simply to render "some account of the haunts of Thackeray's characters"—those un-substantial but tremendously potent figments that to many of us are so much more real than the creatures of flesh and blood whom we meet in street or drawing-room or place of business every day. Yet Mr. Chancellor, of all men, will be readiest to acknowledge how difficult it is to repress the fancy (which may, after all, be gross material fact) that Thackeray's magic made familiar not only certain aspects of life, but certain types of building, which thereafter became models for imitation or for avoidance; so that "Thackeray's London"—the London he discovered and described—has its corollary in the London of which he was the spiritual architect, the London which he may be said to have created by setting a sort of fashion in the design and decoration of the haunts and habits of the denizens of London Town.

Mr. Chancellor has made it his delightful business to revisit or occasionally to re-create the sights, scenes, and settings of Thackeray's comedies of manners; to compare the actual with the imaginary, and incidentally, of course, to restore to such life as Thackeray gave them the denizens he created.

In reconstructing the London that Thackeray described or created, Mr. Chancellor undertook a most congenial task, and one in which he was fore-ordained to succeed to admiration. He knows his London and he knows his Thackeray, and to these two most essential qualifications he adds a third and a fourth which are of grace rather than of necessity—exquisite literary skill and fine urbanity. In "Thackeray's London" he is at his very best as topographer and *raconteur*, and has produced a book which will give the keenest delight to every lover of Thackeray and of London. In ransacking all Thackeray's works for suitable material, he has most delightfully renewed for us the Thackeray atmosphere, the Thackeray "scene" as an American would say; peopled not only with the great creations—Henry Esmond, Arthur Pendennis, Stunning Warrington, Colonel Newcome, Barry Lyndon, Jeames Yellowplush, Amelia, Becky Sharp, and the rest of the immortals who were never mortals—but with the many less impressive characters that tend to grow dim through the haze of time. Mr. Chancellor has given us a fascinating book. Henceforth it will be an inseparable companion to Thackeray's works, which without it must lack the fullness of completion and appreciation.

J. F. MCR.

"The London of Thackeray: being Some Account of the Haunts of Thackeray's Characters." By E. Beresford Chancellor, M.A., F.S.A., F.R.Hist.Soc. London: Grant Richards, Ltd., St. Martin's Street. Price 15s. net. Sixteen Plates of Illustrations.

## The Late Mr. J. T. Osler

It is with deep regret that we learn of the death of Mr. J. T. Osler (Chairman of Messrs. F. and C. Osler, Ltd.). Mr. Osler died on Monday week last, after undergoing an operation.

## Britannic House

In Britannic House—the new premises of the Anglo-Persian Oil Co., Ltd.—in Finsbury Circus, London, 16,000 sq. yd. of rubber flooring will be laid by the Leyland and Birmingham Rubber Co., Ltd., of 24 Duke Street, Aldgate, E.C.3. An illustration of the building appears on p. 792. Sir Edwin Lutyens, R.A., is the architect.

## Architectural Etchings

An Exhibition of Photogravures from the Architectural Etchings by Frank Brangwyn, R.A., and William Walcot, R.E., reproduced under the artists' supervision by hand-printed photogravure, is being held at the gallery of the Challenge Book and Picture Store, 24 Great Russell Street, W.C.1 (near the British Museum). It will remain until May 19 from 10 a.m. to 6 p.m. daily.

## The London Society

The Earl of Crawford has accepted the invitation of the Council of The London Society to be the second President of the Society, in succession to the late Lord Plymouth. The exhibition of a model and drawings for the new road bridge at Charing Cross (in place of the existing railway bridge), which was arranged by The London Society recently at the old County Hall, has been moved to the Holborn Town Hall.

## Two New London Theatres

Arrangements are being made for the building of two theatres on a portion of the Devonshire House site in Piccadilly. The prime mover in the deal is Mr. Archibald Nettlefold, of Wrotham, Kent, and Duke Street, St. James's. The site acquired has an area of about 48,000 sq. ft., and the total purchase price is estimated at £250,000. It is proposed that the buyers shall construct a new road 50 ft. wide running from Berkeley Street to Stratton Street, and on the north side the two projected theatres (separated by a 20-ft. passage) will have their frontage. Flats, with entrances in Berkeley Street and a view over the gardens of Lansdowne House, with shops underneath, are also projected. The proposed buildings will involve an expenditure of about £350,000.

## Coming Events

*Thursday, May 10.*

British Museum.—"The Influence of Classical Architecture." 3.15 p.m.

*Friday, May 11.*

Institution of Engineering Inspection.—At the Royal Society of Arts. "Ciment fondu." By Mr. Harley F. Knight, F.I.C.

*Saturday, May 12.*

A.A.—Visit to Wembley.

*Tuesday, May 15.*

Architects' Benevolent Society Annual Meeting. 5 p.m.

# Maurice Drake

THE world of art and letters has suffered a lamentable loss by the death, at the comparatively early age of 48, of Maurice Drake, the glass painter and novelist, at his home in Exeter.

Glass, particularly old glass, was his first and most dominant love, and although he liked novel writing and that career promised an easier life—and perhaps a more lucrative one—he regarded it always as a hobby.

He was born and bred in the glass painters' craft. He learnt his earliest lessons from his father in the studio at Exeter, founded nearly a century ago by his great uncle. And Maurice Drake was working there up till the end. His last task, and one which unfortunately he left unfinished, was one after his own heart—that of restoring the fourteenth-century panel discovered bricked up in Chelsea Old Church last summer. He was doing this work on original lines, and was extremely keen to see the finished effect of his ideas.

His work is to be found in scores of churches in the West Country, and in his later windows there is always some touch of creative effort that, apart from the technical merit of the window, raises it above the average.

Drake tried to do his work as the mediæval craftsmen, whom he so sincerely admired, did theirs. The "stock" window, with the soulless "pretty" figure, was hateful to him.

A typical specimen of his design is in the tiny Kentish church of Monks Horton. There he is responsible for a St. George War Memorial window, which fills an Early English lancet in the nave. His conception was that of St. George as a young Kentish labourer, worn out and tired with the struggle, his tunic torn and bloodstained, his head covered by the steel helmet worn in the war. He has finished his job—one that nearly used up all his powers—and the conquered dragon lies at his feet, a dragon painted with the German national colours—black, white, and red.

Drake served with the Infantry from the early days of the war, and undoubtedly the effects of hardships suffered then contributed to his too early death. But during his life as a soldier he planned the details of one of the great ambitions of his life, and when he was demobilized he worked to bring that ambition to fulfilment.

The result was the creation of "The British Society of Master Glass Painters," of which he was honorary secretary—a society having among its principal aims the preservation of the glass painters' craft in the hands of skilled and trained men and the protection of old stained glass in this country. He infected many men with his enthusiasm, and though he lies dead in Teignmouth Cemetery his work will go on.

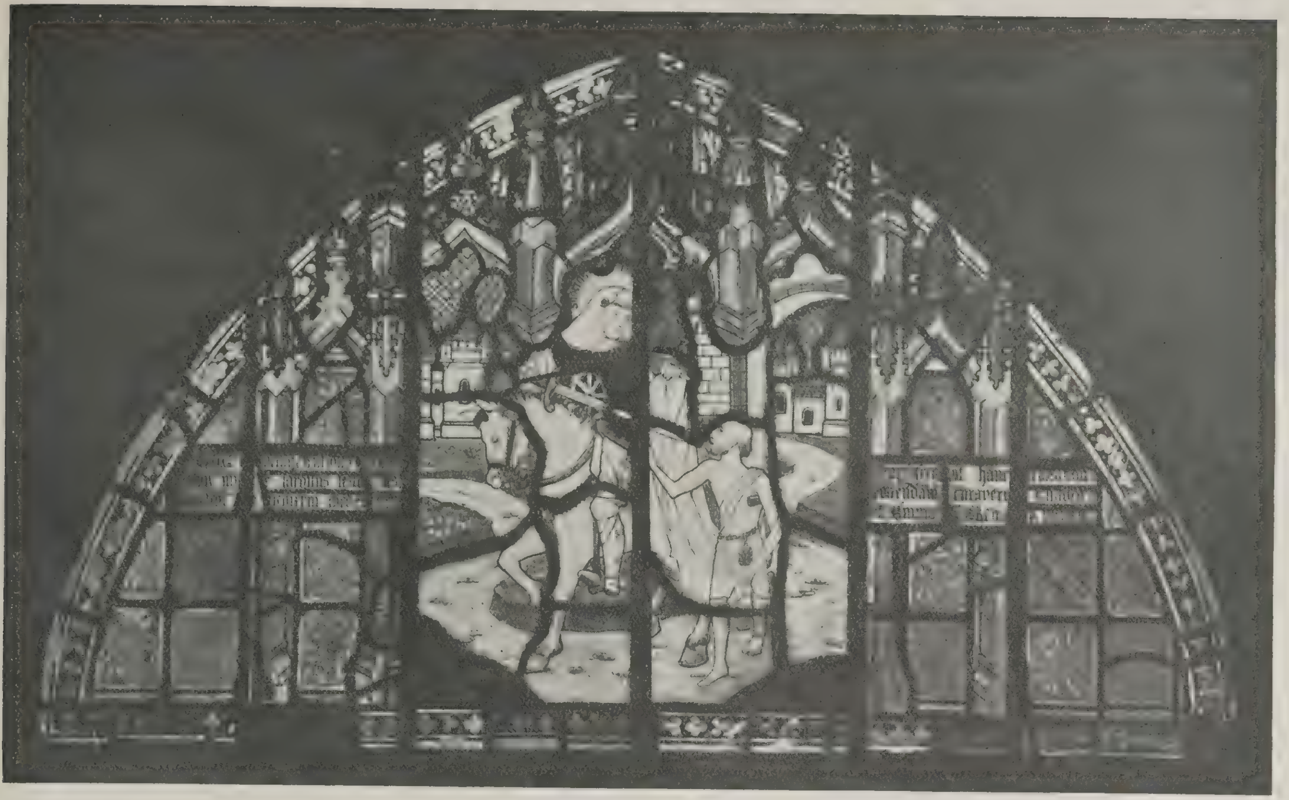
Of writings on his own craft, "A History of English Glass Painting" and "Saints and their Emblems," written with his brother Wilfred, remain as standard books. "The Doom Window," a brilliant novel, dealing with problems of old stained glass, is soon to be published. Of his other novels, "Wrack," "The Salving of a Derelict," and "W.O.2," are perhaps the best known.

He was a man of burning enthusiasms and simple generosity, none more willin to praise good work, even in his rivals none more ready to admit a mistake, eve in matters in which he considered him self, and was considered by others, in th first rank.

Among glass authorities he was unusu in his liking for the work of the "dec dent" period. He could see beauty in th painted windows of the late seventeent and even the early eighteenth centurie He always maintained that the good wor of that time would come into its own or day.

He died after a few weeks of serio illness, and he leaves behind him in th hearts of his friends and in the wor generally a gap which it will be very ha to fill.

CLIFFORD HOSKEN.



THE ST. MARTIN WINDOW IN CHELSEA OLD CHURCH.

A Reconstructed late 14th Century window, by the late Maurice Drake.

# Contemporary Art

### *he Royal Society of British Artists.*

THERE is much that is anecdotal and literary in this exhibition even when it takes on a new com- xion as in Harry Morley's subjects, there is much besides. There is a rn to the splendid painting quality which I referred in my notice of the tennial exhibition of the R.B.A. a weeks ago. It is best seen in the arkable pieces of still life by Orlando enwood, "The Three Graces" and e Decameron." Leonard Richmond ne of the band devoted to quality as be seen in his "Market Place, a," and "Dinan, Brittany." In the k of A. Carruthers Gould there is ther kind of virtue, that of freshness atmospheric effects. Vivian Rolt es a pleasing variation on traditional nes, as does also Hesketh Hubbard. re is a picture, "Spain," by Madeline lls, which amply fulfils the expectation has always had of her capabilities. I. Padwick seems to have adopted the tte of Oliver Hall and produced two pictures by so doing. George kwater has been ambitious in "An y in Colour, Form and Pattern," and luced a dashing but affected picture. e good work is to be seen in Hirst ker's "Stape, Yorkshire," George hton's "Blytheburgh," A. E. Elphin- e's 'The Crag," and "Morning t, St. Ives," by R. Borlase Smith. triking portrait by Ernest Forbes is ofessor de Tunzelman," and two rait studies in charcoal by Cyril erts are interesting. Among illus- ional works Harry G. Theaker's are ceable, and so are the highly pictorial ts in the manner of Turner's most ressionistic colour effects by Chuji Kurihara. E. Handley-Read rather spoils some excellent intentions by overdoing it: he has been caught by the modern Continental manner but has not assimilated it. All the same his picture of "Sunshine Through Trees" proves him an honest trier, and I should like to see others doing the same trials instead of leaving them to the young and inexperienced whose powers are by no means up to what is required to convince people of the sincerity of the new work.

### *The Three Shields Gallery.*

A new kind of drawing, apart from those of the sculptors themselves, is projected by Oswald Cotton Chapman. When I saw them first I imagined they were by a sculptor, for they have a distinct plastic quality. The catalogue, later, informed me that they were "Drawings, mainly for Sculpture." I was satisfied with them in themselves for they are admirable and they are daring, and they are much better than the artist's pen-and-ink drawings.

### *Central Hall, Westminster.*

Ecclesiastical Arts and Crafts in some variety formed a curious and confusing medley, which resolved itself into a thing of beautiful shreds and patches. There was a stall of Powell's glass, some Pomona Toys from Chelsea, some Forest Toys from Brockenhurst, by F. H. Whittington, and some colour-prints by Marjory Whittington, as well as by Hesketh Hubbard, from Braemore; illuminating from Artists' Publications, 25 Oxford Street; Georgian leatherwork from 179 High Street, Southampton, which was good and cheap; some sculpture, the author of which I would mention but cannot, because I cannot find his name in the mazes of a most interesting catalogue, more confused and confusing than the show itself. But I was able to disinter Edith Bateson's sculpture, and several firms of stained glass producers among which the clearest exposition was by James Ballantyne, of 71 George Street, Edinburgh. Here was to be seen a craftsman at work, leading a window, and a window set up and illuminated, which was admirable.

### *The Twenty-one Gallery.*

The thirteenth annual exhibition of the Senefelden Club includes 59 lithographs, most of which are in limited editions, and all the more acceptable to collectors on that account, for the commerciality of the process of lithography has tended to injure it as a means of artistic expression. This is now more widely established, and the limitation of editions will bring about the confidence of print collectors who may be venturing into this field for the first time. The exhibitors at this show include Frank Brangwyn, Charles Shannon, Kerr Lawson, Nevinson, Spencer-Pryse, A. S. Hartrick, Ethel Gabain, Elsie Henderson, which means that most of the prints are good. Those which are most astonishing are by John Copley.

### *The Lefèvre Galleries.*

In aid of French charities, the French Ambassador opened a show of French pictures of the impressionist, Barbizon, and modern schools at these galleries. The artists represented include Monet, Manet and Renoir; Corot and Courbet; Daumier and Degas, and Sisley and Pissaro.

KINETON PARKES.

# Competition News

*Greenwich Public Baths and Washhouses.*

The site of the proposed public swimming baths and washhouses at Greenwich for which a competition has been promoted by the Borough Council is shown on the accompanying drawing. It is situated in Trafalgar Road—a main thoroughfare—and is bounded by Creed Place and Park Street. The existing boundaries of the site are indicated by a dotted black line and the new boundaries by a firm black line. It will be observed that it is proposed to widen Creed Place at some future time, this being a more important road than Park Street. The building line in Creed Place and Park Street is to be set back 10 ft. from the new boundaries and the building line in Trafalgar Road at least to a similar extent, but within these limits competitors are at liberty to suggest any lay-out they deem desirable, having regard to the importance of the approach from Trafalgar Road and the necessity of obtaining a dignified treatment of the building on this front.

The existing houses on the site may be disregarded, but it is suggested that the south-east corner of the site occupied by houses might conveniently be the position of the extension referred to later.

The plan of the site clearly shows the levels and the positions and depths of the sewers, gas and water mains and electric cables are in each of the three thoroughfares, and there are no rights of lights to be respected. Competitors are recommended to visit the site.

The council are anxious to secure a building which shall not only be thoroughly adapted for its special purpose but shall also possess distinct architectural merit both internally and externally, not elaborate in detail but of good proportion and satisfactory grouping. Competitors are reminded of the several fine buildings in close proximity to the site. Economy of plan and section is of the utmost importance in view of high building cost. While the Council desire an establishment complete in every respect, they attach the utmost importance to simple and direct planning and to the buildings being soundly constructed with a view to economy of upkeep, and well lighted and ventilated.

The buildings must be designed to comply with the requirements of the London Building Act, 1894, and any amendments thereof, the By-laws of the London County Council and the Greenwich Borough Council. The first- and second-class bath halls will be used as public halls and will be required to be licensed by the London County Council; it is necessary, therefore, to provide the necessary exits, and to comply with their regulations as to escape in case of fire.

The accommodation required includes first- and second-class bath halls for men, a ladies' bath hall, slipper baths, offices, committee rooms, a service room, an establishment laundry, a public washhouse, boiler house, engine and pump room, and superintendent's quarters.

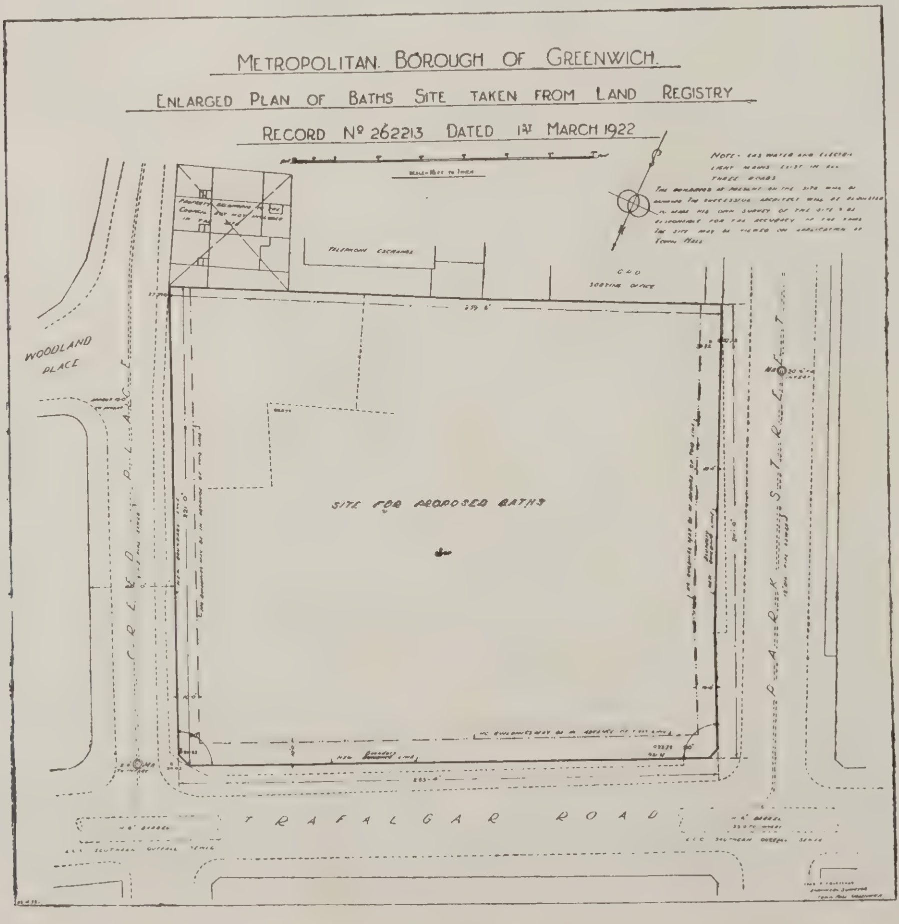
The buildings generally should be constructed of fire-resisting materials. The internal finishings should be plain and simple but of first quality, with special regard to durability and to minimizing the cost of periodical repairs. Particular attention should be given to the selection of materials in the swimming and slipper baths and their adjuncts, to allow of ready and frequent cleansing.

Otherwise the internal design of the two large halls and other public parts of the building require dignified and effective treatment suited to their purpose, but not over-elaborated with fussy detail or ornament; the same also applies to the external treatment. Although the front to Trafalgar Road is the most important, the returns to Creed Place and Park Street should be in keeping with the main front—good proportion and fenestration and sound grouping is of greater value than elaboration of detail.

Competitors should indicate on their plans as a future extension (not included in the estimate) a Russian vapour bath for ten or twelve bathers, with cooling and dressing room, hot and cold douches, and steam room.

The drawings required are: elevation to Trafalgar Road; elevation to Creed Place; elevation to Park Street; plan of basement, showing subways, bottom of ponds, main lines of drainage, boiler house, etc.; plan of ground floor; plan of first floor, showing galleries and seating of bath halls when the baths are not in use; sections, both longitudinal and transverse, sufficient to liberally interpret the intentions of the competitor in regard to the constructional and decorative treatment of the interior of the buildings; ½ in. scale detail of a principal portion of the elevations, together with a ½ in. scale detail section and part elevation of the men's first-class bath hall; ½ in. scale detail of any other part of the building to which competitors desire to draw attention (this detail is optional); a diagram plan showing main lines of heating, hot water and steam supplies and main wastes, and position of plant and machinery.

The council have in mind an expenditure not exceeding the sum of £80,00 for the building and equipment, excluding movable furniture, of the whol establishment. Some further particular of the competition are published in ou "List of Competitions Open."


METROPOLITAN BOROUGH OF GREENWICH.
ENLARGED PLAN OF BATHS SITE TAKEN FROM LAND REGISTRY
RECORD Nº 262213 DATED 1st MARCH 1922
NOTE - GAS WATER AND ELECTRIC LIGHT MAINS EXIST IN ALL THREE ROADS
TELEPHONE EXCHANGE
G P O SORTING OFFICE
WOODLAND PLACE
SITE FOR PROPOSED BATHS
TRAFALGAR ROAD

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## List of Competitions Ope

| Date of Delivery. | COMPETITION. |
|---|---|
| June 1 | New Municipal Buildings and Town Hal Cork. Total cost not to exceed £120,00 Assessor Mr. Lucius O'Callagha F.R.I.A.I., A.R.H.A. The successful com petitor will be appointed to carry ou the work. Second and third premium £200 and £100 respectively. Apply M William Hegarty, Town Clerk, Cork. Th competition is limited to architects livin and practising in Ireland. |
| June 12 | Concert Pavilion, Bournemouth, to seat 2,00 Estimated cost £100,000. Assessor, Si Edwin Cooper, F.R.I.B.A. Premiums: £30 £200, and £100. Apply Town Clerk, Mun cipal Offices, Bournemouth. Deposit £2 2 (cheque). |
| June 30 | Bridge over Nygaardsstrommen in Berge Apply Department of Overseas Tra (Room 50), 35 Old Queen Street, Wes minster, S.W. 1. |
| June 30 | National War Memorial at Melbourne cost £250,000. Competition, in two stage open to Australians, not necessarily residi in Australia, and British subjects reside in the Commonwealth. Preliminary desig to the Right Hon. the Lord Mayor of Me bourne, Chairman of the Executive Co mittee, Town Hall, Melbourne, Austral by June 30. Apply Agent-General in Lo don, Victoria House, Melbourne Plac Strand. Deposit £2 2s. |
| July 3 | Pavilion in Calverley Gardens, Tunbrid Wells. Assessor Mr. E. Guy Dawber, F.S. F.R.I.B.A Premiums £150, £100, and £ Apply Town Clerk. |
| Aug. 25 | Public Swimming Baths and Washhous East Greenwich. Assessor, Mr. Henry Ashley, F.R.I.B.A. Premiums: £300, £2 £100. Apply Mr. Frederick J. Simps Town Clerk, Town Hall, Greenwich. |
| Nov. 5 | Art Gallery for Hull. Assessor, Mr. John Simpson, PP.R.I.B.A. Apply (with cheq for £2 2s.) to Mr. H. A. Learoyd, To Clerk, Guildhall, Hull. |

# Law Reports

## Housing and Town-planning Act—Jurisdiction

*Ryall* v. *Hart.*

April 19. King's Bench Division.
efore the Lord Chief Justice and Justices Shearman and Branson.

This was an appeal by the Town Clerk n behalf of the Bermondsey Borough Council against a decision of the magis-rate sitting at the Tower Bridge Police Court in a matter arising out of the Housing and Town Planning Act, 1919.

Mr. Harvey, K.C., for appellant, ex-lained that the scheme which governed he matter was this : Where the local uthority through its inspector found hat a house was not reasonably fit for abitation they could serve a notice upon he owner calling upon him to make the lace habitable within a specified and easonable time, not being less than 21 ays. If the owner did not comply with he notice then the local authority could ut in its own workmen to execute the epairs and if necessary sue the owner for he sum expended in the police court, ith interest at the rate of 5 per cent. n this case when the owner was sued for he sum expended on putting his property nto repair the point was taken that the otice given was not one that gave him easonable time to execute the repairs. he question was whether the magistrate ould go into the question of the reason-bleness of the time given by the notice hen it agreed with the Act of Parliament, and appeal on that point could be made to the Ministry of Health. There ad been a previous and similar case efore the Court and it was his duty to sk the Court to reverse the decision in hat case because he considered that ecision to be erroneous. Counsel added hat the magistrates dismissed the sum-ons on the ground that the notice was ot reasonable in point of time. Counsel gued that the time for objecting to the ngth of the notice was when the notice as received, and an owner should not e allowed, after disobeying the notice nd putting the local authority in the osition of having themselves to do the ork, to go to the police court and raise he excuse that the notice he received was ot reasonable.

The Court dismissed the appeal with osts.

The Lord Chief Justice said fortunately he scheme of legislation they had to deal ith in this case was not a very usual ne, but it was the one adopted. It ppeared that the owner was given an ppeal of a twofold nature : against the otice and against the demand. The one bout the notice, it was said, was only the Ministry of Health, and that the me for entering the appeal should be mited to the 21 days of the notice. It ay be that there was much to be said r that point of view, but if the statute ad intended to not merely provide for n appeal to the Government Depart-ent but to prevent that question being ised at no other time and to no other ody, the Statute might fairly be expected have said so in clear terms, and it had ot done so. The fact that the owner had ethods of appealing to the Ministry of ealth did not seem fatal to the con-ntion that, having refrained from those ethods, he still could take the point before a justice, when sued for the expenses of the repairs, that the condition precedent to the doing of the work had not been fulfilled. That question could be decided by the magistrate.

Justices Shearman and Branson agreed.

## Liability for Repairs

*Ewart and Collis, Ltd.* v. *Binet.*

May 1. Official Referees' Court.
Before Sir Francis Newbolt.

Sir F. Newbolt delivered a reserved judgment in an action in which the plaintiffs, Messrs. Ewart and Collis, Ltd., of 346 Euston Road, claimed from the defendant, Mr. Cyril Wm. Binet, of 43 Regent Square, St. Pancras, £608 damages for failure to repair the premises occupied by him in accordance with the repairing covenants of his lease.

Mr. Colam, K.C., and Mr. Fortune appeared for the plaintiffs, and Mr. Wootten, K.C., with Mr. Blanco White, appeared for the defendant.

In May 1919 Messrs. J. Collis and Sons leased the premises in question to Celltax, Ltd., for a period of twenty-one years, the lease containing the usual covenants to repair. The Celltax Co. subsequently went into liquidation, and it was doubtful whether the liquidator had power to continue in possession, so he granted a lease to Mr. Binet, the defendant. The plaintiffs applied to the Court of Chancery for an injunction to restrain the liquidator from granting a lease, and asked that the lease already granted should be set aside. The judge before whom the application was made, however, refused the application, but awarded the applicants £150 damages. A schedule of dilapidations was prepared when the liquidator was appointed, but it was admitted now that it was only damages for omission to repair which could be recovered in the present reference.

The defendant said that he had carried out all that was necessary under the present lease and he had not got to do the repairs as if the covenants had come to an end. Having done all the repairs which he thought he was liable for he said that £25 was sufficient compensation.

During the hearing of the case a number of witnesses were called on both sides. Amongst those in support of the plaintiffs' case were Mr. Alfred Collis, managing director of the company, Mr. John Gelles, also a director, and Mr. Napper, architect, of Bedford Row, who made out the original schedule. For the defence, Mr. Ernest Mussman, architect and surveyor, gave evidence as to the condition of the premises, and Mr. Chas. Gill, a partner of the firm of Richardson and Gill, of Russell Square, said that the Celltax Manufacturing Co. appointed him in 1919 to inspect the premises and he found that they were old, a portion being of a "ramshackle" character, with the iron roof decayed and rotten.

In reply to the Referee it was stated that the Celltax Manufacturing Co. was a reconstruction of the Celltax Co., and the defendant was assignee, having taken the premises over from the Celltax Manufacturing Co. when they went into voluntary liquidation.

Mr. Wootten said that the lessees had, in fact, ceased to exist, and the liability was that of the assignees, who could no longer be sued.

The Official Referee, in giving judgment, said that what he had to decide was the amount of damage caused to the plaintiffs by reason of the breach of covenant to repair. It was clear that the plaintiffs had greatly exaggerated their claim and that they had acted in an unreasonable manner in carrying on the action when substantial repairs were being carried out. He had himself inspected the premises, and had come to the conclusion that they were not in a worse state than they were in 1919. He found that the schedule had been drawn up as if for a tenant coming out, and not for a continuing tenancy. It would require the expenditure of only a few pounds to complete the repairs in hand. The only question was what injury had been done to the reversion. For that the defendant had paid £50 into court, which he (the Referee) had no hesitation in saying was more than enough, and he assessed the damage at £25. It was risky of the plaintiffs to bring the action, and defendant would be entitled to judgment with costs.

Judgment was accordingly entered for the defendant, and on the question of costs a stay was granted on terms.

# Parliamentary Notes

[BY OUR SPECIAL REPRESENTATIVE.]

*The Housing Bill.*

After a discussion lasting several hours the money resolution with which to found the Government's new Housing Bill was agreed to in the House of Commons. An amendment, put forward by the Scottish Members, for a separate Bill for Scotland, was defeated. Captain Elliot, Under Secretary to the Scottish Board of Health, said the amendment, if accepted, would mean that the Bill would have to be withdrawn, and that bureaucratic control from Whitehall would have to be reimposed. On an amendment to make the financial resolution apply only to local authorities with a population exceeding 250,000, the Minister of Health stated that, if it was found that under the terms of the Bill houses had not been provided in districts where they were required, those districts would have a claim on the consideration of the Government in discussing future legislation. The amendment was defeated by 236 votes to 129. A further amendment to delete the subsidy altogether from the Bill was rejected by 208 votes to 97. The Minister of Health, in this connection, stated that he could not see why it was necessary to discuss the question of the type and size of house on the financial resolution. That could be raised on the Bill in Standing Committee. There was nothing in the money resolution to tie them down to any particular type or size of house.

*Housing Grants.*

At question time Captain Elliot informed Sir G. Collins that the total expenditure by way of grants on housing schemes in Scotland under the Housing, Town Planning, etc. (Scotland) Act, 1919, and the Housing (Additional Powers) Act, 1919, was in 1920–21, £135,140; in 1921–22, £658,247; and in 1922–23, £837,114.

Captain W. Benn has introduced a Bill to deal with rings and trusts, with special reference to the building industry.

# The Building Difficulties of Ireland

## Architectural Influence of the English

EVEN in her normal state Ireland would be faced with architectural difficulties as great as those of England. In Ireland the public, as in this country, are apathetic towards architecture, the house shortage is acute, the cost of building is higher than in England, and every town has its slums even though it be surrounded on all sides by pleasant open countryside. These are some of the facts to be gleaned from the year book of the Architectural Association of Ireland.

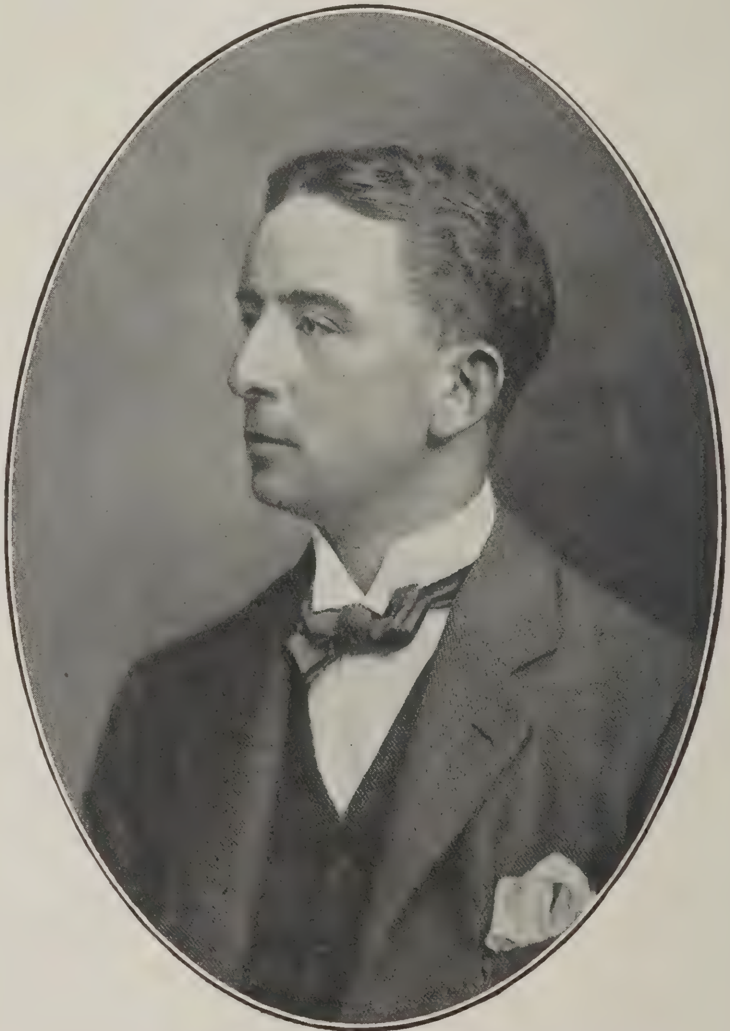
Mr. T. F. Strahan, the President, has carried out valuable work with regard to the technical side of urban and rural housing in Ireland, and he has much to say on that subject. He points out that while in many towns outside Ireland the housing question is one of making up a shortage occasioned by the war, in Ireland they are faced with the additional task of rehousing thousands now living in appalling conditions. In addition to the obstacles of interrupted railway and other means of communication, and the general feeling of insecurity that pervades the country, there has been local difficulty in some few towns of procuring land by agreement. It is, however, gratifying to learn that the progress made with the housing schemes so far is considerable when the difficulties to be contended with are borne in mind.

With regard to the cost of building, which shows little signs of approaching a practicable level, he puts forward several reasons why it is higher than in England. He says that higher wages are paid in the building trade, the cost of home materials, such as bricks and slates, exceeds the price of similar materials in England, and there is the higher freight on home and imported manufactured goods, and the increased agency commissions due to importation.

As to the external appearance of the dwellings the Government have not reserved to themselves the power of refusing approval of plans on the grounds of displeasing external appearance, nor, he thinks, may they ever do so. He says that so far such has been unnecessary and for two reasons: (1) that the designs are usually not unpleasing, and (2) that where the reverse is the case the architect has shown good sense and agreed as to the desirability of preparing alternative sketches. "The most that can be attained now in external treatment is good proportion and simplicity in design, and these will always suffice and be preferable to the inclusion of what is euphemistically known as ornament."

"The planning of the worker's house is special work, and the draughtsman, if he achieves success, may well take credit to himself, hampered as he is by regulations as to areas to be provided, with a desire, perhaps, to exceed them, and withal a fixed limit as to cost. How much simpler to plan where fewer inelastic factors exist? It should be remembered that many of our present difficulties and the existence of regulations are due to the lack of attention given in the past to the planning of the small house."

It comes as a shock to learn from Mr. J. J. Robinson, M.R.I.A.I., M.S.A., that "practically no good architecture was produced in Ireland after the coming of the English. This was perhaps not so much due to any inherent badness in the Saxon as to the fact that the culture of Ireland is different from the culture of England, and would not mix or get absorbed in it seven centuries ago, and will not mix or get absorbed in it to-day. And so all down the centuries there was constant faction with hardly a decade of peace, with the result that architecture suffered or was non-existent. The education of the youth of the age was directed to prowess in arms instead of to learning and the arts of peace."



MR. T. F. STRAHAN, PRESIDENT OF THE ARCHITECTURAL ASSOCIATION OF IRELAND.

We cannot believe that Mr. Robinson means to include the work in Dublin of Gandon and, if we can stretch a point, of Chambers. Gandon's Custom House, "Four Courts" and King's Rooms and Chambers' Casino at Marino, are generally regarded as architectural masterpieces. Another magnificent building which readily comes to mind is the Belfast City Hall, the work of Sir A. Brumwell Thomas, F.R.I.B.A.

Can the Irish produce a living style—characteristic of the age that is upon them—adequate for its requirements and expressive of the attributes of the country? Mr. Robinson believes they can, but not now. He says: "There is work to be done, study to be gone through, and those amongst us who are advanced in years may find it difficult to perfect themselves in the time at their disposal. If there be one who feels he has achieved the highest point he can attain, to such a one I say there is still work to be done. There is work to be done which is infinitely better, infinitely harder and infinitely more ennobling than any self-perfection can be, and that work is the education of our younger men."

The Association are fully alive to the need of educating the public whose "ignorance in regard to matters of art is positively abysmal." No indication is given as to the steps to be made by the Association to secure that end. Perhaps they will follow the lead of the R.I.B.A. and other architectural societies of this country by inaugurating a series of public lectures and exhibitions.

A number of prizes are offered each year for competition among the members, and the Association possesses a class of design, a golfing society, a boxing class, and a leading library. The year book, which is entitled "Constitution, By-laws, Syllabus of Meetings, Catalogues, Etc., Session 1922–3," may be obtained, from the offices of the Association, 15 South Frederick Lane, Dublin. E. R.

# The Week's News

### *Street Improvement at Croydon.*

It is proposed to widen High Street,
›ydon, at a cost of £250,000.

### *More Houses for Dublin.*

Dublin Corporation propose to build
mediately 84 five-roomed houses on a
e near Clonliffe.

### *New School for Durham.*

A new elementary school to accommo-
te about 300 children is to be erected
Knutsley by the Durham County
uncil.

### *Change of Address.*

Mr. Hurley Robinson, F.R.I.B.A.,
.S.E., has moved to Newspaper House,
Corporation Street, Birmingham.
ephone : Central 7050.

### *Sports Pavilion for Fulham.*

The Fulham Borough Council are to
oly for a loan of £1,100 for the erec-
n of a sports pavilion in West Meadow,
hop's Park.

### *More Houses for Nuneaton.*

Plans have been approved by the
neaton Town Council for the erection
seventy-four non-parlour type houses
Attleborough.

### *The Roof of Exeter Cathedral.*

Sir Francis Fox in a report on the
dition of the roof of Exeter Cathedral,
tes that repairs, which are bound to
costly, must be undertaken at once.

### *The Wembley Tower.*

he proposal to erect an Eiffel Tower
the grounds of the British Empire
nibition at Wembley is to be resisted
the Government Departments con-
ned.

### *Concert Hall for Folkestone.*

he General Purposes Committee of the
vn Council has recommended that a
ncert Hall and Pavilion should be
cted on a cliff site at an approximate
t of £100,000.

### *New Brighton Arcade.*

Brighton Corporation have decided to
struct an arcade costing £80,000 on the
of a 100-years-old brewery in Western
ad, in the centre of the shopping dis-
t. It will have a tower which will be
minated at night.

### *The Cavalry War Memorial.*

he work on the Cavalry War Memorial
hand, and is expected to be completed
he spring of next year. The site is
inside Hyde Park at Stanhope Gate.
design is by Captain Adrian Jones.

### *he Works of the late Ernest Newton.*

n exhibition of a selection of the
ks of the late Mr. Ernest Newton,
., is being held at the Architectural
ociation, 34, 35, and 36 Bedford
are, London, W.C.1, and will remain
n until May 24.

### *A Chelsea Art Centre.*

is proposed that Chelsea shall have
w institution for the encouragement
enjoyment of art, music, and litera-
. The directors of the Chenil Galleries
the option of a site, part of which
histler's time was the original home of the Chelsea Arts Club, adjoining the Chelsea Town Hall, and plans have been prepared for the erection of ground-floor art and sculpture galleries, together with a *café* which is to have "distinctive character." Upper floors would be set apart as an art school for day and evening study, and it is further intended to establish an artistic, musical, and literary club in connection with the galleries.

### *Newcastle Colliery Welfare Scheme.*

A welfare scheme is to be carried out for the miners at Cowper Colliery, Newcastle. It will comprise an institute and hall with extensive grounds. The cost is estimated at £14,000.

### *The British Academy in Rome.*

The centenary of the foundation of the British Academy of Fine Arts in Rome was celebrated by the opening of an exhibition of modern art, the work of recent and present students of the Academy.

### *An Advertisement Regulation Bill.*

The Scapa Society propose to introduce a new Advertisement Regulation Bill into Parliament at an early date. The object of the Society is to preserve the amenities of town and country. Its president is Viscount Lascelles.

### *Professional Practice.*

Mr. D. Herbert Richards, F.S.I., has commenced practice at offices in Canning Chambers, 2 South John Street, Liverpool (Tel.: 4283 Royal), also at 76 Victoria Road, Widnes, and is prepared to receive catalogues.

### *New Academicians.*

At a general assembly of Academicians and Associates Mr. Glyn Warren Philpot, A.R.A., was elected a Royal Academician, and Mr. Wilfrid Gabriel de Glehn, painter, and Mr. George Spencer Watson, painter, were elected Associates.

### *New Shopping Arcade for London.*

It is understood that plans have been passed for a shopping arcade on the site of Messrs. Cross and Blackwell's premises in Charing Cross Road, London. The scheme provides for about ten shops on each of five floors connected by lifts or escalators.

### *German Granite for War Memorials.*

Questions are to be raised in Parliament by the Granite Merchants' Association with regard to the use of German granite for British war memorials. German granite is being dumped at Aberdeen, and it is stated that some of it has actually been used for the erection of memorials in this country.

### *New Art Gallery for Maidstone.*

Maidstone Town Council have accepted an offer by Lord Bearsted to add a new wing to the town's art gallery and museum to contain a large and valuable collection of Baxter prints presented by Lady Bearsted. One room in the new wing will be devoted to an exhibition of engravings by Woollett, who was a native of Maidstone.

### *The Future of the Hop Exchange.*

The Hop Exchange at London Bridge has been sold to a private company. The premises are to be reconstructed as professional and commercial offices, shops, show rooms, and warehouses, and an egg market, and the large hall is to be let from time to time for exhibitions, sporting and other purposes. The Exchange was built sixty-three years ago, and was badly damaged by fire in 1920.

### *The Housing Problem.*

The Minister of Health has issued a circular (No. 388) calling the attention of the housing authorities of England and Wales to the powers conferred upon them by the new Housing Bill. It is pointed out that the Minister is prepared forthwith to consider schemes where local authorities are able to make arrangements with private builders on the basis of the Bill being passed.

### *Building Material Prices.*

Sir Halford Mackinder presided over the first meeting of the committee appointed to watch the prices of building materials. Mr. Neville Chamberlain, the Minister of Health, in addressing the committee emphasized the important bearing of their work on the new housing proposals of the Government. Subcommittees were appointed to take preliminary steps.

### *A Building Scare at Leytonstone.*

The erection of the new mission hall at Leytonstone for the Fillebrook Baptist Mission is held up owing to a crater in the middle of the site. By many people this crater is believed to contain a bomb dropped during a German air-raid in 1918. The committee have suspended building operations pending the result of communications with the Home Office and the War Office.

### *Standard Method of Measurement.*

Upon the advice of the Practice Standing Committee the Council of the R.I.B.A. recommend Members and Licentiates in England and Wales to adopt the "Standard Method of Measurement," agreed by the Surveyors' Institution, the Institute of Builders, and the National Federation of Building Trades' Employers. Copies of this document may be obtained from the Surveyors' Institution, 12 Great George Street, Westminster, S.W.1, and the National Federation, 48 Bedford Square, W.C., price 10s. 6d. net.

### *L.C.C. and Southwark Bridge.*

The London County Council have instructed the Highways Committee to report whether or not, "(1) Great inconvenience is caused to large numbers of the South London travelling public owing to the fact that the tramways do not cross Southwark Bridge; (2) public opinion should be stimulated by the Council with the object of causing Parliament and the Corporation to agree to the extension of tramways over the bridge, and, if practicable, to Cannon Street; and (3) the Council should take early steps again to promote appropriate legislation authorizing the proposal."

# Artificial Daylight

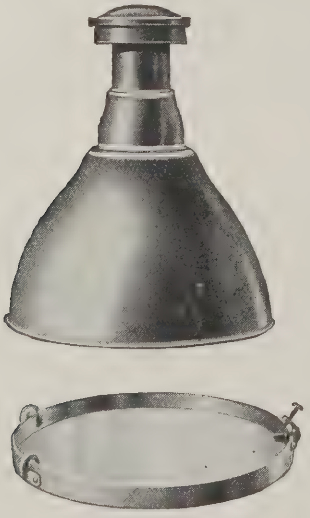
THE ROYAL GARDENS AT THE 1922 IDEAL HOME EXHIBITION, OLYMPIA, LIGHTED BY "TRUTINT" UNITS.

APROPOS the article on "Daylight Lamps," by Mr. P. J. Waldram, F.S.I., published in our issue for April 4, a correspondent writes: The accurate discrimination of colour values enters, either directly or indirectly, into almost every trade, industry and art. Now colour is not an absolute and constant quality. It varies, or rather our perception of it varies, according to the nature of the light under which it is viewed. Normal colour standards are, of course, derived from the appearance of the various colours under normal daylight.

From this, and also from the experience of anybody who has ever tried to match colours at night, it is evident that accurate comparisons can only be made either by daylight or by artificial light of similar spectroscopic characteristics. Until recently, a person whose occupation involved the discrimination of colours could only work satisfactorily by good daylight, owing to the lack of an effective substitute.

In designing the "Trutint" colour-matching unit, the British Thomson-Houston Company have rendered a valuable service to the community at large, and particularly to certain specific industries in which the accurate examination and matching of colours is of fundamental importance. The "Trutint" unit consists essentially of a Mazdalux reflector, fitted with a special daylight glass screen, and equipped with a Mazda gas-filled lamp. This screen, by absorbing most of the red and yellow rays, produces an illumination which, to all intents and purposes, is identical with daylight from a north sky.

Of course, the success of the "Trutint" unit—which is claimed to be 100 per cent. successful—depends upon the composition and colour of the glass screen. The development and production of this glass have involved an enormous amount of research and experiment spread over a long period. The actual apparatus is simple enough—so simple indeed, that many people might think it possible to achieve the same results by filtering the light through an ordinary piece of blue-tinted glass. Although artificial light modified in this way might have the appearance of daylight, the colour test would immediately expose its inaccuracy. The Company have fitted up demonstration cabinets to prove this point. Each cabinet consists of several compartments, one compartment being lighted by a bare carbon lamp, another by a bare metal filament lamp, a third by a gas-filled lamp in a reflector fitted with ordinary blue glass, and a fourth by a Mazda gas-filled lamp in a "Trutint" unit. Ribbons of various colours are stretched along the floor of the cabinet, and one may see at a glance how the colours are affected by the different forms of lighting equipment. The variations are startling, and there is a very perceptible difference between the effects produced respectively by the "Trutint" unit and the ordinary blue glass.



PENDANT TYPE "TRUTINT" UNIT, WITH DAYLIGHT GLASS SCREEN DETACHED.

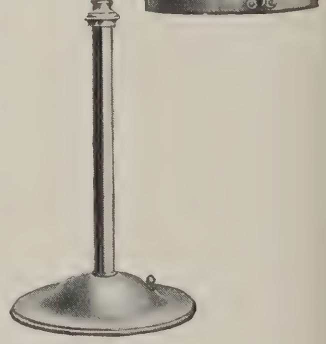
"Trutint" units are made in two forms. One consists simply of the reflector and screen, which is contained in a metal ring secured by thumb-screws to the reflector. This form is for pendant use in industrial and commercial establishments, and it is supplied in three sizes, for 100 watt, 200 watt, and 500 watt Mazda gas-filled lamps.

The other unit is made only in one size—for a 100 watt lamp, and consists of the reflector and screen fitted to a standard equipped with a switch in the base, the entire unit being finished in antique copper. This standard type is intended for use on counters, desks, etc., where it is desired to have local daylight illumination without interfering with the general lighting scheme.

The most important commercial application of the unit is, of course, in connection with the colour-matching requirements of drapery, millinery and haberdashery stores. Even in the daytime there is rarely sufficient daylight available for the proper examination of coloured fabrics, etc., and customers have acquired the habit of taking articles to the doorway in order to get an idea of their real colours. At night, the selection must be made by artificial light. By installing "Trutint" units of the standard type at intervals along the counters in all departments where colour discrimination is to be exercised, the trader enables his customers to examine and match colours on the spot. The convenience and profitable possibilities of the unit in this connection are evident.

In practically every industry there is probably at least one operation in which "Trutint" lighting can be advantageously employed.

One of the most interesting of the many "Trutint" installations that have been carried out was the temporary equipment of sixty large "Trutint" units employed to light the Royal Gardens at the 192 Ideal Home Exhibition. The object o the installation was to show the flowers in their natural colours by means o artificial daylight. The experiment—th first of its kind on so considerable a scal —was immensely successful. Indeed from one point of view, it was too successful. Many people simply did not realiz that the gardens were artificially lighted



"TRUTINT" UNIT FOR COUNTER AN TABLE USE.

nesday, May 16, 1923
Vol. LVII. No. 1480

# THE ARCHITECTS' JOURNAL & Architectural Engineer

*With which is incorporated "The Builders' Journal."*

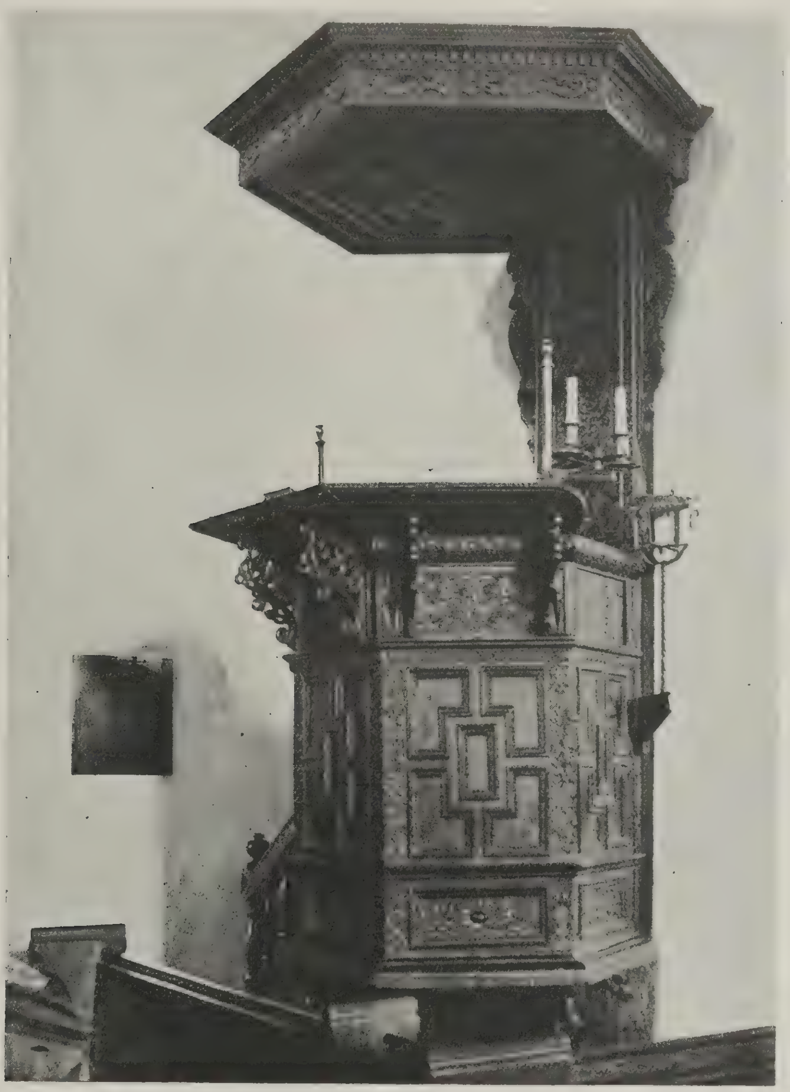


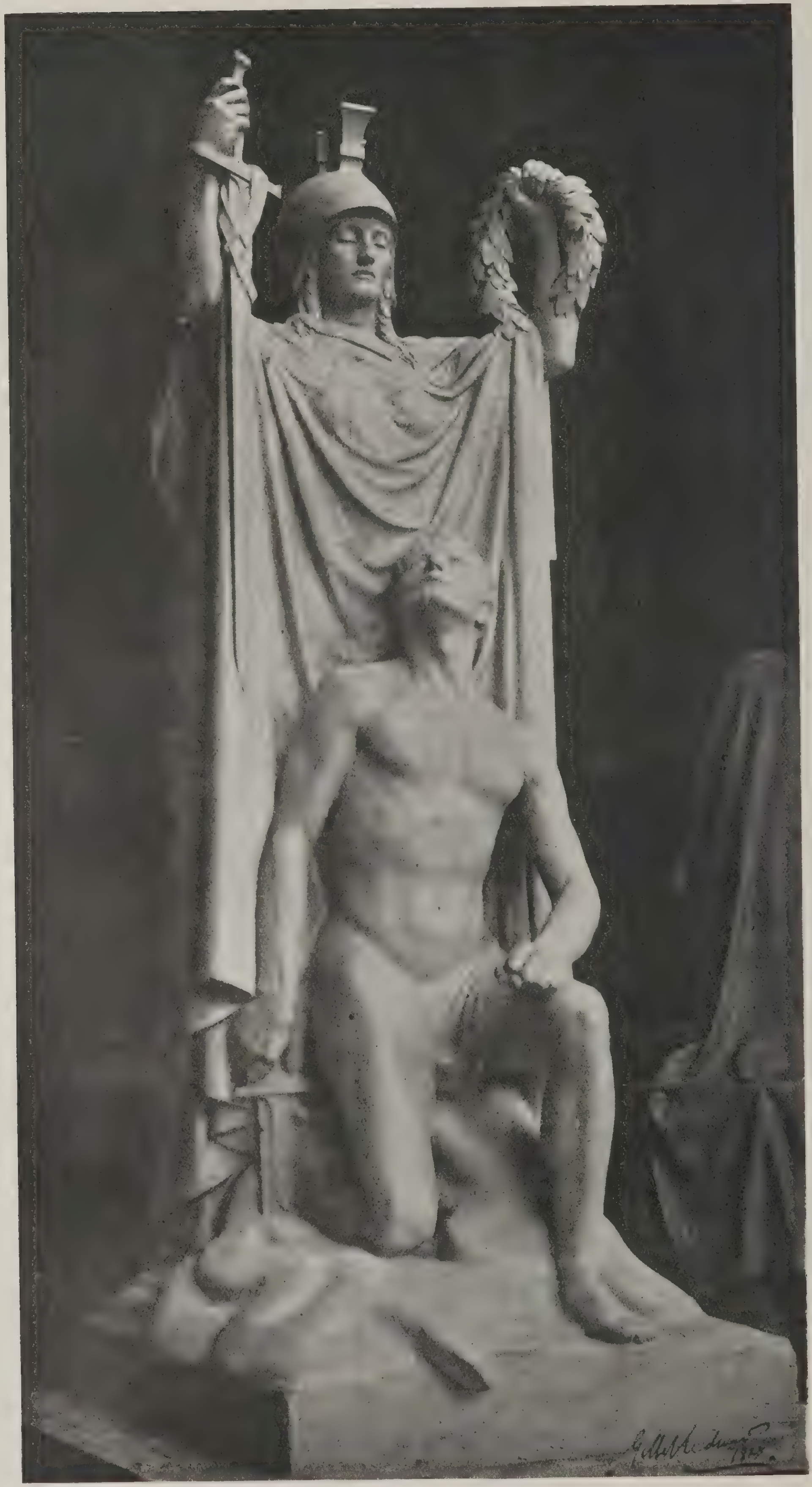
*Photo: E. M. Hicks.*

ST. MICHAEL'S CHURCH, ST. ALBANS: THE PULPIT.

27-29 Tothill Street, Westminster, S.W.1.

# Group for Stockport War Memorial

## By Gilbert Ledward



This Group is to be placed in a semi-circular recess in the Stockport War Memorial Hall, designed by Messrs. Halliday, Paterson & Agate. The total height of the Group is 8 feet.

*(Royal Academy Exhibition.)*

THE
ARCHITECTS' JOURNAL
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# Town Planning as a Business Proposition

IT is a curious fact that what opposition there is to town planning, and it is happily lessening day by day, originates with the business man. It is clear that a vast activity which reflects all the aspirations of man- nd can be viewed from many aspects, but from one of ese it will be seen throughout as a business proposition. me of the earliest town planning was done for defence; en gathered together for their mutual protection, or they anned so as to exploit to the greatest advantage the tural situation. And even when they planned broad and ble streets one of the motives of this grandeur was that might attract outside trade and so bring prosperity to e town and its inhabitants. The value of spacious streets d open spaces as a commercial asset was probably better preciated in Rome during the age of Augustus than in ndon fifty years ago. From these, the very simplest amples, it follows that if the early town had been so orly planned as to be incapable of offering resistance to e attacks of intruders, trading and business would have ffered; likewise, if the town had been so planned as to ste the natural advantages of harbour, river, road junc- n, or ford, business would have developed less efficiently, d finally, if instead of planning fine streets and spaces a licy of haphazard growth had been followed, the town uld not have attracted outside trade, and its inhabitants uld never have reached the same state of prosperity.

The desire of the business man to-day who is opposed to wn planning is to be left alone. The less interference with projects, he thinks, the greater will be his success, but examination of the past does not always bear this out. reover, if his personal success involves the discomfort d misery of a vast number of his fellows it cannot be mitted, and even if it can be achieved without involving mediate suffering to his fellows it will probably cause imate inconvenience, hardship, and waste of money to successors.

To-day the question of planning cities for defence no ger arises, since no defence can avail against the methods modern warfare. But the exploitation of natural re- rces is an ever-present problem, and to-day every large vn is paying for the business man's failure during the st period of *laissez faire* to exploit to the best advantage. industrial areas we find hopeless chaos; houses, instead warehouses, occupying dock frontages; a needless multi- cation of railway termini; areas obviously best fitted for idential districts covered with factories, and so on. As the wisdom of planning noble streets we have only to k at modern Paris to see what a wonderful business estment was the spending of £50,000,000 on improve- nts which have resulted in making that city the most utiful in the world.

There is a common fallacy that town planning means an enditure of public money and a consequent increase he rates. In the first place a little thought will show that rates are high to-day because during the preceding tury town planning was neglected—just when the siness man had things all his own way; furthermore, t since public money is being and must be constantly spent on improvements, therefore the less money there is available the more important it is that every penny of it be carefully spent. The object of planning a town is to ensure that the town as a whole be considered in relation, not to the aspirations of a single individual or a class of individuals, but to the community at large—in relation to its certain present and probable future needs, and in relation to its surrounding territory.

In addition to such direct considerations lack of town planning is responsible for losses less easily calculated. The bad housing conditions which it involves have a very definite effect upon the moral and physical condition of the workers, and these, after all, comprise the majority of the nation. Not only, therefore, do such conditions result in an enormous loss of output, but they also involve the State in charges for prison and hospital maintenance, for workhouses and asylums, in addition to engendering unrest and discontent.

It would be interesting to endeavour to compute the annual losses on an average business due to the last century's complete abandonment of town planning. Quite a large proportion of the present rates, for example, might have been avoided were there not streets to be widened, slums to be cleared, workhouses, clinics, and medical services to be maintained. A co-ordinated system, such as a town-planning scheme, would have provided for light and power production and distribution, would have resulted in lower costs for these essentials. Had the mining areas been town planned in a way suggested by the South Wales Regional Survey, coal would be cheaper to-day, and this being the prime commodity for manufacture, it would have reduced costs in countless ways. Bad roads are responsible for difficulties in obtaining raw materials and disposing of the manufactured product. They are the cause of a loss of time which, estimated at a minute per day per head, amounts, at a shilling per hour, to about £25,000 for a town of 100,000 inhabitants in a year. Traffic congestion, too, is enhanced by the fact that workers are housed a long way from their work, and this is another source of loss to the business man; moreover, the conditions under which he is compelled to travel to and from his work mean a loss of output through fatigue. Ground rents have in many places assumed a quite false value due to surrounding congestion arising from unco-ordinated planning in the past.

Most manufacturers to-day are aware of the essentials that must be looked for in selecting a site for a factory. Good road and rail access, low-priced land, proximity to public services of gas, electricity, and water, facilities for minimizing transport and handling expenses, adequate and accessible housing for workers, low rates. Yet to-day where would it be possible to find an area which realized such conditions? It is the purpose of a town-planning scheme to see that in the future it will be possible to satisfy these needs. Clearly this can never come about so long as each may work solely for his own ends; where it is possible to prevent or hamper the construction of necessary roads, or, on the other hand, to lay out new roads which serve only local and immediate needs and disregard the future surrounding requirements; where a man may build a factory in the midst of a residential neighbourhood; where no provision is made by the early purchase of land for subsequent open spaces, or cheap housing sites.

It is clear, therefore, that town planning is a sound investment. The counter question to the one which seeks to know what a town-planning scheme will cost, is to ask what the lack of one in the immediate past is costing us to-day.

## The R.I.B.A. Elections

We published in our last issue a letter in support of the Nominations of the 1922 Emergency Committee, from which it will be seen that over two hundred and fifty members and Associates of the Institute are sufficiently convinced of the seriousness of the occasion to declare their intention of supporting these nominations "en bloc." When one considers the extreme reluctance of architects as individuals to identify themselves with party issues in the affairs of the Institute, one cannot fail to be impressed by the fact that this is regarded as an occasion upon which the issues involved are so momentous that a departure from the traditional attitude becomes necessary. In the past two years Mr. Paul Waterhouse has presided over the deliberations of the Institute Council, with eminent distinction and impartiality. It was at the termination of his first year of office that the sitting Council was turned out by the election campaign of the so-called "Defence League." During his second year in the presidential chair Mr. Waterhouse has had abundant opportunity of becoming acquainted with the policy and methods of the Council elected by the Defence League. With this knowledge, and we are sure not without much careful consideration, Mr. Waterhouse has identified himself with the nominations of the 1922 Emergency Committee because, and here we quote from the letter of support, he "believes that, as representatives of the art and practice of architecture in London and the provinces, they will do all in their power to safeguard the interests of the R.I.B.A., and because he believes that they will endeavour, if elected, to ensure a satisfactory solution of the very difficult problem of registration by agreement between the various interests concerned." When we also find among the signatories such names as those of Sir Aston Webb, Sir Reginald Blomfield, Mr. T. E. Collcutt, and Mr. J. W. Simpson, all past-Presidents of the Institute, and qualified by their experience in the chair to form a considered opinion upon the points at issue, it hardly seems as though there could be any question as to who are the men to vote for. We view with regret the persistent attempts of Mr. Perks to misrepresent the policy of the 1922 Emergency Committee's candidates, and we print in our correspondence columns a letter from Mr. Maurice Webb which clearly disposes of the points upon which Mr. Perks so frequently rings the changes. An election campaign so conducted cannot come to good, and we hope to see a triumphant return of the Council nominated by the 1922 Emergency Committee.

## Piccadilly Circus

Reports have appeared recently in the daily Press to the effect that Piccadilly Circus is to be entirely remodelled and the Shaftesbury Memorial removed to Leicester Square. We learn semi-officially that no such drastic changes are contemplated. Briefly, what will happen is as follows: The southern corners of Piccadilly Circus will change from segments of circles to right-angles, the Swan and Edgar building will be set back to align with the Piccadilly Hotel and with the angle of the new "Circus," and the front of the County Fire Office will be made to conform to the building line of the Quadrant. The Café Monico and the London Pavilion stand on L.C.C. property, still have long leases to run, and cannot be touched. The island on which the fountain stands will still be required, and consequently there is neither need nor intention to interfere with the monument.

## Architecture on the Film

On another page we give a report of a film of St. Paul's Cathedral which has been taken for the benefit of the Restoration Fund. This is not the first time that a great building has appeared on the screen by virtue of its own inherent interest; the P.L.A. Building was filmed at the time of its opening last year, and possibly other buildings have received a like distinction. We have frequently urged in these columns the importance of the cinema as a means of stimulating popular interest in architecture. That the public are interested in architecture, or, if the word is preferred, "building," is apparent from the knots of spectators that gather before any scene of building operations. And when the scaffolding is at last taken down from a new building the crowd often becomes of sufficient dimensions to evoke a stentorian "Move along, please," from an adjacent policeman. Possibly it is the white newness of the stone that attracts attention; it is difficult to believe that the man in the street is critically examining the proportions of the façade or passing judgment upon the detail. Whatever the cause of his interest, there can be no doubt that it is perennial. What has now to be done is to cultivate and guide that interest; and the film is obviously the readiest means of accomplishing this aim. Architects will wish this film of St. Paul's all success, as much because of the splendid object to which a big proportion of its proceeds are to be devoted as because of the good which it is bound to do in the work of interesting the public in architecture.

## A Commission of Fine Arts

Sir Aston Webb's announcement at the Royal Academy banquet that the Government is considering the creation of a Commission of Fine Arts is an item of news welcome, no doubt, to all good citizens, but most of all welcome to members of the artistic fraternity. The proposed commission is designed to "advise on matters affecting the æsthetic amenities of the towns and the countryside," somewhat on the lines of the American National Commission of Fine Arts, which is composed of distinguished architects, sculptors, painters, and others. It is a depressing commentary upon the public estimation of the arts in this country that we should be, at this late time of the day, "considering" the creation of so obviously necessary a body—an authority that, in one form or another, has long been a recognized part of the civic organization of most other civilized countries, certainly on the Continent of Europe—in France and Italy, for example. In Italy there is even a law preventing the owner of a building of historical importance from touching the fabric without the approval of the arts authority: he may not even paint his shutters a different colour without official sanction! This, perhaps, is going a little too far; but "too far" is preferable to not far enough, or worse still, to nothing at all. In England too much licence has always been permitted to the individual in relation to the public amenities. And not only to the individual, but to public authorities, who themselves are the greatest offenders against good taste in civic matters. London has suffered probably more than any other English city from the non-existence of a controlling authority. The bad management of the past is everywhere apparent. It shows itself in bridges where they are not wanted, in aching spaces where they are; in badly planned street "improvements"; in misplaced or ill-conceived monuments; in haphazard rebuilding schemes. In such matters a Commission of Fine Arts would find enough work to keep it permanently sitting. There is also much to be done for the countryside—the removal of hideous hoardings and other blatant means of advertising; the preservation from the despoiler of our old-world towns and villages. All who have any regard for the past or hope for the future will pray for a speedy and an affirmative pronouncement from the Government in this matter of a Fine Arts Commission.

# An Exhibition of Work by the Late Ernest Newton

THE exhibition of work by the late Ernest Newton, R.A., now at the Architectural Association, might very well be called "The Evolution of an Architect," or "A Short Pictorial History Modern Domestic Architecture," for it shows in a very eresting way how the architect himself developed and ew in creative strength year by year, and also how the ansitional period through which he passed during the rlier years of practice is reflected in his work.

The drawings and photographs are all dated and embrace period of roughly forty years. They are not arranged in ict chronological order, but with a little pedestrianism e is able to follow more or less closely the sequence and velopment of the work.

Naturally the influence of Norman Shaw is very apparent the early drawings. The House at Guernsey (1883) is in e characteristic "Queen Anne Revival" manner, and ows many of the peculiar mannerisms of the master, ch as small broken pediments above the windows. The ouse at Beckenham, for A. W. Cree (1894), is a very strik- g example of the influence of Shaw, not only in design but draughtsmanship; Shaw might very well have done this awing himself. By 1894, however, the Shaw influence is ginning to disappear, although one finds occasional ggestions of it in such features as oriel windows and bles.

The year 1898 produced among other works, the House at okingham, a notable mansion in the Tudor manner, and e branch office of Martin's Bank at Bromley. The two ildings make an effective contrast—the former mature in yle, the latter still experimental, with distinct traces of e Shaw influence. The bank is shown both by a photo- aph and a drawing; and it is interesting to note how ithfully the drawing conveys the true character of the ork.

Between 1899 and 1902, Ernest Newton had developed a stinct individuality of manner, and indications are seen of the tendencies that were later to culminate in such perfect specimens of domestic architecture as "Ardenrun," and "Feathercombe," Hambledon.

The architect probably reached his zenith about the year 1910, designing a number of delightful houses, such as "The Greenway," Cheltenham, a stone house in the Tudor manner (shown in a very charming drawing by the late Alick Horsnell), "Ardenrun," and others equally famous. The house at Burgh Heath (1912) belongs to what may be called the period of later maturity; it has a clean-cut severity that reminds one oddly of Inigo Jones. The house at Kingswood (1913) is also typical of the later manner, though here there is a suggestion of Wren influence in the warm red brickwork and the circular porch.

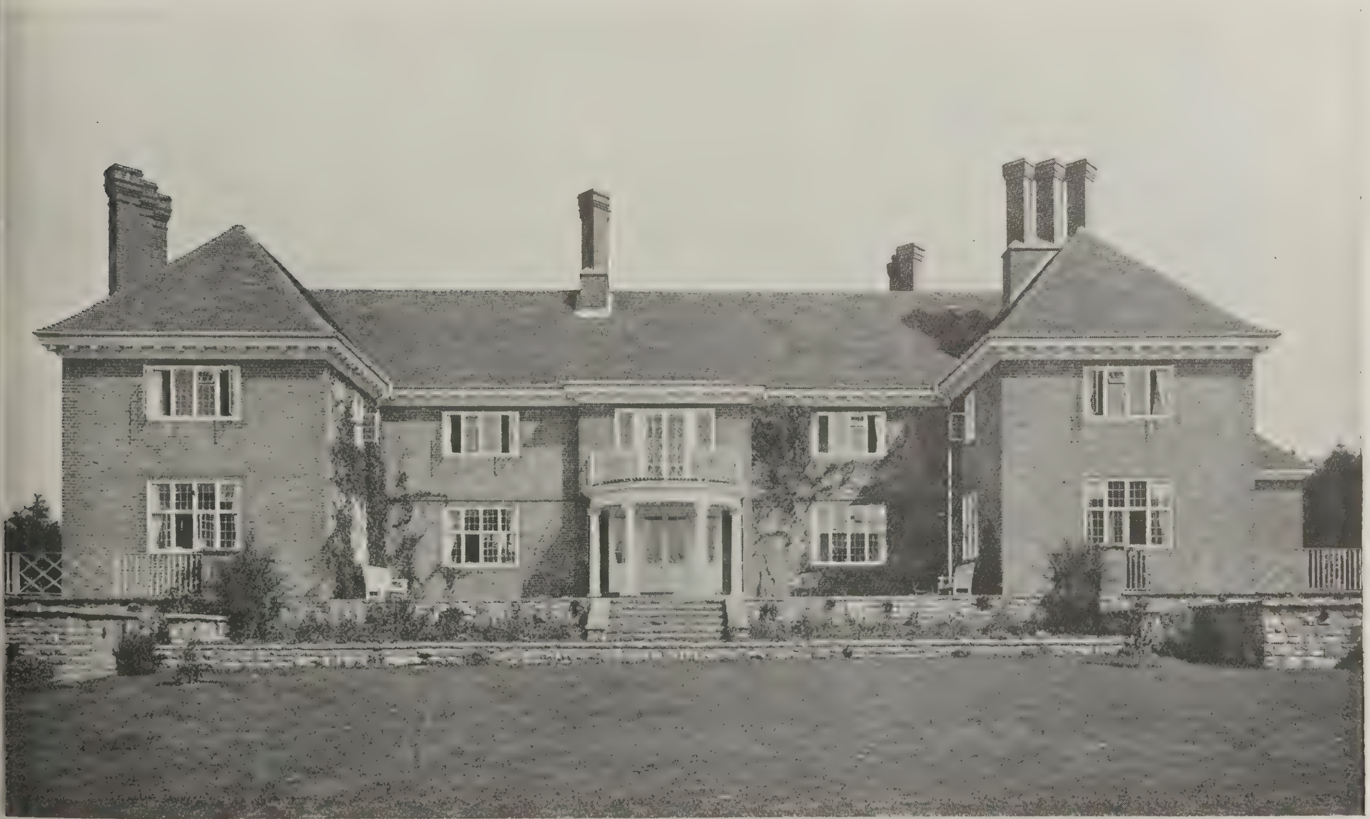
"Upton Grey," Hants, is in a class of its own. It belongs to what is usually described as the "vernacular" manner. It has a half-timbered porch with herringbone brickwork, a ground story of brick, and an upper story of weather tiling, with lattice windows—a house full of homely charm, and a delightful place to live in. Besides photographs of it there is on view a drawing of a bay and gable—a rich specimen of the pen work of F. L. Griggs.

Other interesting works of the later period are a fine house for the Grand Duchess of Luxembourg, and the Monastère du Carmel. Church work is represented by St. George's, Bickley, and St. Swithin's, Hither Green.

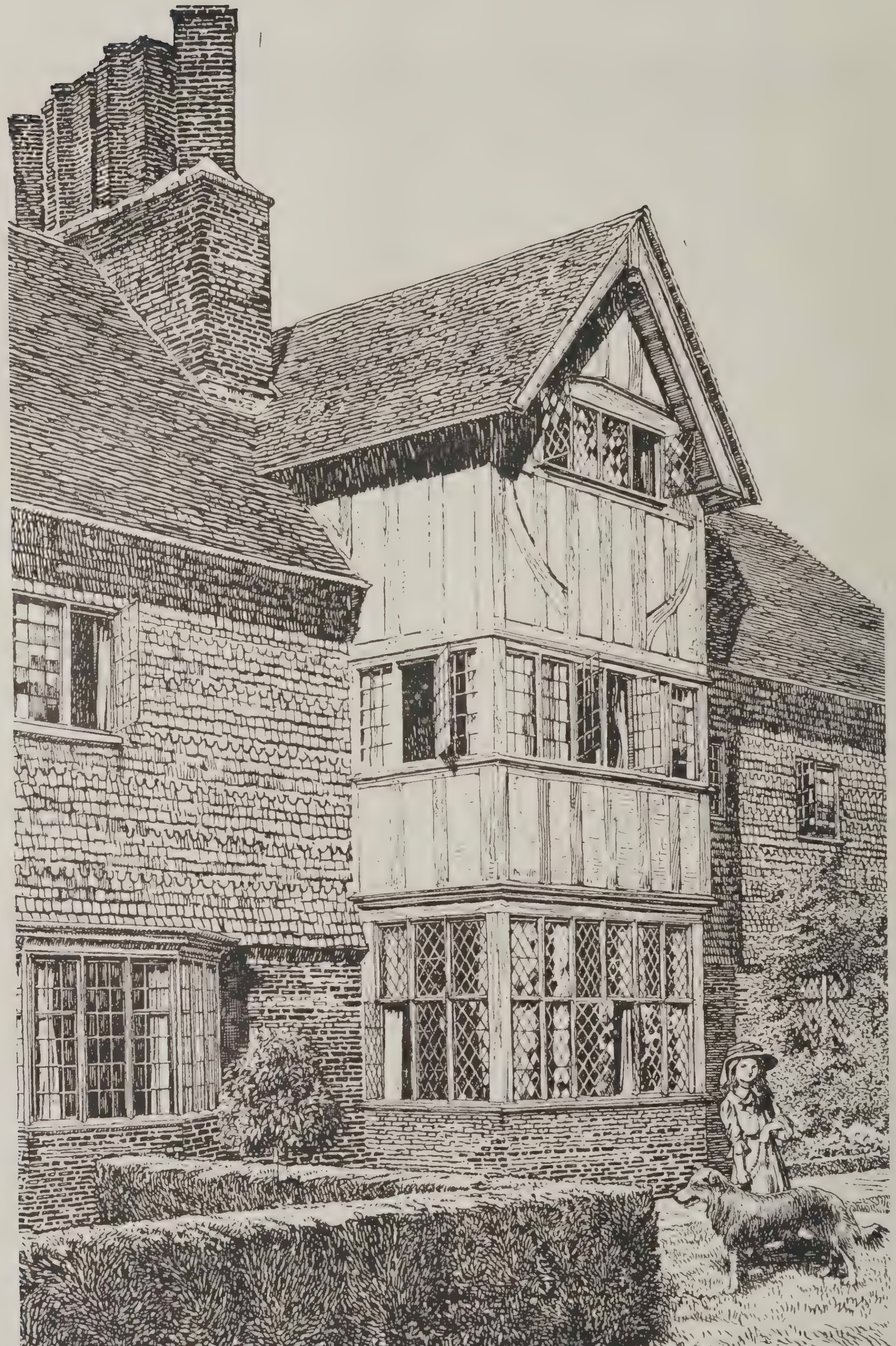
Ernest Newton lived and practised through a period that saw many changes in architectural ideals, yet during his whole career it may be said of him that he was unwavering in his acceptance of traditional forms. The fine thread of tradition ran through all his works, no matter what pattern he was weaving. Yet he was never a copyist; everything he did has the touch of his personality upon it.

One of the minor points of interest about the exhibition is the unchanging character of Raffles Davison's draughtsmanship. There is a drawing by him dated 1886 that might well have been done yesterday.

G. J. H.

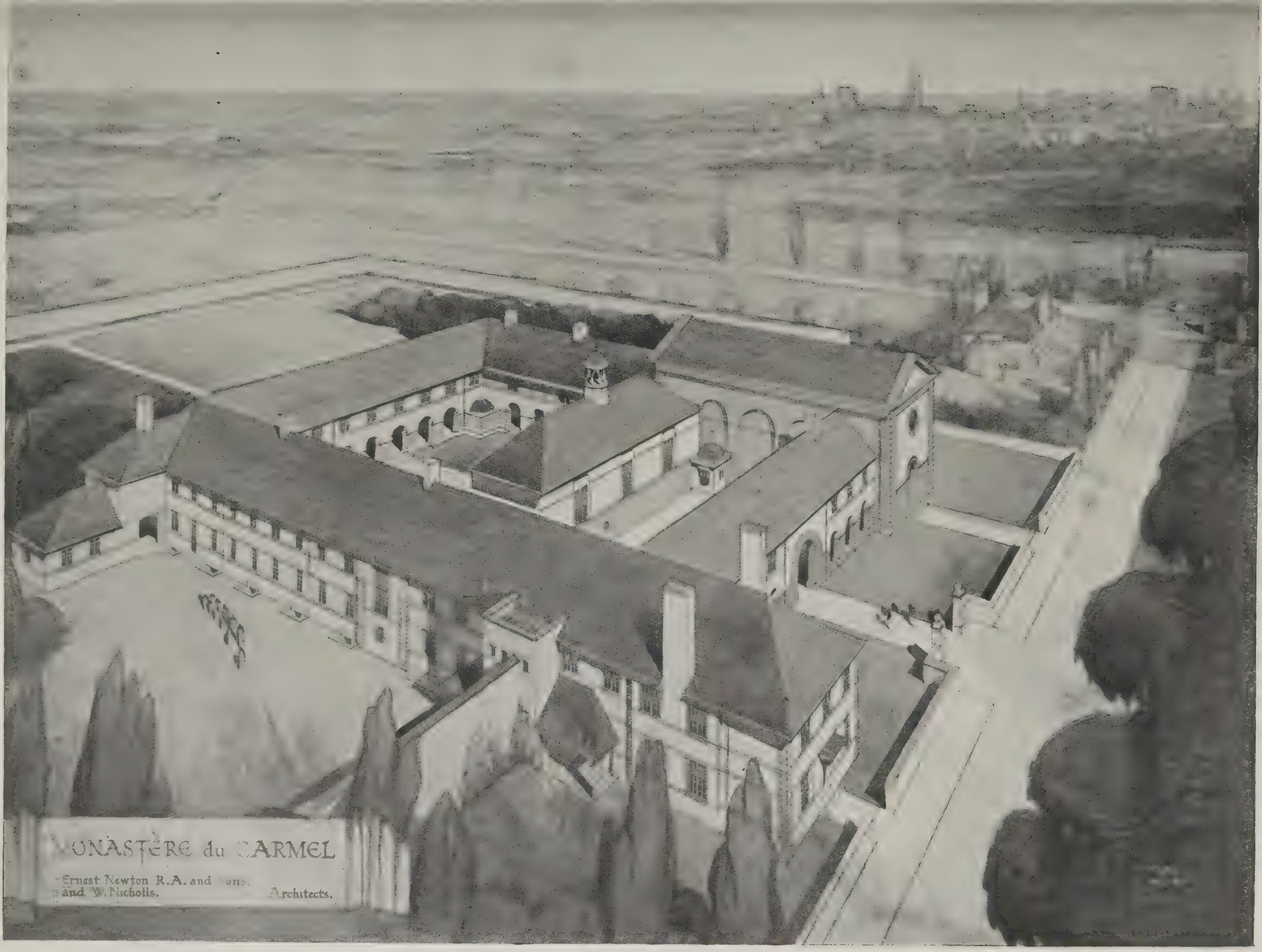


"FEATHERCOMBE," HAMBLEDON, SURREY. THE LATE ERNEST NEWTON, R.A., ARCHITECT.



UPTON GREY MANOR. THE LATE ERNEST NEWTON, R.A., ARCHITECT.

*(From an Exhibition of Work by the late Ernest Newton.)*



MONASTÈRE DU CARMEL. THE LATE ERNEST NEWTON, R.A., ARCHITECT

*(From an Exhibition of Work by the late Ernest Newton.)*

# The Legal Side of Architecture in America

### By CLINTON H. BLAKE, Jr.

IN America, the business side of architecture has been brought to a very high point. In the following address, Mr. Clinton Blake insists that there is nothing incompatible between business and art. We know now that it is no longer possible for poetry to be written only by young men with long hair, and especially in America are architects realizing that to succeed in their profession they must be not only fine artists, but, in Mr. Blake's forceful words, "mighty good business men." One has only to try to see the top of the Woolworth Building in order to appreciate the problems both of professional practice and design mastered by the architect, and to realize to the full that the man with only an artistic temperament can win for himself only a minor professional position.

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Mr. Clinton H. Blake, Jr., in lecturing on "The Legal Side of Architecture" at the School of Architecture at the Boston Institute of Technology, said: There is hardly anyone, I suppose, who goes through life without in some way coming in contact with the matters that are treated of under the general heading of the law of architecture and building. There is hardly any one of us that, at some time or other, does not have to come in contact with a building operation. It may be a bungalow that we are interested in. It may be a mansion on Fifth Avenue, an apartment house, or nothing but a dream house. But in one way or another, as a rule, sooner or later, the great majority of people come in contact with these questions that lie at the root of the legal relationships and business relationships of the architect and his client and the contractor.

Of course, your primary conception, and rightly so, of architecture, or the profession of architecture, is that it is a fine art. That is unquestionably true. It is unquestionably the basic characteristic of the profession of architecture, and its broadest one.

The thing that I have been preaching for a number of years since I began to take up this subject from the legal point of view is that there is another totally distinct side of the profession which must be appreciated by the modern architect to-day if he is going to be really successful in the practice of his profession. As you probably know, I refer to the business side of architecture.

This is a side of the profession that a great many architects, especially those that graduated some years ago, have failed, up to this time, to appreciate or understand, as they should appreciate it and should understand it.

There is nothing incompatible between the artistic side, if I may term it such, of the architect's work and the business side. I have been met a great many times with the statement that an architect is not fundamentally, or cannot fundamentally be, at one and the same time, both an artist, in the proper sense of the term as applied to his profession, and a business man. Now, that, I think, is nonsense. I *know* that it is nonsense, from the experience that I have had. Clients of mine whose work I know intimately, architects whose names are nationally known, are fine artists, fine craftsmen, and, at the same time, mighty good business men. Of course, that is the ideal combination.

What I have tried to do in my writings, and in my talks to architects and students, is to get them to place in their minds, as it were, the main danger signals and danger points which they will meet in the practice of their profession, not to get you to try to memorize or understand as a lawyer understands, or is supposed to understand, all of the legal questions entering into the practice of architecture, but to get you to place in your minds the main headings, the main points, the main basic principles, upon which your relations with your clients and their relations with the contractor, and your relations with the contractor, are based; to get these points sufficiently fixed in your minds so that when you, in the course of your practice, approach the place where the ice is a little thin, although you may not know it, you will, nevertheless, sense that fact. The effort is so to prepare you that, while you may not know just what course you ought to take, you will know, in a general way, that you are approaching a point where it behoves you to go slowly and carefully, and, if in doubt, to get competent advice.

I can say to you from personal experience—from what I have seen of the relationships of architects and clients and builders—that if these basic principles could be instilled into the minds of the students in our schools of architecture to-day, it would save literally hundreds of thousands of dollars in litigation and in loss, and untold thousands in ill feeling, in loss of clients and in misunderstandings, in the practices of those students as architects, during the next few years.

I have in mind various clients of mine especially, architects whom you would recognize instantly as leaders in their profession. They have primarily the artistic temperament. They are not business men, although they could be business men if they cared to apply their minds in a business way. They have been keen enough, however, to recognize the need in their organizations of this business element, and they have made a part of those organizations men who are good business men. These men have organized and built up business organizations within their respective office organizations, and these business organizations are excellent examples of what attention to the business details of a practice will accomplish.

The artistic side of the work, the planning, and preliminary interviews are carried on by the architects themselves. When it comes down to making a contract, to attending to the bids of the contractors, to guarding the client's interests, all these devolve on the business side of the organization. The result is, that the clients whom these offices serve are protected in their dealings, not only wit the architect—these are put on a definite basis, so tha there can be no misunderstanding—but in their dealing with the contractor, from the day the contract is signe until the last item of work is done and the final paymen made.

I have seen instances, for example, where the contractor without the client ever discovering it, possibly without an intention on the part of the contractor, would have go away with a great deal of money belonging to the clien if it had not been that the business organization of th architect was "on the job."

I remember one case in particular, where a contrac called for bids by units and for the payment in instalment in the usual way, and the contractor lumped all of th higher charges in the earlier items; that is, he built u beyond what they should have totalled, the early iten in that construction. He put in his excavation work at very much higher figure than it should have been put i at, his foundation work at a higher figure, and the framin work. If the unit items in the bid of this contractor ha not been carefully examined and analysed, the resu would have been that, when the contractor had complete a part of the building—when the foundations had bee put in and the framework erected—he would have bee entitled, on the figures submitted by him, to an amount which, on a true basis of valuations and a true proportion between the value of the work done and the value of the total work to be done, would have been largely in excess of the sum to which, in fairness, he was entitled. If his units had not been checked and revised by the architect, he would have been entitled to perhaps three-quarters of his bid at a time when, on the basis of actual work done and cost to him, he should have received only about one-third thereof.

In this particular case, when a part of the building operation had been completed, the contractor went into bankruptcy. Now, if the architect in that case had not checked these items and seen that the contractor was overloading earlier units of construction, charging an excess on those over what was fair at prevailing rates for labour and material, the contractor would have been paid prior to the time when he failed a very much larger proportion of the cost of that building than he should have been. When he failed the client would not have been able to collect damages from him or force him to complete the building. He would have had to get someone else to complete the building, and he would have been out of pocket the excess cost.

The architect did check those payments and found that the contractor was charging too much, and he had the contractor come into his office and he made him reduce those items, so that when he was paid the preliminary payments he was paid an amount that was substantially equitable. When he failed, therefore, and the owner had to get a new contractor, there was enough money left unpaid so that the owner was able to complete the building without any appreciable loss.

That is a practical example of what I have in mind when I speak of the business side of the architect's organization.

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# Some Minor Aspects of Town Planning.

## 1—Street Traffic

### By H. J. BIRNSTINGL, A.R.I.B.A.

*These articles have been written from a purely general point of view, and have been framed to offer suggestions on various aspects of Town Planning in a broad way. They deal with principles rather than with particular things. In view of the compulsory regulations, they should be of value to all architects and town-planners.*

TRAFFIC is one of the subsidiary matters confronting the town planner which would be handled with more success if a few of the general principles governing it were more thoroughly understood. Towns cannot be planned by standards or formulæ, each example needs careful consideration on its own merits. Nevertheless, there are always certain principles acting as a foundation upon which the structure of the plan is built. These it is necessary to understand.

The object of traffic is to convey persons and goods from place to place with the utmost speed compatible with safety, and roads are primarily constructed because they offer less resistance to human and vehicular traffic than the ground in its natural state. Water, of course, presents a medium for conveying traffic, which, since it offers in its natural condition less resistance than land, antedates, in well-watered countries, the road as a traffic-carrying medium. Inasmuch, therefore, as a road impedes the swift and secure passage of traffic it fails in its purpose, and the cause of such impediment is threefold—congestion, bad routing (this covers gradients and indirectness), and bad surface. The last of these scarcely comes within the scope of our investigation, it is entirely a technical engineering matter. Suffice it to point out that the perfect road surface, which will successfully withstand the strain of heavy motor traffic and yet not be inimical to horses has yet to be discovered.

The most frequently encountered impediment to traffic in our towns is undoubtedly congestion, for which increased breadth of road surface, besides often being economically unsound, since congestion usually occurs where land is most valuable, is no universal panacea. Congestion occurs through three causes: first, through the infinite variety of speeds at which vehicles travel; secondly, owing to road junctions; and thirdly, owing to stationary vehicles in a road.

It is obvious that if vehicles travelled at a uniform speed the requisite width of a road would be only such as could accommodate two streams of traffic, one in each direction. Allowing 30 ft. per vehicle and presuming a uniform speed of only eight miles per hour, then 2,776 vehicles would pass a given point in an hour, but imagine a vehicle proceeding in either direction to be moving at a speed of four miles an hour, then, unless the interval is broken to allow overtaking, the number of vehicles passing a given point in an hour is at once halved. Congestion of this kind with columns of troops on the march and motor vehicles was frequent enough in the theatres of war. Where, therefore, the greatest variation of speeds is likely to occur the maximum road surface will be required. Speed itself does not demand road surface, as we see by the railway. And the greatest variation in speed will naturally occur at road junctions, and in those parts of the town where passengers wish most frequently to alight and goods must be loaded and unloaded, for each vehicle passes through the infinite number of speeds in accelerating from, and in decelerating to, rest.

Roads flanked with shopping and commercial buildings will, therefore, demand the greatest width. These are not always arterial roads. Another remedy exists for the alleviation of congestion arising from this cause, and that is artificially to lessen the speed variation. This may be done, first, by offering alternative routes for through traffic, but it is essential that the alternative route has an equally good surface, otherwise no fast traffic will be induced to use it; and secondly, by instituting fixed stopping places for all public passenger vehicles, for speed variation at definite places is less disturbing to the traffic at large than promiscuous variation. Much can be done, therefore, by making existing alternative routes more attractive to road users by improved surface and by opening up short bottle-necks and making proper connections. The actual road area in a town is often sufficient if the traffic were properly distributed over it.

The second cause of congestion arises through road junctions. The junctions are, of course, inevitable, but much can be done to lessen the congestion. At simple junctions the angles can be rounded, often this entails nothing more than simply setting back the kerb. In planning new junctions, however, not only the road area, but the angle of vision should be considered. At existing junctions placing mirrors across opposite angles, so that an oncoming driver has a reflected view up the cross road, adds to the safety of the crossing, and so lessens speed variation. With regard to multiple junctions, there are two differing theories, the one favouring the gradual debouching of streets into each other—in other words, avoiding a multiple junction; the other favouring large open spaces where multiple junctions occur around which the traffic can circulate.

The former is favoured by German and the latter by French trafficists. Both have points of merits, and both can be disastrous. The German method is sometimes carried to an extreme by breaking a road, which should continue straight on, where it crosses another road and continuing it a few yards to one side. This is ridiculous, it causes through traffic on the subsidiary road to have two turns each causing danger and delay. The other method invariably causes congestion if the area is too small to accommodate the traffic from the converging roads. It must be remembered that the number of possible points of contact between streams of traffic increases out of proportion to the number of roads. It can be graphically shown that a junction of three roads yields only three points of contact whereas a junction of five roads yields thirty. Attempts have been made to regulate junctions by gyrating the traffic in one direction. Such a method can only be successful where the space at the junction is regular in shape and is sufficiently large to accommodate comfortably all the traffic that comes into it. It would obviously be absurd to endeavour to gyrate the traffic at Ludgate Circus, neither can this method be adopted at irregular junctions, such as Piccadilly Circus or the Mansion House. Suggestions have been made from time to time for carrying lines of traffic over each other, but such arrangements are only practicable where they are the outcome of the natural configuration of the ground. But the construction of subways for pedestrian traffic certainly tends to lessen congestion.

Passing now to the third main cause of congestion—stationary vehicles—we shall find here several expedients, the adoption of which will tend to lessen congestion. A more general adoption of a parking system is required. With the exception of the Albert Hall no large place of amusement in London has proper facilities for parking the vehicles of those attending the building. It would be far less costly in original and upkeep charges in road construction if cities were planned with recognized parking places off the main stream of traffic for waiting vehicles, both at shopping and theatre centres. As it is, either an important thoroughfare is narrowed by a queue of stationary vehicles or a subsidiary road is rendered wellnigh impassable. The question of goods traffic is more difficult. Railway receiving offices, post offices, stores, newspaper offices, and the like, should be planned with loading yards or with a service road to the side or rear. What will help also is to minimize the time during which a vehicle is stationary, that is to say, to expedite loading and unloading, and with this end in view efforts might be made to improve the loading facilities of vehicles. The other means for controlling stationary vehicles we have already referred to—it is the establishment of recognized stopping places for public vehicles. But thought must be expended in the selection of such points. The custom of fixing stopping places at road junctions is manifestly absurd—it leads to congestion and danger. Stopping points should be arranged so that no vehicle is within 25 yards of a junction. The selection of routes for public vehicles requires more careful attention. This traffic can be roughly grouped under two heads—local and long distance. It is obvious that the local traffic, both in order to serve the public and to secure the best return, must follow the routes richest in pedestrian traffic. This means that local plying vehicles must run along streets lined with shops, business houses, and places of amusement. Their object is not directness of route between terminus and terminus. The purpose of long distance traffic is somewhat different, and vehicles conveying passengers between the suburbs and outlying districts and the centre of a town should be encouraged not to use the shopping and other congested roads. The extreme of long distance traffic is found in the charabanc, which should start from a central parking place and proceed out of the town by less frequented roads. By a careful segregation of local and long distance traffic, which resolves itself into a segregation of speeds, much will be done to ease congestion, and in planning roads this matter should be definitely kept in mind.

The mention of charabancs suggests another matter to which the town planner must give, but has not given, adequate thought, and that is the charabanc station. The charabanc traffic has developed so rapidly within the last few years that no preparations have been made to deal with it. With the advent of railway transport a special building was at once imperative, with charabanc traffic this is not so. Yet if not imperative it is at least urgent; it would be folly to plan new town centres without making provision for charabanc parks, and for a building containing waiting-rooms, booking offices, luggage offices, and the like, and not only the terminal towns, but the intermediate villages should have their roadside stations at which passengers can wait in shelter.

Instead of segregating various speed traffic along different routes there is the alternative, favoured in Continental cities, of roads with multiple tracks, the centre portion of which is reserved for the through traffic and the outsides for stopping traffic. There are also further divisions into methods of locomotion; and, in addition to the tram having its own track, there are tracks for cyclists and for riders The multiple-track road, however, is rarely suitable for our big cities. Land is too valuable. It is obvious that if a certain road area is required to accommodate the traffic two moderately wide roads create twice the frontage of one exceedingly wide road of twice the width; economically therefore, the former must be favoured where land is at a premium. Moreover, there is another disadvantage in the multiple-track road for town centres, for it defeats it own object where there are many turnings and cross roads since vehicles entering or leaving the road by a left-hand turn (unless there is a double roadway) or crossing it mus interfere with the swift moving traffic in the centre, and i town centres the intervals at which subsidiary roads ente a main road is always small. Circumferential roads, how ever, may often with advantage be of the multiple-trac kind, for none of the disadvantages above enumerated ther maintains. Moreover, if well designed, such roads are ver beautiful. Such roads, too, offer great scope for conven ent tramway placing. Instead of being placed in the centr of the road the tracks can run at the side, and very ofte on grass.

Whatever theories we may propound about traffic w must remember that the whole matter rests ultimately o the human element, and the aim of the town planner whe considering his roads in relation to traffic will be so to pla them that congestion will be avoided with the minimu interference. It is clear that if sufficient police officers b placed about the streets and that if traffic be the subje of numerous regulations and by-laws, restricting the use certain streets for certain vehicles travelling at certa speeds at certain hours in certain areas, congestion can b avoided. But at what a cost! Such a method is an admi sion of failure. The roads are for the use of all comer And the object of the town planner is to avoid congestio by skilful planning rather than by legislation; to indu through traffic to avoid shopping roads by making alternati routes of equal road attractiveness; to arrange parkin space for stationary vehicles; to plan his road junctions sufficient area to accommodate and dispose of all t passing traffic without checking it; to place his pub buildings with due regard to the putting down and t taking up of their visitors and goods. He has then to re on the human desire for co-operation, comfort, and a fee ing of citizenship for the ultimate realization of traf efficiency and orderliness.

(*To be continued.*)

# The Royal Academy Exhibition

## Paintings, Drawings, and Prints

### By KINETON PARKES

THIS is a "Portrait Academy": there are many brilliant examples by the late J. J. Shannon, and George Henry, Sir William Orpen, chard Jack, Walter Russell, Wilfred de ehn, and Sir John Lavery, to name the ademy's own men. There are brilliant rtraits by the outsiders, too : A. Stuart-ll, Betty Fagan, James Quinn, Ishishi, Thomas C. Dugdale, and Alfred R. omson.

George Henry has never done better rk than he shows in this exhibition her in portraiture or in figure-landape. "The Quarry" is splendid. Orn's "Dr. Aldrich Blake" is the most served and stately of all his portraits; s "Roland Knoedler, Esq.," is another say in unrestrained colour-joy; its ite, black, and grey clothes, ruddy untenance against the daring pink ckground, make it a rival to Walter ssell's "Mr. Minney." The "Lord rkeley" in his astonishing yellow coat ns close with "Roland Knoedler, q.," for virtuosity, and there are others. ere is "Mrs. Turner" comfortably ated on a sofa, her face in shadow, by gernon Talmage, which will be welmed by all those who like the artist's ndscapes and cattle and horses; there is large "Ida and Joan," by Meredith ampton that is quite surprising, and se to it is the very beautiful dual rtrait by Wilfred de Glehn, "The sters"; there is something very reshing in the unassuming "Reader," by arry Watson, while Mrs. Betty Fagan's inting of "Ottilie Wallace" the sculptor a fine work. Stuart-Hill's "Mrs. eischki-Smith" in riding habit even rpasses this original painter's standard. ere is no more delightful picture in e Academy than T. C. Dugdale's Children of F. S. Bennett, Esq.," while John Hay, in his "Mrs. Alan Gibson," continues the progress he has been showing for two or three years in portrait art. James McBey's "Red-haired Girl" is perfectly delightful, and Oswald Birley's "Mrs. Joseph Pike" is sound and pleasing. The best piece of portrait realism is James Quinn's "Cynthia Stockley," and R. G. Eves and Gerald Kelly maintain their reputation for truth to subject. Archibald Barnes, Melton Fisher, and Harold Knight all send sound portraits, but for sheer joyousness, archness, and skill, Laura Knight's "Daughter of Eve," that careless girl in rank red with quaint hands holding woolly apples, scores over most.

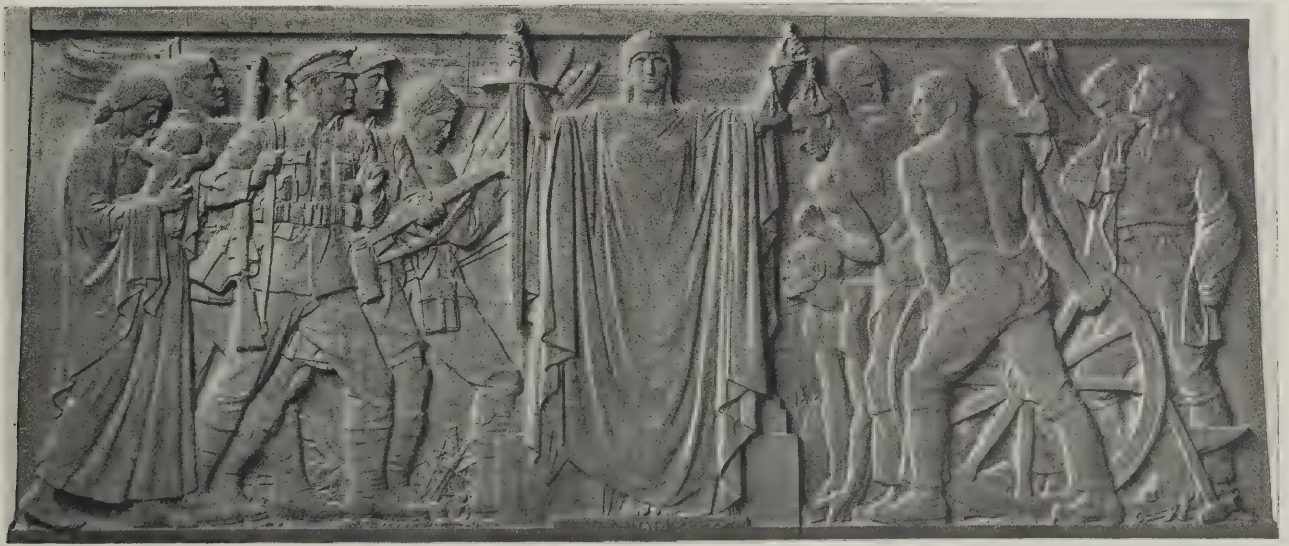
There are no huge pictures this year, for which thanks, and no large landscapes. Indeed, landscape is not up to the level, although there are some very delightful pictures in this form there, mostly of a size and of a quality to suit the home rather than the picture gallery. In painting for painting's sake, Orlando Greenwood and H. Davis-Richter are as good as ever. The former's fancifully named still-life, "King Arthur and the Knights of the Round Table," shines in its technical excellence, and the latter's *Page d'Harmonie* and "Shadow and Sheen" exhibit the consummate craft which is always associated with this painter's felicitous handling of pigment.

There are no ostensible painted decorations, which is to be regretted, but there are pictures which are in essentials decorative. C. H. Shannon and Charles Ricketts are well represented, and every one of their works might well form a panel in decorative schemes, so rich and pictorial are they. Into another class of decoration, the canvases of Talmage, Connard, Munnings, Sidney Lee, Anna Airy, and Charles Sims, might be incorporated with great advantage. There is really no necessity for so great a use of frames when wall panelling is so much in favour with architects. The ostensible decorative paintings include Ethel Walker's "Invocation," Anning Bell's "Women Going to the Sepulchre," Orpen's "To the Unknown British Warriors in France," and W. Elwell's "Sanger's Circus," Greiffenhagen's "Message," and "'Twixt Devon and Cornwall," by John H. Willis, all of which are admirable pieces of mural decoration and should be made use of as such. The same may be said of Richard Jack's sumptuously painted "Spring Flowers," a mass of finely rendered blooms with an even more finely rendered woman selling them.

There is very sound work in the water-colour room. Barnard Lintott and W. T. Wood uphold the tradition. Lintott's "Llanbedr" and "Rhoscolyn" are the real thing, and Wood's two Sussex studies, "Shadows and Showers" and "Evening" are veritably English water-colour art, freely washed in, wonderfully drawn and observed, fresh and atmospheric. Joseph Southall's "Barquetine" is an admirable illustration; Cecil A. Hunt in his "Rain in Glencoe" proves himself a valuable adherent to the tradition. Edith Granger-Taylor's two portraits are excellent in drawing and unusual colour.

In the print room there are some very good etchings and engravings, as well as drawings. Ian and Robert Strang are well represented. Frederick Marriott exhibits one of the charming etchings of his French series; Urushibara, a fine woodcut, and Gerald Brockhurst has two of his exquisite drawings.

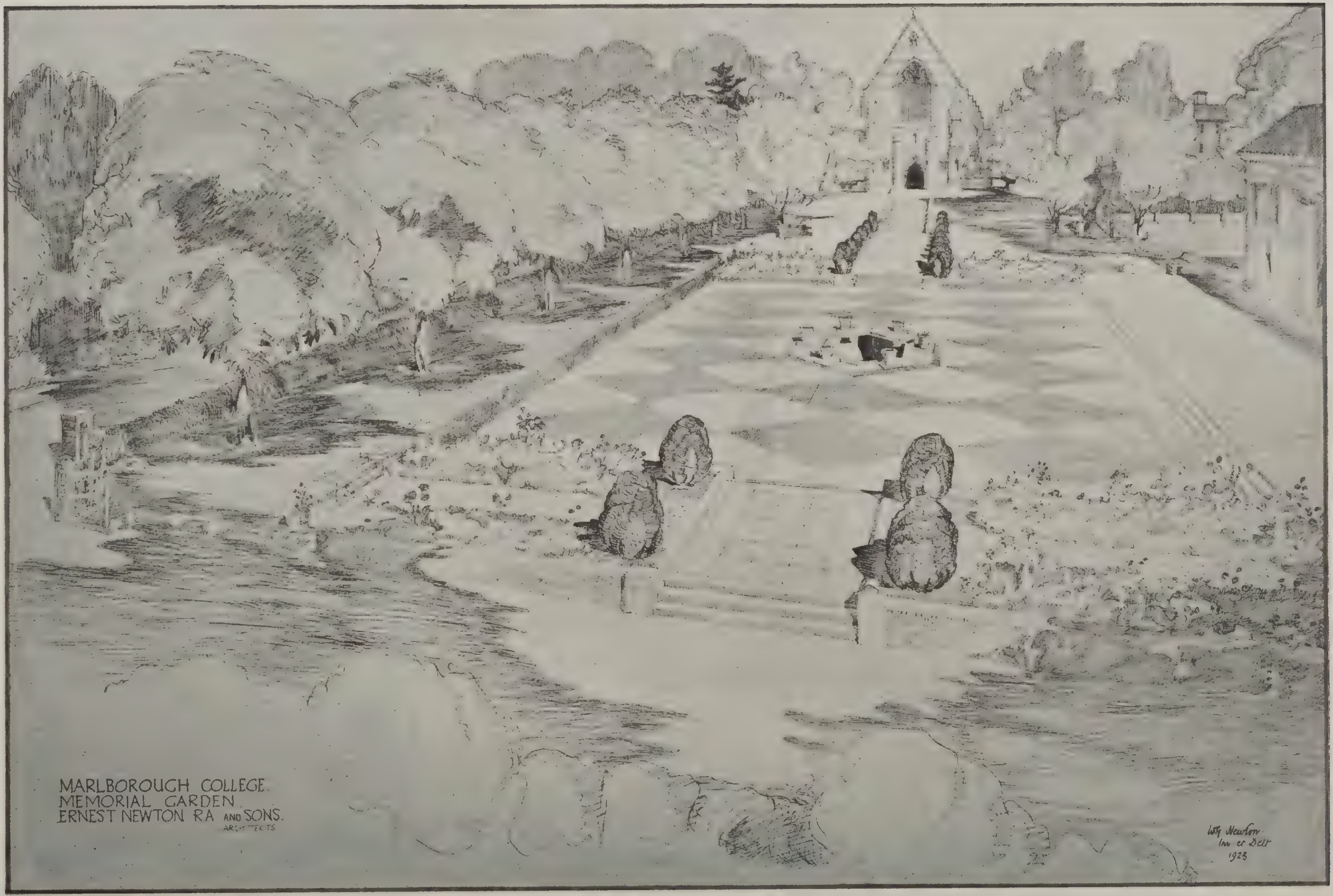
Altogether the 1923 Academy is excellent in all-round accomplishment.



BRONZE FRIEZE FOR BLACKPOOL WAR MEMORIAL. BY GILBERT LEDWARD.

The frieze (14 ft. 6 in. by 6 ft.) is to be placed at the base of the Blackpool War Memorial, designed by Mr. Ernest Prestwich, A.R.I.B.A. The subject of this part of the frieze is "1914" and represents the outbreak of war. A part only of this panel is exhibited at the Royal Academy, i.e., the group of figures on the left of the central figure.

(*Royal Academy Exhibition.*)

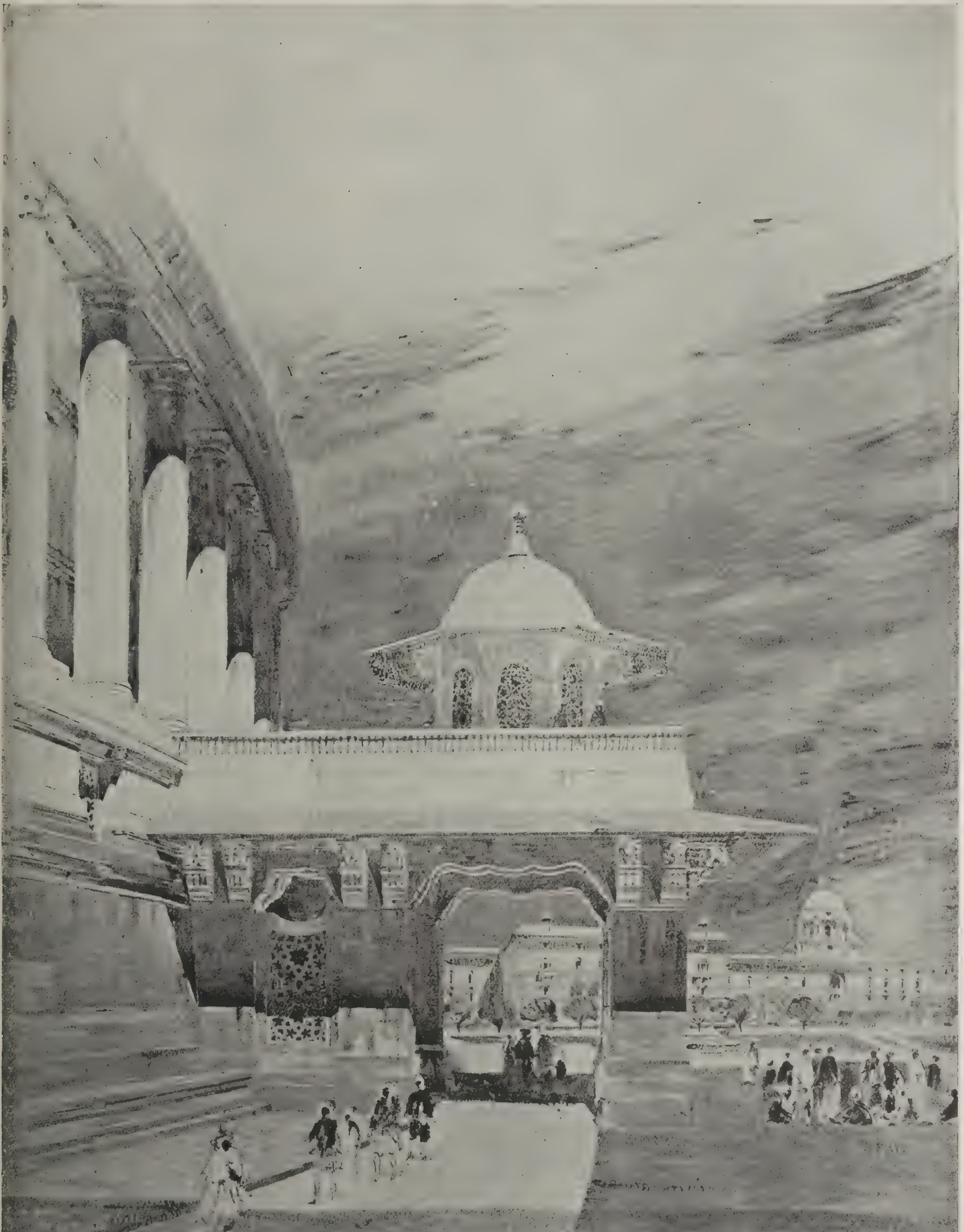


MARLBOROUGH COLLEGE MEMORIAL GARDEN. ERNEST NEWTON, R.A., & SONS, ARCHITECTS.

(*Royal Academy Exhibition.*)

# Porch to Princes' Chamber, Legislative Buildings, Delhi

Herbert Baker, A.R.A., Architect



Mr. Baker's building for the Legislature is a blending of Classical and Oriental forms, and, as will be seen in the above illustration, has all the grace of Greece and the glamour of the East.
*(Royal Academy Exhibition.)*

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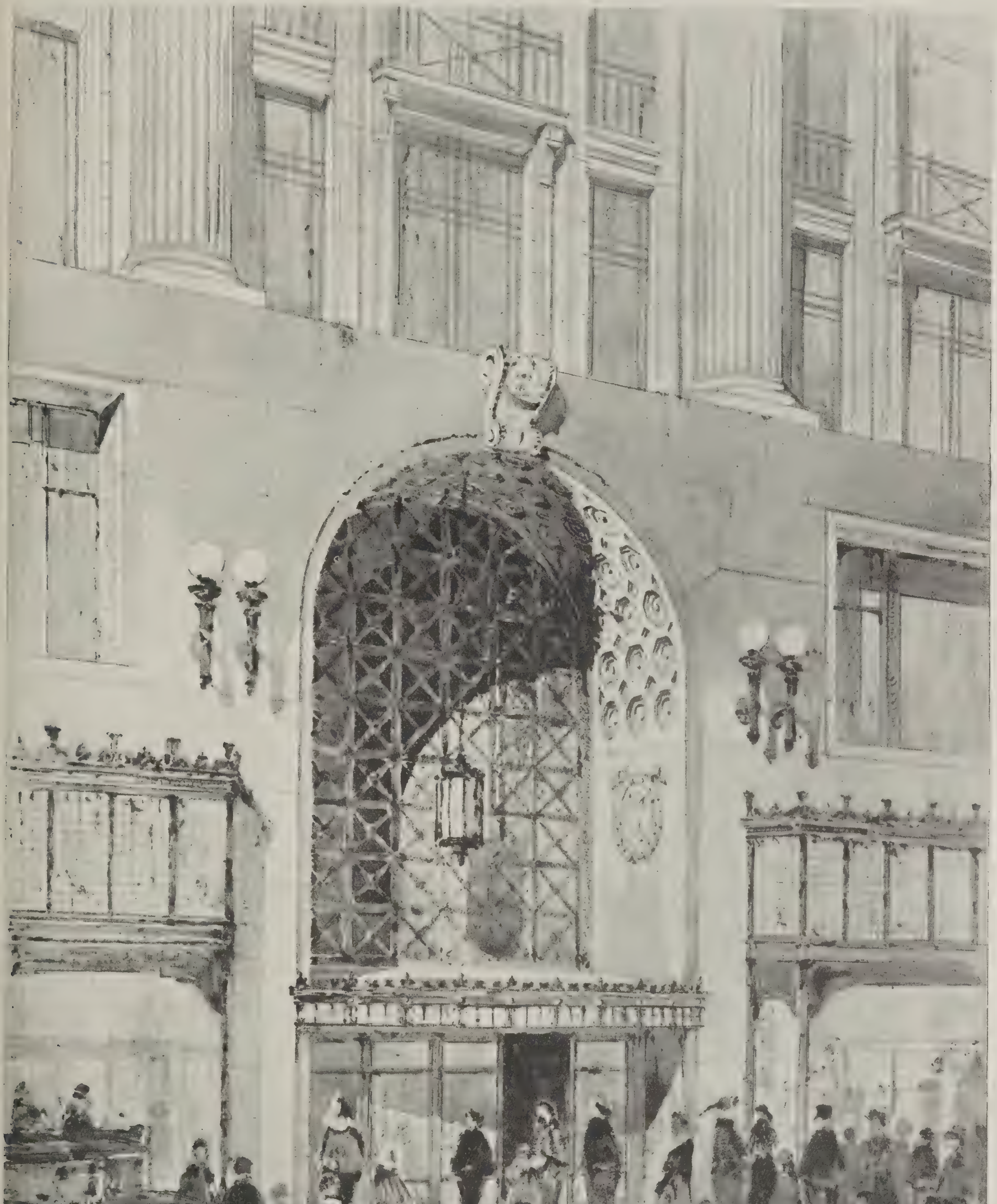
# New Premises in Oxford Circus : Oxford Street Entrance

T. P. and E. S. Clarkson and H. Austen Hall, Joint Architects


P. HEPWORTH del.

This building shows the familiarity of the architects with the best American business architecture of to-day.
(*Royal Academy Exhibition.*)

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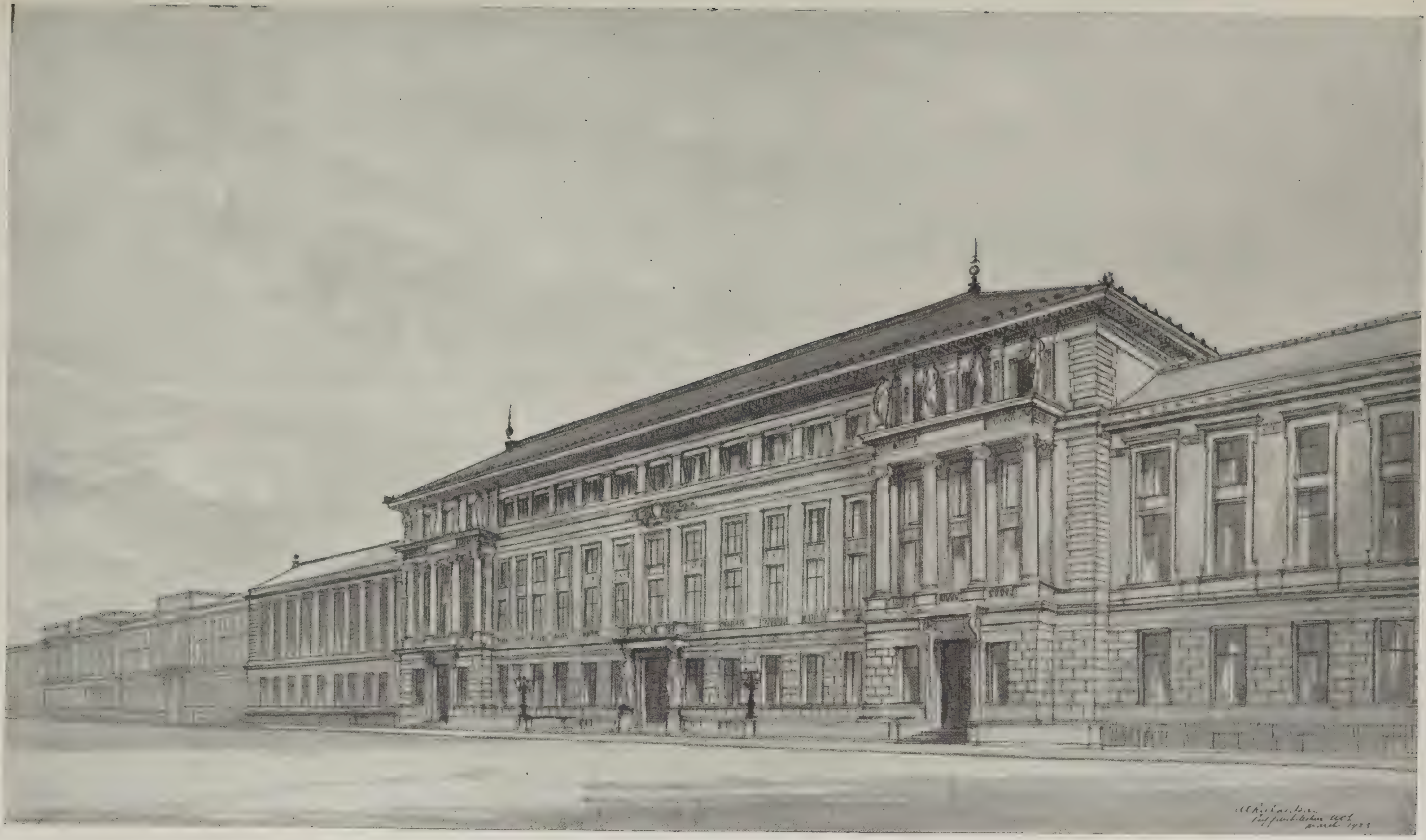


DARWIN BUILDING, UNIVERSITY COLLEGE, GOWER STREET, W.C.
PROFESSOR A. E. RICHARDSON, F.R.I.B.A., ARCHITECT

*(Royal Academy Exhibition.)*

# Architecture at the Royal Scottish Academy

## A Lean Year

### From a Scottish Correspondent

THE architectural room is this year occupied by a somewhat meagre display, a reflection, no doubt, of the exceedingly lean years through which the profession in Scotland has been passing. The greater part of the crop of war memorials has been garnered; the revival of normal activity has hardly yet begun. For the first time in the writer's memory the supply of exhibits would appear to have fallen short of available space, and to help fill up the room a huge oil-painting, in a colour-scheme designed to shout down all rivals, almost monopolizes one wall. The architect-exhibitors should be grateful to the painter-majority for this. By comparison many of the drawings gain a refinement that might not otherwise have been apparent. We doubt, however, whether either the architects or the painter of the intrusive picture will be entirely satisfied.

### *Local Talent Reinforced.*

Of the "baker's dozen" architect-members of the R.S.A. all except three have contributed something, but it must be admitted that the exhibits of these gentlemen are, with few exceptions, somewhat wanting in distinction. Local talent has been heavily reinforced from over the border—Sir Edwin Cooper, Sir Reginald Blomfield, Cyril A. Farey, Cecil G. Hare, Edward Maufe, Robert Atkinson, Guy Dawber, and Paul Waterhouse, etc., though the latter's case hardly constitutes a reinforcement, for the reason (among others) that Mr. Waterhouse appears to have thrown in his lot to some extent with architects practising in Scotland. There is a remarkable absence of the usual vigorous Scottish note in this exhibition; the local profession is surely not going strong at the moment.

To begin with "the visitors"—Sir Edwin Cooper shows his perspective and plan of the new Port of London Authority building, that very notable essay in monumental design on a grand scale, illustrated by an extremely fine drawing. The same architect also has his "Banque Belge" in Bishopsgate Street, a satisfactory example of street architecture. Mr. Robert Atkinson shows drawings of the Regent's Theatre, Brighton, and of the Salon at Cherkley, Leatherhead, which are extremely clever as drawings, but one feels that in interior decoration Mr. Atkinson's colour-appetite outruns his discretion. Life in rooms displaying such an orgy of yellow as do two of these might be trying. A yellow note can be effective and stimulating in a colour-scheme, but this is more than a note—it is a blast!

Sir Reginald Blomfield is represented by a bank at Chelsea and the memorial chapel for the British cemetery at Lyssenthoek. The latter, a domical building, is cleverly designed, and is an intriguing little work, but shown by a rather tame and ineffective drawing.

Not the least interesting feature of the exhibition is the large number of drawings by that most sympathetic draughtsman, Mr. Cyril A. Farey, in particular that showing a house of his own design at Forest Row, Sussex. Mr. Farey can not only draw with a tender charm, but possesses a very individual touch of his own in design.

Mr. Waterhouse's exhibits, Nos. 508, 539, and 545, illustrate work at St. Andrews. The first shows a church interior of doubtful ecclesiastical feeling and somewhat excessive catechism, and the two latter numbers refer to this architect's domestic essays, and scarcely show full grasp of the Scottish tradition they seem intended to follow.

Before leaving our visitors Mr. Philip Tilden's astounding conception should be mentioned—"Great Wall Proposed for Surrounding an Estate on the South Coast" (Nos. 536 and 547). This vast and fortress-like undertaking suggests pronounced mediæval habits—or, at any rate, ideas—on the part of the American gentleman for whom it professes to have been designed.

### *Work by Members of the R.S.A.*

Amongst the work by members of the R.S.A. there is nothing much better than that of the associate-elect, Mr. Reginald Fairlie. His church at Methil is severe but good, and splendidly drawn. His interior of the church at St. Benedict's Abbey, Fort Augustus, has distinction; the detail of the leather canopy over the altar (unintelligently hung at the far end of the room from the general view to which it refers) is deserving of study.

Sir R. Lorimer, R.S.A., has not chosen a happy example for his one contribution to the exhibition of his native academy. The treatment of the east end of the Eton Memorial Chapel may possibly be a fine work—from Sir Robert it is sure to be—but that can hardly be judged from this mere photograph of the chapel taken after the installation of full-size cartoons.

No. 527 illustrates the Scottish National King Edward Memorial at Holyrood by Mr. Washington Browne, R.S.A. One would like to speak kindly of this important work, but it is difficult to sympathize with its conception. Why should gateways, which will never be closed, have been thrown across these public thoroughfares? Why should the King's statue stand aside, as it were, from the rest of the memorial in a rather out of the way corner? The architect would appear not to have been quite happy over his design.

Even less convincing is the Helensburgh War Memorial (No. 520) by Mr. A. N. Paterson, A.R.S.A., which shows a great lack of restraint. The dome almost suggests an attempt at a would-be Hindu effect.

Mr. John Kinross, R.S.A., is not at his best in the portico to the Norwich Unio Insurance Co.'s building in Edinburg (No. 522) carried out jointly with M J. Inch-Morrison.

Dr. Kelly, A.R.S.A., of Aberdeen, an Mr. John Keppie, A.R.S.A. (Keppie an Henderson), have also memorials to shov Mr. J. B. Dunn, A.R.S.A., has two ex hibits of domestic work.

Among the works by "outsiders" good exhibit is No. 528 by Messrs. Beg and Lorne-Campbell, showing their com petition design for the Calcutta Legisl tive Council Chamber—a broad an effective piece of work, convincing of i suitability to the climate for which it designed.

No. 501 shows a new Edinburgh pi ture-house by Messrs. Richardson an McKay, of admirable breadth an restraint. Mr. Aikman Swan's phot graphs of the Wardie Housing Are (No. 490) and Mr. B. N. H. Orphoot Mayfield houses for the "Scottish Vete ans' Garden City" are both examples good sound housing work in which th rival factors of economy and æsthetic are fairly happily reconciled. Mr. Swan Tranent War Memorial (No. 548) is di tinctly above the average of such work and the same remark applies to M William Davidson's Balfour Memori Kelso (No. 533).

Mr. F. C. Mears has an interior pe spective of his design for the new Cath dral, Dublin (No. 534), a work which should have liked to see more fully illu trated.

One further exhibit, at least, calls f remark—Mr. A. G. R. Mackenzie's com petition design for the Lewis War M morial (No. 494). This is illustrated an extremely clever water-colour drawin showing a great simple bastion of roug masonry on a typical Lewis hillside. Th design is in accord with the charact alike of the site and surroundings and the rugged crofter soldier-lads it seeks commemorate.

### *A Disappointing Display.*

On the whole, as we said before, th architectural display this year is di appointing, and the architectural roo has more than ever its wonted air backwater stagnation. The old questio will recur to one's mind—Are the ac demies justified in professing to embra the art of architecture, or, if you pref Does architecture justify its inclusi among the arts fostered by the ac demies? Perhaps, however, it would unfair to dwell on that perennial phil sophic doubt at the moment. The que tion is prejudiced till the architec profession has recaptured some of its o pre-war activity—if it ever does so. B never have we seen the incongruity hanging architects' drawings with o paintings more pointedly illustrated.

# The Rebuilding of East Prussia—A World's Former War Centre

### By HANS J. PHILIPP, M.G.I.A.

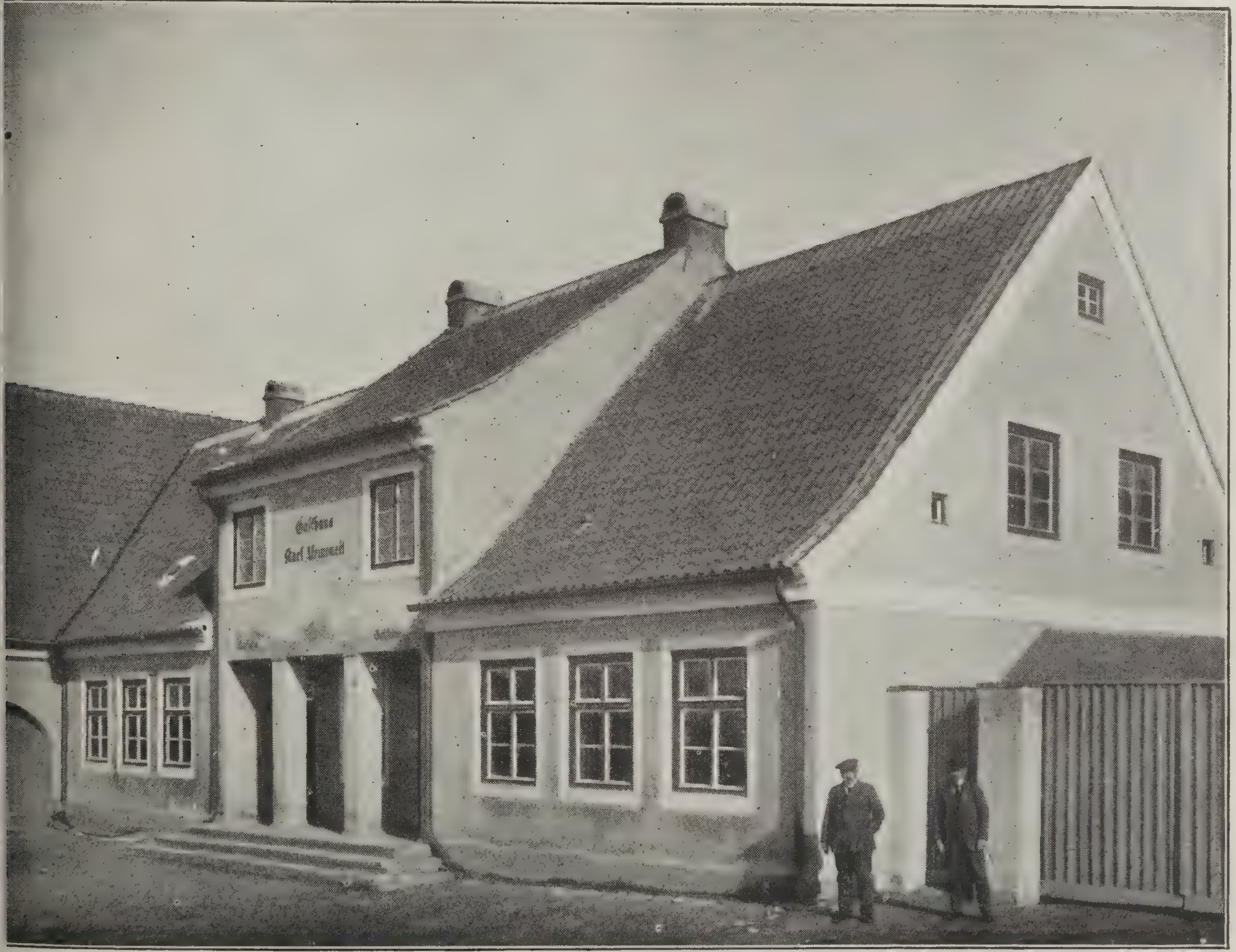
WHEN the German Government tackled the immense problem of reconstructing the devastated dis-
cts of East Prussia, the result of the
ssian invasion of 1914, special building
thorities were called into action, having
eir main office at Königsberg, from
ence all sub-offices were controlled.
ese sub-offices were opened in various
stricts in the destroyed parts of the
ovince, and immediately set to work
gether with the insurance companies to
amine the amount and kind of damage
ne. Temporary indemnities were paid
the people to cover the most necessary
penses, and men began very soon to
t up intermediate places of abode in
e towns as well as in the country, and
till and cultivate their lands.

Thus rebuilding began under the
nnon of the near Russian frontier and
e most indescribable conditions. All
ilroad lines were overburdened to the
most limit by military transport of all kinds; building material was confiscated and reserved for the fighting lines and only obtainable upon urgent request, authenticated by the officials. At the same time architects, and building officials, labourers, masons, carpenters, and other working men, stood under constant danger of being enlisted in the army. Thus there was a continuous strain on the process of rebuilding.

A scheme was worked out by the authorities by which the work was financed, and the Government paid a surplus upon the pre-war price of a structure according to the cost at time of erection, amounting to some 1,500 per cent. at the end of the rebuilding period, about 1922.

So far, so good; but as already mentioned, war had to be carried on at all costs, and, notwithstanding that all was planned with great far-sightedness, normal building was hindered considerably. It occurred often enough that either working men were called to arms, or that material was lacking just at the moment when most urgently wanted, or that the sums were not granted at the moment by the authorities for some reason or other; the Government and authorities being considerably overworked, these matters required more than normal time to be accomplished. A building remained unfinished for nearly a year at times.

It was an extremely difficult task under the conditions described to tackle the problem of re-erection, and at the same time to carry on a world's war. The work was one of great organization. No fewer than 33,000 buildings were destroyed by the Russians and Cossacks. All these were re-erected in the course of the war, and the revolution—which caused no interruption in the work. Rebuilding began about the end of 1915 and was completed in 1922.



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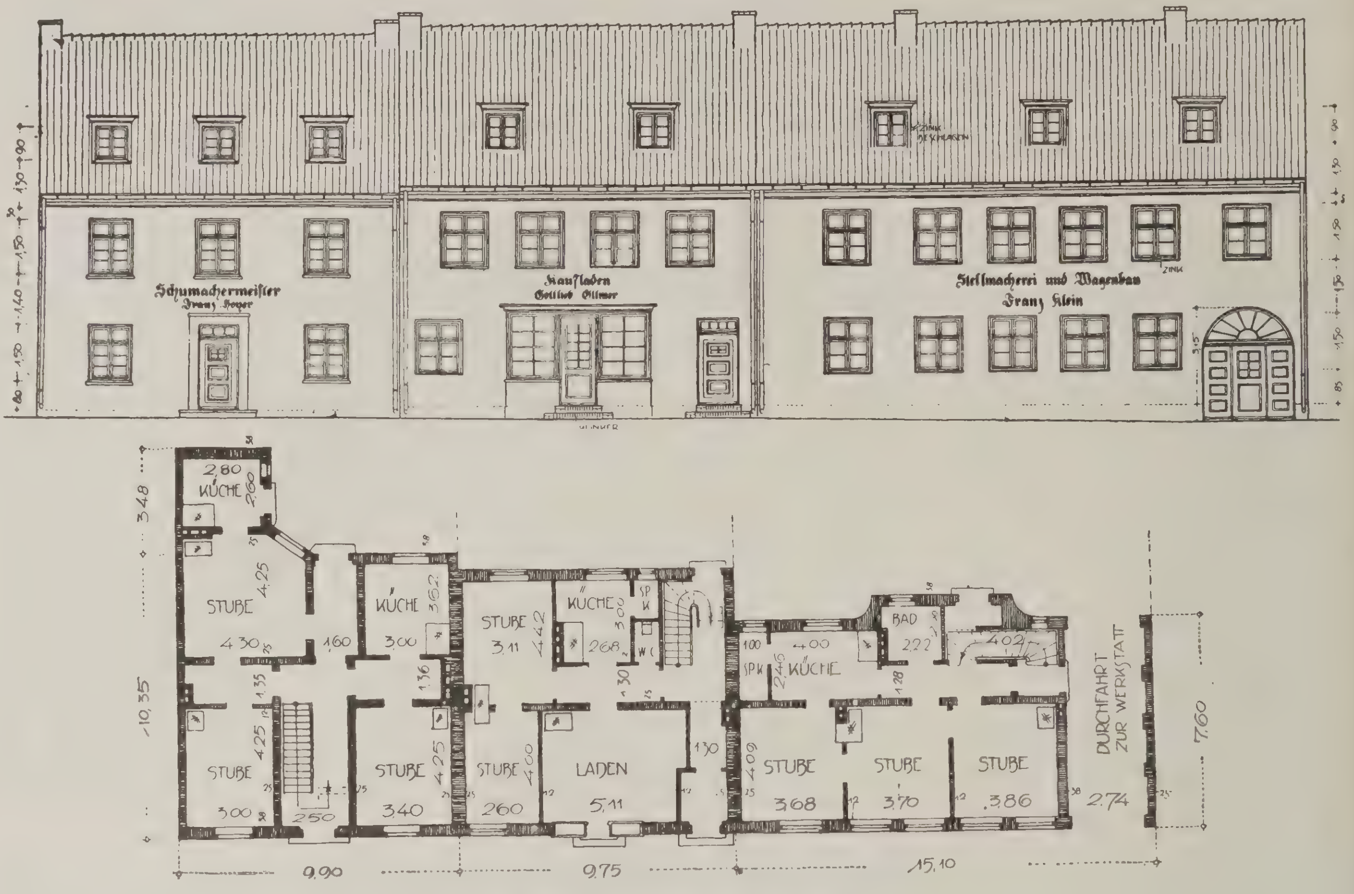
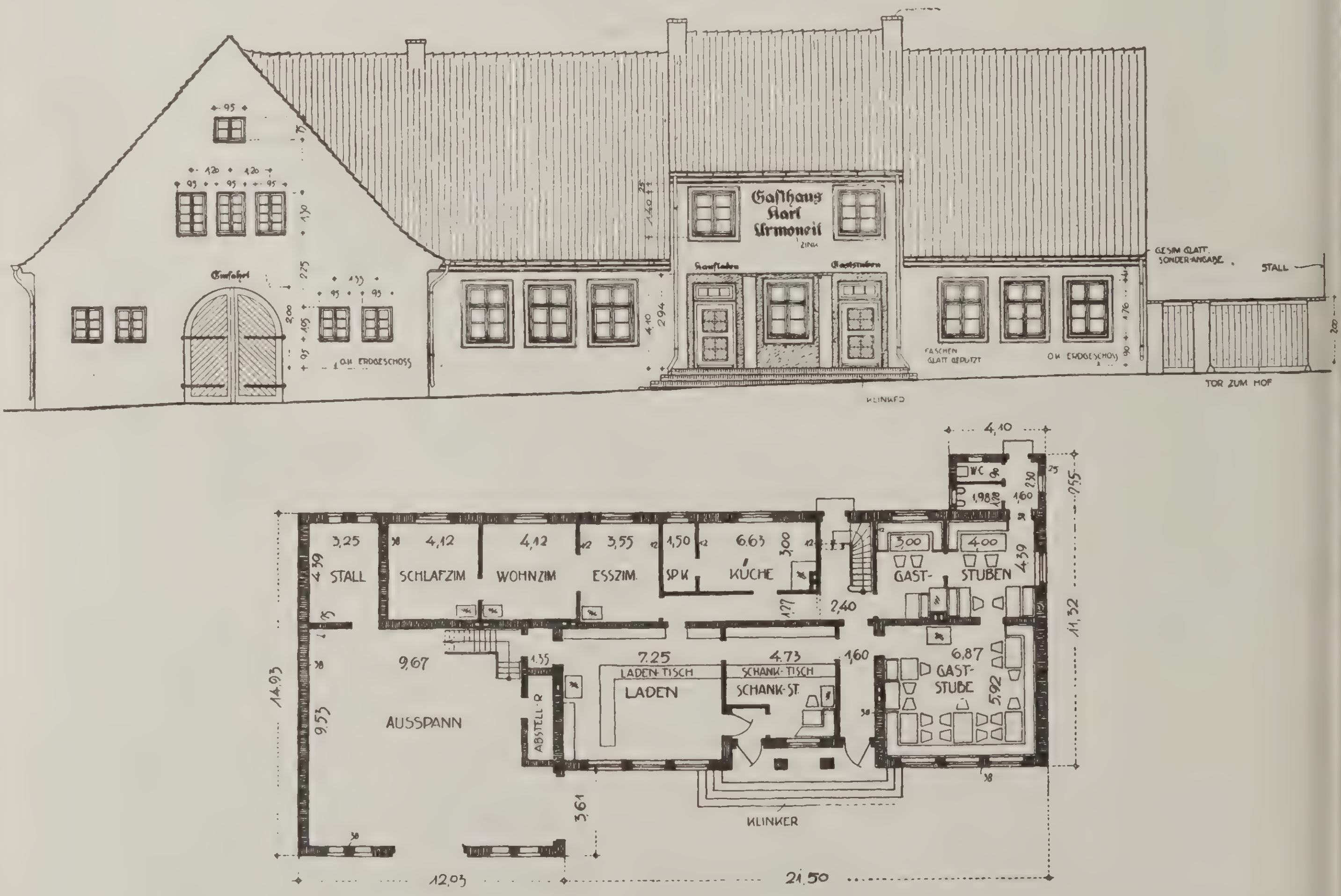


A GROUP OF HOUSES AT GOLDAP



A VILLAGE INN.

NEW BUILDINGS IN EAST PRUSSIA: TWO TYPICAL DESIGNS

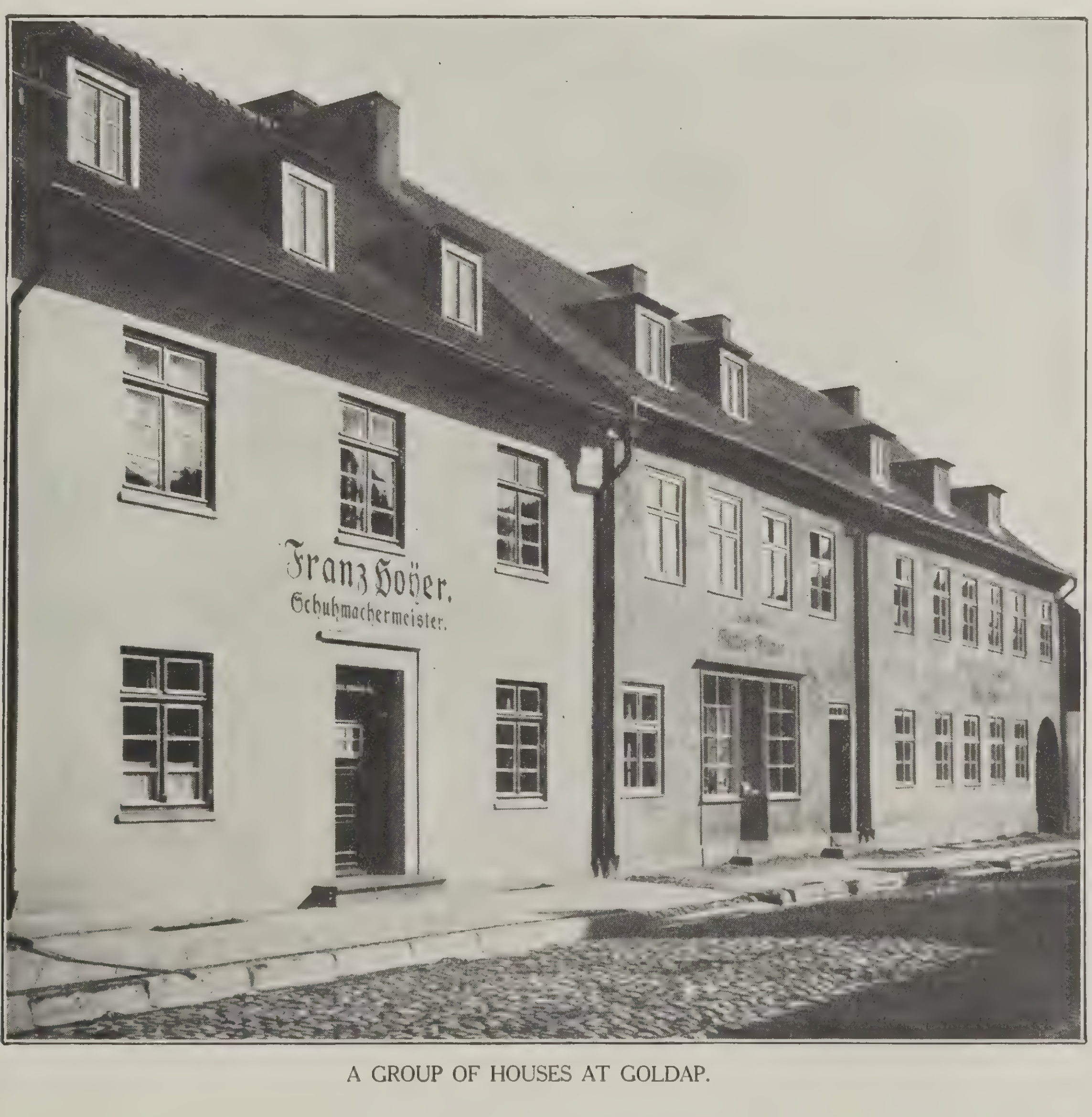
When the former Imperial Government was succeeded by the Republican régime, which, at any rate, meant quite a change to the country, rebuilding was supported and financed as heretofore, and no pause whatever took place.

In considering the architecture of the re-erected buildings regard had to be given to these abnormal conditions and to the severe winters that prevail in East Prussia. A certain simplicity of architectural form connected with an undeniable strictness in appearance was the evident consequence. All richness in the plastic form, which snow, ice, rain, and succeeding frost would irresistibly have destroyed, all piazzas, open porches, and numerous roof formations had to be avoided. Besides this, the lack of money and, therefore, the necessity of building on the basis of small expenditure made designing and building a special task and strain to the architect. Therefore the means left to the designer were merely those of proportion, line, form, material, and colour. But here he was hindered by the fact that the foundations of the former houses were in most cases uninjured and had to be re-used. The Government paid only for really demolished parts of structures, and all these parts had to be considered by the rebuilder. It may be believed that the old houses were mostly of ugly and impractical form, so that the task of designing new plans on such a limited basis was not an ideal one.

ALTE MÜNZE

Rebuilding was entered into with great care, and besides the ordinary building inspection, as in service all over the country, for the first time a trial was made with what may be called an æsthetic building control, exercised by the authorities throughout the entire district. The plans handed in to obtain permits were examined, not only on the old basis, but from the artistic point of view. This was done systematically from the very beginning, starting with town-planning, so far as the old and ancient building lots would admit a correction in dimensions. Then the height of a building was limited to a certain number of stories, according to the position in the town where its erection was intended. At various market-places of some communities the height was fixed at two or at three stories, and attention was paid also to the roof-lines, to avoid unrestful outlines and ugly formations. The spirit of the good former building epoch was not exactly put up as a standard to be slavishly followed, but it was regarded as a guide in all planning work. The result was that the rebuilt section was typical of that province, notwithstanding other methods of expression in the sense of to-day. On this uniform basis, construction and art were linked to the aim of a good and uniform spirit throughout the province, and the result was a fair one. The German Institute of Architects worked with the authorities to solve the problem.

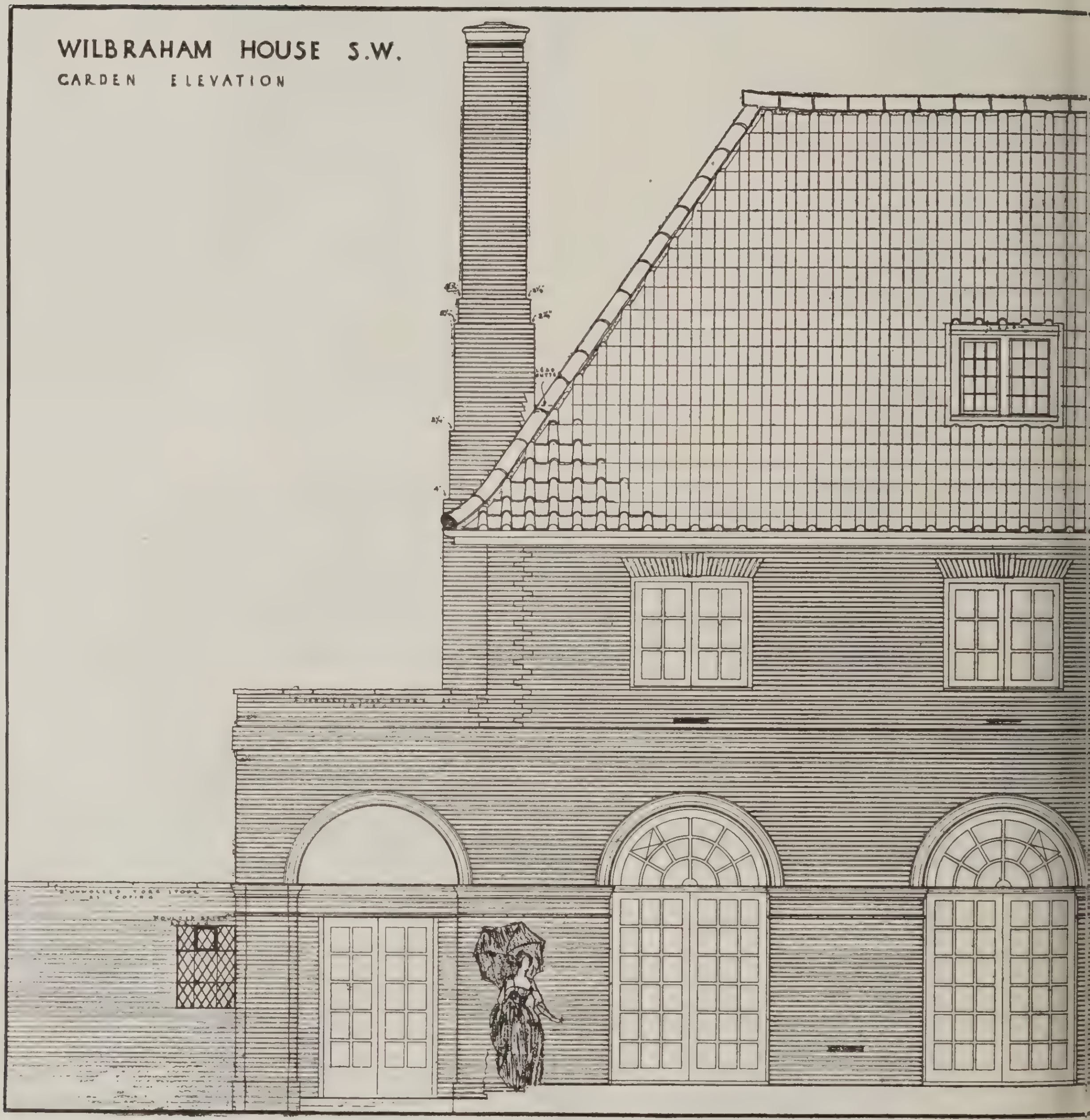
For the roofs red pantiles were used throughout the country. Most of the houses were of rough-cast, varying in colours. Window- and door-sashes were usually painted in dark green, brown, or blue, with the windows themselves contrasted in a soft white. For doorsteps a red-blue clinker-brick was used. Thus the destroyed East Prussia rose from the ruins clad in a brilliant new attire, better, more modern and artistic than before.



A GROUP OF HOUSES AT GOLDAP.

# Architects' Working Drawings. 62.—The Garden Ele

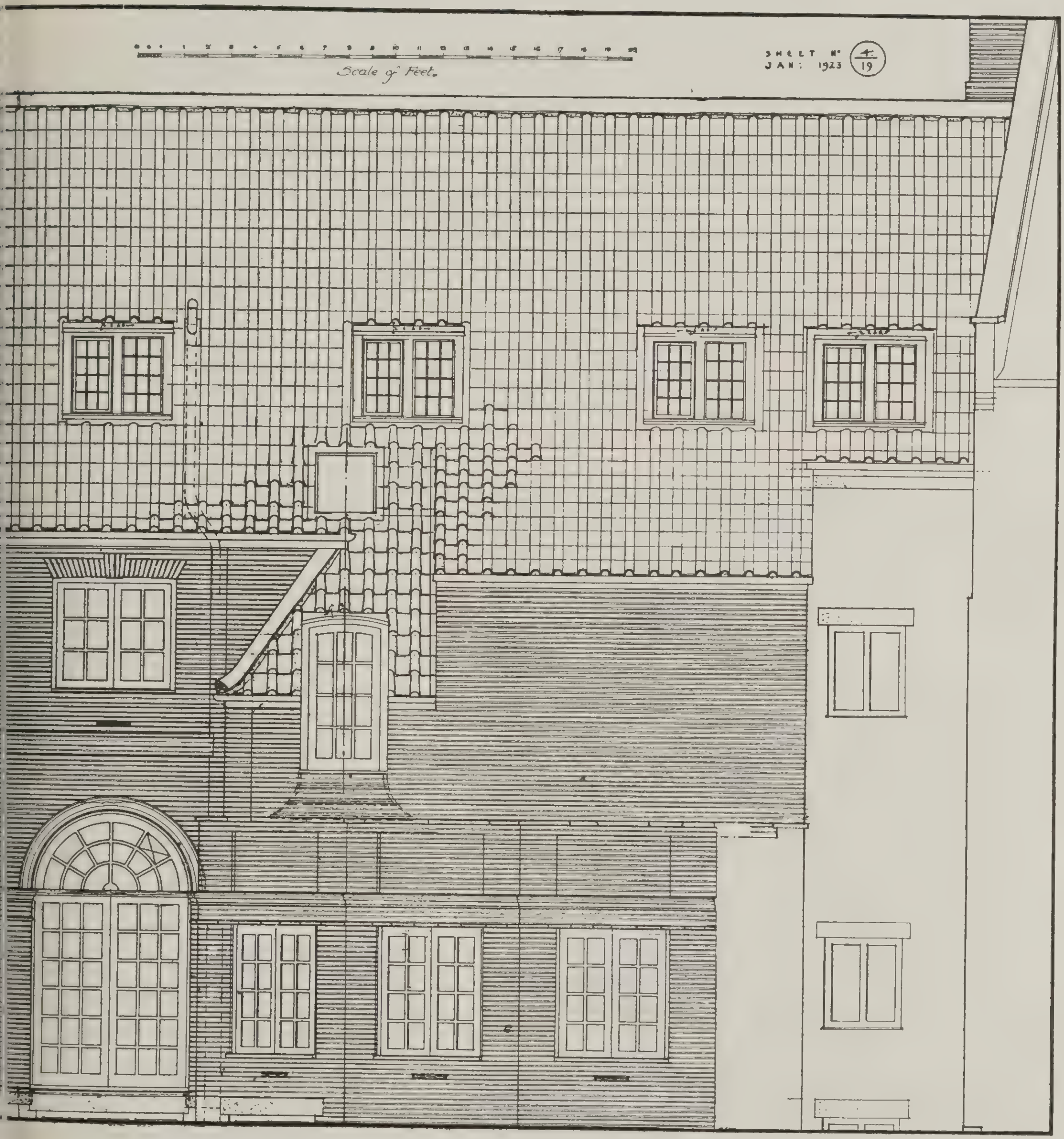
Oliver Hill, A.



This house is nearing completion on a site—open on three sides—at the end of Wilbraham Place. The façad
illustrated in

# of Wilbraham House, Sloane Street, London, S.W.

, Architect



with 2 in. silver greys, with dressings of red bricks. The ground-floor plan and the front elevation were
April 4.

# Spherical Niches—Construction and Stonecutting

## By J. STIRLING BOYD, F.S.A.Scot., LicentiateR.I.B.A.

THE niche as an architectural feature is used in buildings of Gothic and Renaissance design. In the former, the body of the niche is usually polygonal in form, the hood being enriched by the formation of ribs in imitation of vaulting. In Renaissance work the form of the body is generally cylindrical, the surface of the hood being spherical as shown in the photograph of one of the niches on a bridge which crosses the Seine at the Gare de Grenelle, Paris. In special circumstances it may be necessary to make the body of the niche shallower than a semi-cylinder by adopting an elliptical form. An example of this is shown in a photograph—to be published next week—of a niche in the Vestibule Daru at the Louvre.

Whatever be the form of the plan and elevation curves, it is essential that the surface of the hood be a surface of revolution, the axis of revolution being either vertical or horizontal according to the prearranged form. Further, the form of jointing in the hood is determined by the surface of the latter.

When the hood is in form a quarter of a sphere the axis of revolution may be either vertical or horizontal, the beds being either plane surfaces as in Fig. 1, or conical as in Fig. 13. When the plan curve is a semi-ellipse, and the elevation curve a semicircle—as in the Louvre example already referred to—the axis of revolution will be horizontal, the beds being plane surfaces. If the plan curve be a semicircle and the elevation curve a semi-ellipse, the axis will be vertical and the beds conical as in a dome.

Conical beds are used when the niche is on a large scale, the appearance in perspective being considered more satisfactory than would be the case were radiating bed joints used. The principal objection to the use of conical beds is that the horizontal thrust acting through the courses of the hood have a tendency to displace the face stones. This sliding tendency can, however, be overcome by working a horizontal bed on each of the face stones thus bonding them with the surrounding masonry. The keystone also requires to be "joggled" into the adjacent stones (see Fig. 13), otherwise it will have a tendency to slide forward. The best statical conditions exist when the courses of stone are arranged as in Fig. 1. For niches which do not exceed 3 ft. in width the courses may consist of single stones. In hoods of larger width it is necessary—for economical reasons, and for convenient handling—to build the courses in two or more stones. These stones may vary in length, and if made to "square bond" with the surrounding ashlar additional strength is ensured.

*Niche with Radiating Beds, Fig.* 1.

The body of this niche is a semi-cylinder built up in ashlar courses each about 10 in. in height, the vertical joints being formed normal to the cylindrical surface as shown in the half-plan V. The hood, as shown by sketch IV, is a quadrant of a sphere.

The description of the setting out of the niche in detail as in VI, VII, and VIII, will apply also to the small-scale drawings I, II, and III, but the former are intended to represent the full-size drawings required for mould cutting. In the actual full-size drawing, however, much of the detail would be omitted, e.g., the projection of the radiating joints in plan and the drawing of the section are not essential for mould making. The moulds required for this niche are face moulds taken from the elevation, a radiating bed mould, and a templet cut to the spherical curve.

Draw the centre line, and at right angles thereto draw the chord of the semicircle in plan and the springing line in elevation. With a radius of 2 ft., draw the semicircle in elevation and in plan, drawing also the wall line at a distance of 2½ in. from the chord of the semicircle in plan. Now draw the elevation of the boss, the width of which should be large enough to ensure that the narrow end of the tapering courses will be not less than 3 in. in width. Approximately, the width of the boss will be one-third the width of the niche. From the elevation project the boss into plan, its form being either cylindrical or conical as shown by solid and dotted lines respectively. The conical surface of the boss being normal to the spherical surface of the hood ensures that the pressure of the surrounding voussoirs will not spall at the arris on the exposed end of the boss. The hood of this niche, however, being really an arch with a spherical soffit scooped out, there should be no harm done by forming the boss as a semi-cylinder. Now divide the elevation semicircle into the necessary number of divisions—nine in this case—to give stones of a suitable size. Draw the bed joints radiating from the centre O′ until they intersect the horizontal beds of the ashlar. Now arrange the conical heading joints which divide each course of the hood into two stones. The arc AB in plan is divided into three equal parts, and a joint is drawn as at C. This shows the position of the conical joint for stones 1, 3, and 5. The conical joint on the alternate courses 2 and 4 is shown at the point D in plan. These joints may be drawn in elevation by projecting to the points C′ and D′ on the springing line, and describing concentric arcs on the respective stones.

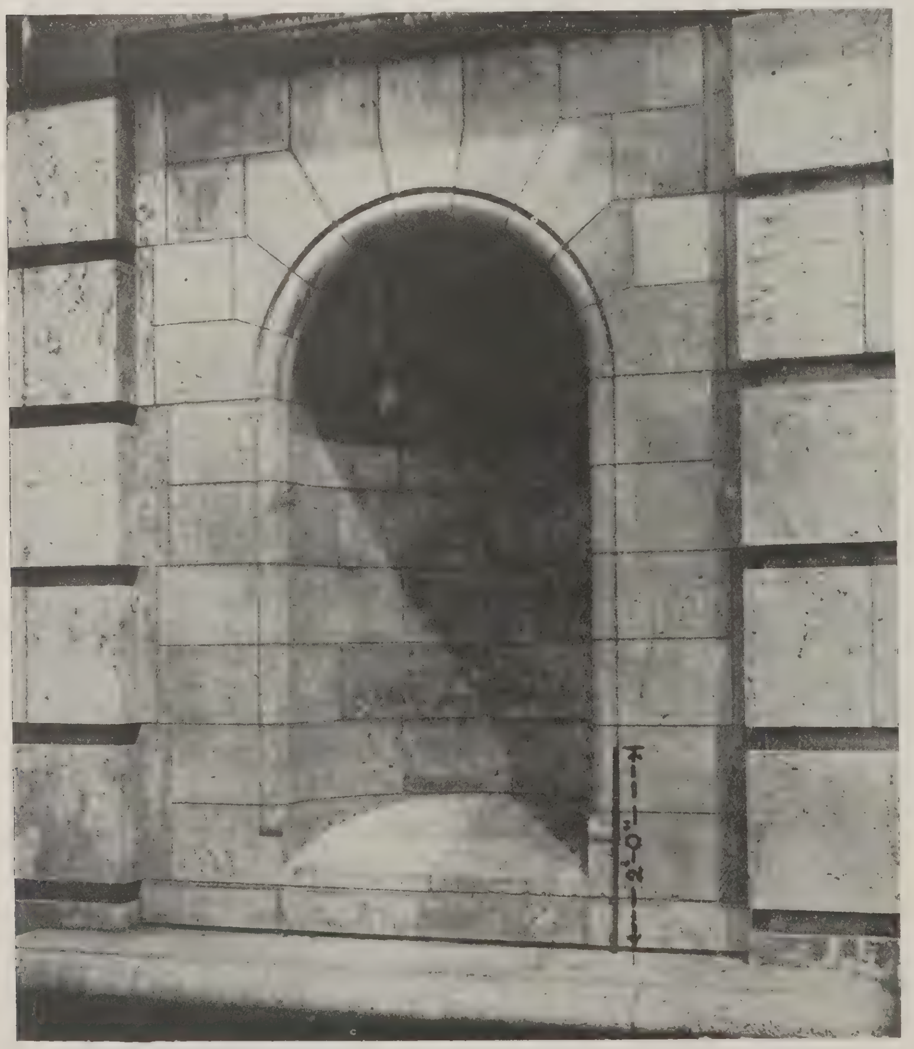


Photo: J. S. Boyd.

NICHE ON BRIDGE NEAR GARE DE GRENELLE, PARIS

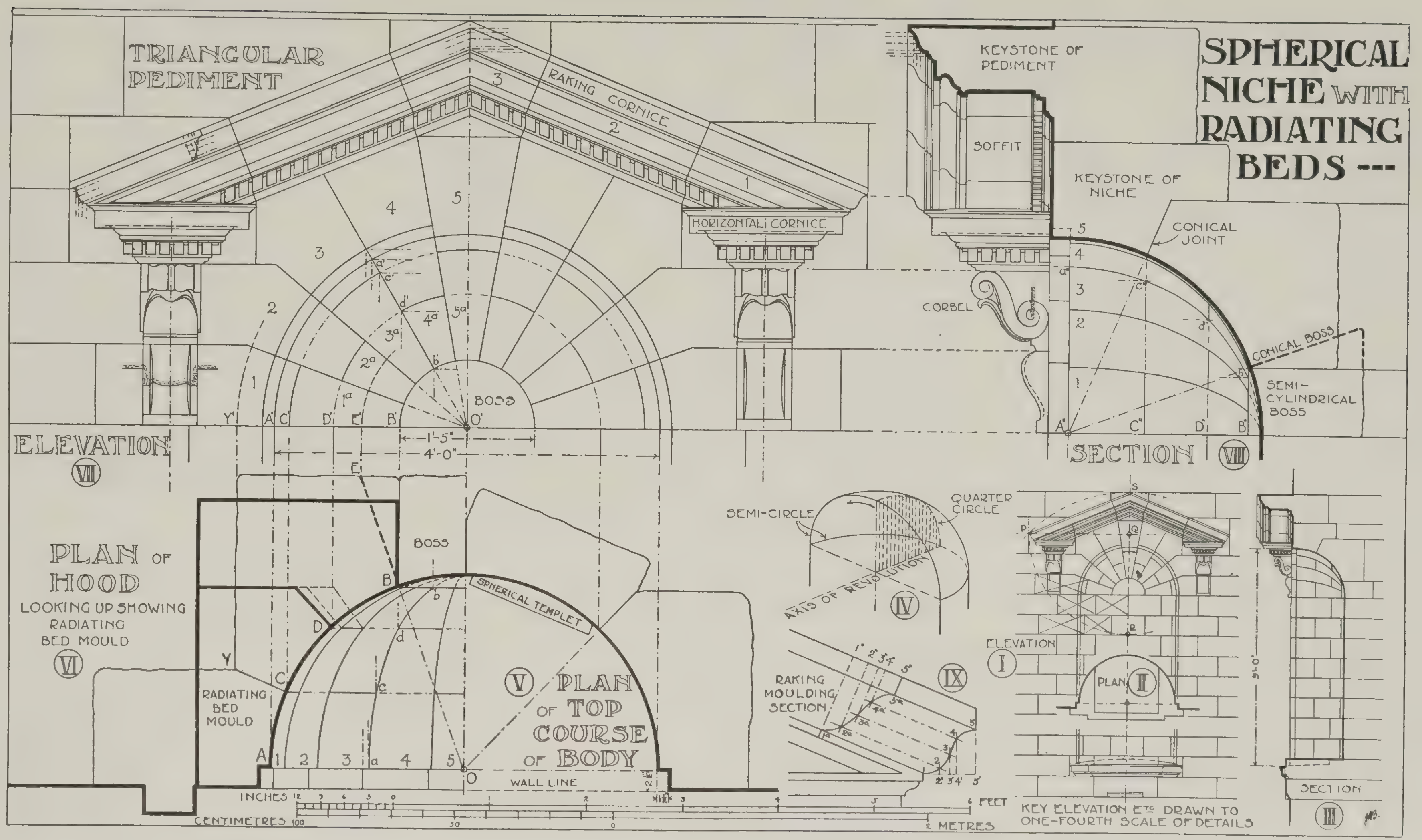


FIG. 1.—SPHERICAL NICHE WITH RADIATING BEDS.

The projection of the radiating beds in plan and section, as already stated, is not required for mould-cutting, but for the purpose of making a complete scale drawing the projection of one such bed will be described. From the points C and D in plan draw lines parallel to the wall line. These lines are the plans of the semicircles already drawn from C′ and D′ in elevation. From the points *a′*, *c′*, *d′*, *b′*, where the semicircles intersect the radiating bed in elevation, project to the plan in the points *a*, *c*, *d*, *b*, through which a firm curve is drawn. Continuing this curve to the centre of the boss in plan it will be observed that the curve is a quarter ellipse. To project the same joint into the section, first draw vertical lines from the points C″ and D″ representing an edge view of the semicircle shown in elevation, and from the points *a′*, *c′*, *d′*, *b′* in elevation project across to intersect these vertical lines in the points *a″*, *c″*, *d″*, *b″*, through which the elliptical curve may be drawn.

### *Stonecutting.—Stone No. 1, Figs. 2–5.*

The bed mould is shown large enough to cover a complete course. If used in this form the conical joints at C and D must be scribed on the mould, but it may be found more convenient to cut the mould into smaller parts each one representing the bed of each stone.

Begin by working the bottom bed, and thereon scribe the bed mould. At right angles to the bed cut the operation face and a rough joint at the opposite end or back of the stone. Scribe the face mould on both surfaces adjusting it to the lines already scribed on the bottom bed—see Fig. 2.

Now work the upper horizontal bed and radiating bed. Scribe the bed mould on the latter, adjusting it to the lines already scribed on the face and back of the stone. The vertical joint may now be cut, after which proceed to cut the conical joint. On the back of the stone scribe the back arris of the conical joint, the templet being obtained from the curve drawn at Y in the elevation, Fig. 1. From the back of the stone form a cylindrical surface to contain the face arris of the conical joint, the arris line being scribed on this surface, as shown in Fig. 3. A series of straight drafts coinciding with the generators of the conical surface are now cut, a straight-edge being applied, as shown in Fig. 4. The spherical surface is now formed by first removing the superfluous stone, then sinking drafts on all four edges of the spherical surface. A spherical templet is applied in the direction shown by the dotted line, and a chisel draft cut from the face to the back. The remainder of the surface between these drafts can now be completed. Fig. 5 shows stone No. 1 assembled with the other stone which completes the course.

### *Stone No. 2, Figs. 6–9.*

Begin by working the largest surface, which in this case is the upper radiating bed. On this scribe the bed mould, forming at right angles thereto the operation face and rough back joint. On each of these surfaces scribe the face mould, see Fig. 6. The lower radiating bed and small horizontal bed are now cut to the lines of the face mould, and on this radiating bed scribe the bed mould. The upper horizontal bed and the vertical joint may now be cut (see Fig. 7), the remainder of the stone being formed as already described when dealing with stone No. 1 (see Figs. 8 and 9).

### *Stone No. 1a, Fig. 10.*

Work the bottom bed and thereon scribe the bed mould as shown in Fig. 10. Now work an operation face to contain the face arris of the conical joint, and form a rough joint at the back. On both these surfaces scribe the face mould and take off the radiating bed. If it is intended that the boss should be cylindrical as is shown in Fig. 5, the cylindrical joint can now be cut, a draft being cut at the extremities of the joint to a templet, as shown in Fig. 10. If it is intended that the boss should be conical as is shown by dotted lines in Fig. 1, the conical surface is cut as already explained in dealing with the conical joints of stone No. 1, the templet for the back arris being made to the arc drawn from E′ in the elevation, Fig. 1.

The conical heading joint between stones No. 1 and 1*a* is now cut, the superfluous stone being first removed and a draft cut to the dotted curve shown in Fig. 10. The templet for this draft is a reverse of the one already used in forming the conical joint of stone No. 1. The stone may now be completed by forming the spherical surface as already described.

### *Boss Stone with Cylindrical Surface.*

Work the bottom bed—Fig. 11. At right angles thereto cut an operation face and a rough joint at the back of the stone. On both ends scribe the semicircle, and form the cylindrical surface. On the bed scribe the circular arris line by applying the spherical templet. The spherical end of the stone can now be formed by cutting a series of drafts to the spherical templet, the latter being always applied normal to the spherical surface. Fig. 12 is a view of the finished boss stone.

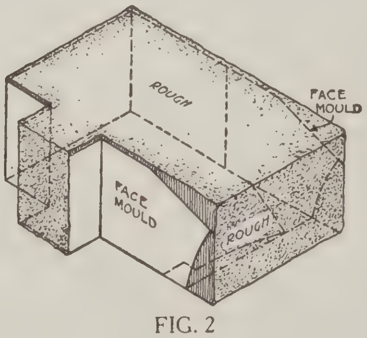


FIG. 2

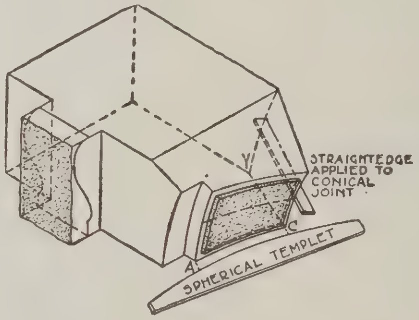


FIG. 4.

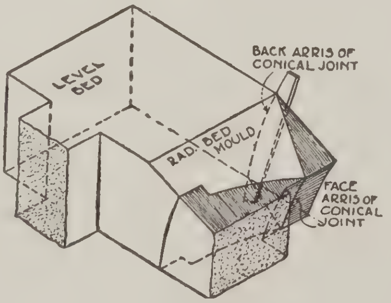


FIG. 3.

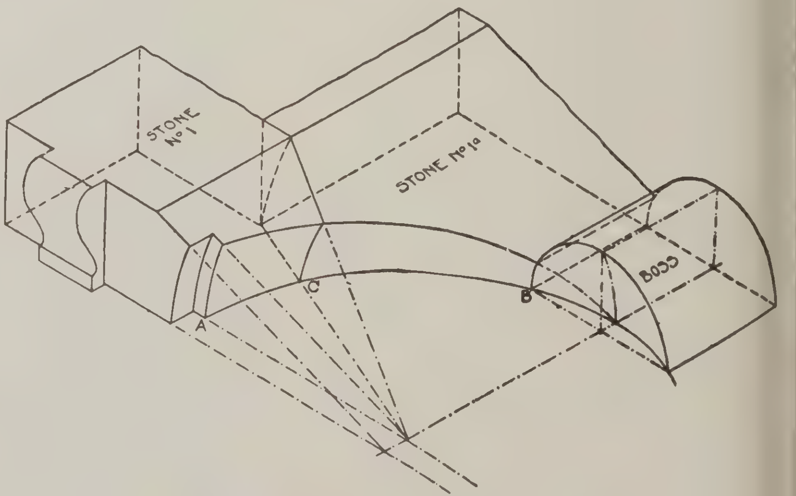


FIG. 5.

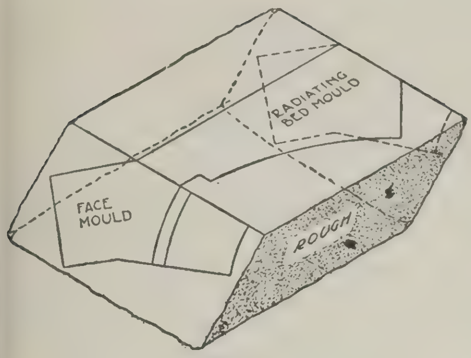


FIG. 6.

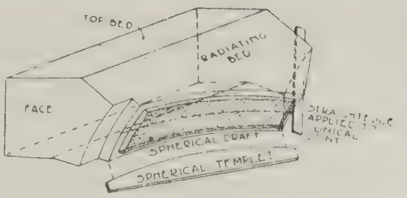


FIG. 8

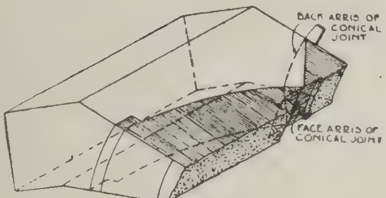


FIG. 7.

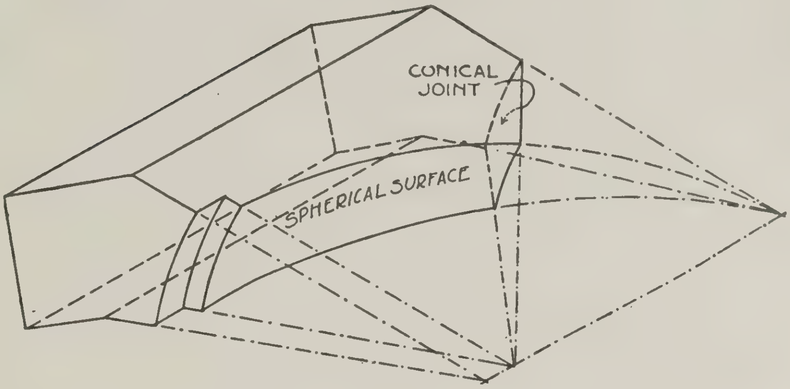


FIG. 9.

*Boss Stone with Conical Surface.*

Work the bed, and at right angles reto cut the face and back, on which ibe respectively the small semicircle ich represents the face arris, and the ger arc drawn from E′ representing back arris. On each end of the stone v cut a circular draft and complete conical surface by cutting a series straight radial drafts. The spherical l of the stone will be cut as already cribed.

*Triangular Pediment.*

he triangular pediment supported by bels is included in the design to pro- e a basis for the study of the jointing such architectural features. In de- ning a pediment—as in practically architectural work—the architectural atment cannot be disposed of without the same time designing the jointing. vill be found that slight adjustments of architectural detail require to be de to fit in with the general arrange- nt of the jointing, and vice-versa. e corbel is arranged in two parts, the , middle, and bottom beds coinciding h the beds of the ashlar. Having lly fixed the position of the corbels, outline of the horizontal cornice and upper member of the raking cornice drawn, as shown in elevation (see I VII, Fig. 1). Draw a horizontal line ss the face of the pediment from the point P to cut the vertical centre line of the elevation (I) in the point Q. With Q as centre, and QP as radius, describe an arc to cut the centre line in the point R, which will be the centre for describing the arc, PS giving the altitude of the apex. Now draw the upper surface of the raking cornice, and parallel with this draw the fillet and moulding. It should be noted that this fillet will be narrower and the moulding broader than would be the case were they drawn horizontally from the original outline. Excepting these two, all the other raking members are exactly the same size and form as in the horizontal cornice. The correct intersection of these raking mouldings with the inclined plane of the weathering on the horizontal cornice are projected from the section VIII. The dentils are drawn with their long edges vertical and they should be arranged such that the space is about half the width of the dentil. It is preferable to have a space rather than a dentil coinciding with the vertical line through the apex.

The jointing of this example is very simply arranged, the most important stone being the one forming the junction of the raking and horizontal cornices. It will be observed that the joint at right angles to the slope is not carried across the face of the dentil, but is so arranged that it will come vertically down at one side. This is always so arranged in the best work. The keystone has its top and bottom beds coinciding with the beds of ashlar, and it extends into the wall a little more than its projection beyond the face of the latter. The middle stone on either side is laid on an inclined bed, the breadth of the latter being at least equal to the projection of the cornice.

The cross section of the raking cymarecta is derived from the original profile on the horizontal cornice as shown in the enlarged detail IX. A few points—2, 3, 4—are marked on the original profile, and from these lines (shown dotted) are drawn parallel to the upper edge of the raking moulding. At right angles to the raking moulding a series of lines are drawn at distances similar to those drawn vertically through the original outline at 2′, 3′, 4′, 5′. Through the intersections of these lines in the points 1*a*, 2*a*, 3*a*, 4*a*, 5*a*, the profile of the raking section is drawn. It will be observed that the concave and convex surfaces are flatter than on the original. Where this is too flat for the effect of light and shade desired, it may be necessary to emphasize the curvature of the original section in order to produce a more pronounced curvature on the raking section, or, the profile of the raking moulding may first be decided, and the corresponding profile on the horizontal cornice be derived therefrom.

(*To be continued.*)

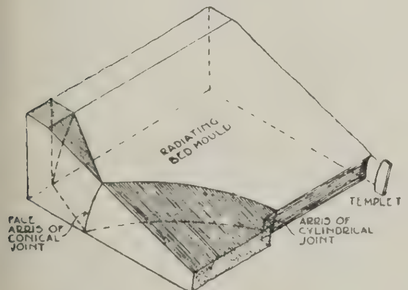


FIG. 10.

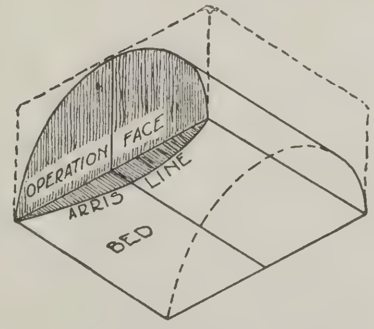


FIG. 11.

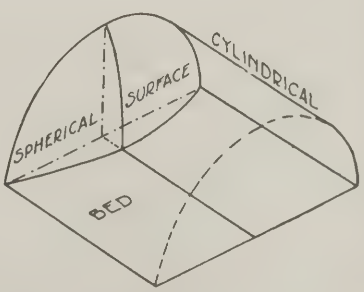


FIG. 12.

# Architecture in the Lay Press

## Acoustics in Concert Rooms

It is inevitable that many large assembly halls are used for all possible purposes, involving the acoustic opposites—public speaking and choral singing. But in such cases it is more necessary than ever to direct sound by means of useful reflecting surfaces, and on this principle the American fan-shaped plan for theatres and orchestra halls has recently emerged. Also, when the reverberation is short, thereby ensuring distinctness, it is possible both to increase and to brighten the tone of instruments by means of resonant material such as wood in the neighbourhood of the source of sound. It is also a useful empirical practice to enclose a 6 in. air space under the wood floor of a platform or an orchestra pit, for the sake of reinforcing instruments in contact with the floor, of which 'cellos and double basses are the most important. These instruments have frequently to be increased in number, due to the low energy condition of a crowded concert-room; and conversely a 'cello owing to its "pure" tone can benefit by the increased power provided by a bare, empty room. Generally speaking, horns, bassoons, and bass voices, that is to say, instruments having powerful overtones, are sweetened in a crowded auditory, and can stand the inevitable reduction in power. This is due to the fact that strong sound absorbents, such as audience, thick curtains, upholstered surfaces, absorb relatively more in the upper register than in the lower, that is to say, they tend to eliminate overtones.—Hope Bagenal, A.R.I.B.A., in "The Daily Telegraph."

## Inigo Jones

The Welsh architect's design for Whitehall Palace has been the source of innumerable architectural ideas ever since it was conceived, and abstractions from it can readily be recognized in many well-known buildings scattered all over the country. A glaring instance may be seen in the Home Office block of buildings at Westminster, which seems to be made up of slices taken wholesale from the façades of Inigo Jones's "Whitehall." Speaking of Inigo Jones's supreme effort one well-known authority says that, given the conditions, it is the most astonishing creation by a single mind that the history of architecture has to show. It is the work of a man who went to Italy, learnt the grammar of his art there, and returned to this country to throw off a scheme for a palace, not only larger than any other in the world, but at once more varied, more homogeneous, and inspired with a national feeling in spite of the fact that no national tradition existed to help him. Inigo Jones freed English architecture from what has aptly been described as the imbecilities of foreign designers, and started a fresh and healthy line of thought and development which was doubtless the foundation for the premier position now occupied by the modern school of English architects who favour the Renaissance manner. His works are distinguished by great beauty of proportion and excellence in style. His own theory was that buildings should be solid, proportional, masculine, and unaffected. Blomfield tells us that no man ever more completely realized his own ideal of his art. It is certain that no one of his successors ever approached him in perfection of detail, which was always remarkable for its refinement and restraint.—Isaac J. Williams in the "South Wales Daily News."

## The Results of Monotony

We may conjecture that the excessive modern interest in games is the result of the lack of opportunity in our world for the craftsman's instinct. Human beings delight in making things; and now, while some are occupied with purely intellectual work that needs no skill of hand, others merely tend machines that make things for them. So the craftsman's instinct finds its vent, not in making things, but in a skill exercised for its own sake; and very delightful is that exercise. Only it makes nothing. Our world is full of games beautifully played, but not of things beautifully made. The fine workman has become the fine athlete, amateur or professional, and we fall back on the past for our steadily decreasing stock of beautiful things. No one can deny that there is waste in this, as in the employment of all human beings on monotonous work. Instincts when indirectly satisfied are not fully satisfied. We still need a world of beautiful things, even if we do not know it; and a world of happy and interesting work, not merely of amusement and excitement. The division between *panem ac circenses* is vicious. In a thoroughly civilized world men should get their amusement, or a great part of it, in the earning of their bread. But how this is to be achieved, in modern conditions, is perhaps the most difficult problem that we have to solve. —"The Times."

## The Completion of Kingsway

For a long time Kingsway was disappointing. Though amply wide enough for dignity and convenience, long enough for fine effects of perspective and atmosphere, and possessing an unusual number of buildings of very considerable merit, it yet lacked life and interest; it could almost be called dull. Holy Trinity Church, designed by Messrs. Belcher and Joass, the "Kodak" building of Sir John Burnet, and Messrs. Trehearne and Norman's Africa House—to pick out only three of the best—all in their several ways have quality and distinction, and some of the details, such, for instance, as the lions over the entrance to the last-named building and Sir Edwin Lutyens's delightfully carved key-block to the door of No. 42, are particularly happy, but even these were not enough to give character to the street. The island site at the end, the key position which dominates the whole, still remained empty. And then one day Bush House began to rise, and gradually from the glimpses caught through the veil of scaffolding it became abundantly clear that Kingsway would be dull no longer. Over the main entrance facing Kingsway is inscribed the noble ideal to whic Bush House is dedicated : "To the Frien ship of the English-speaking Peoples It was a happy thought to carve the words here, and most fitting, for, indee the whole building is a living illustrati of that friendship expressed in terms architecture. If Messrs. Helmle an Corbett have had a great opportunit Bush House is certainly worthy of it.— Paul Phipps, F.R.I.B.A., in "Th Observer."

## The Architecture of Washingto

The most recent building in Washin ton of first-rate importance is the Linco Memorial, by Henry Bacon, with French great statue inside. It is an enormo white marble structure raised on a gre artificial hill, where the Mall joins t Potomac. The outline is that of a Gre Doric temple, but with an attic abo the cella walls in place of a roof. I main axis is at right angles to the ax of the Mall, with the entrance a approach on the flank. This approach on either side of a long canal, so that t gleaming white marble structure, slight larger, I imagine, than the Partheno stands reflected in water for all come Beyond the water is a great flight marble steps, almost as wide as the buil ing. No Eastern race ever attempt anything so magnificent. As one grad ally ascends this flight the great seat statue can be seen through the massi Doric columns, much in the way t statue of the god appeared to the ancie Greek worshippers. Unfortunately this case the great projecting knees the figure become visible almost as so as the head. But that is a momenta defect. Soon one is standing in the pe style, with the interior Ionic colonnade front in the midst of which sits the gre solemn figure. The light comes throu the entrance doorways and marble ce ing in the Greek way. It is perfect quiet and diffused. Peace reigns ever where. No one speaks, all hats are moved. Great architecture and fi sculpture have given a great man a mon ment to rank with the Taj-mahal. On a very old or a very young race wou have the courage to do so simple and fi a thing, but only someone very skilled a learned could have carried it out with t reserve and refinement Henry Bacon h put into this structure.

The other great modern monument building in Washington, a little old than the Lincoln Memorial, but in so ways more impressive still, is the tem the Masons of the Scottish Rite ha erected to their craft. There must something very fine in American Mason to call forth such a building. This gre structure, too, is only one of a seri which is to be completed shortly by a st greater monument in Washington its by Mr. Corbett, the architect of our o splendid Bush Building in the Stran John Russell Pope is the architect of t Temple of the Scottish Rite, and ma of the younger architects consider he the leading artist in his profession America.—Professor C. H. Reilly "The Manchester Guardian."

# Correspondence:

## The R.I.B.A. Council Elections

*Letters from Frederick R. Hiorns, Arthur Welford, H. G. Fisher, H. P. Burke Downing, W. J. Stenner, Nicholas and Dixon-Spain, and Maurice E. Webb.*

*To the Editors of* THE ARCHITECTS' JOURNAL.

IRS,—In your comments on the forth- ing Council election you say that "it bvious that the new Council, whatever composition, will have to devote time energy to the cause of Registration t session." That is very true, and even continue to be so for many ions to come, for I seem to recall the ectness of its application to Institute irs for at least fifteen years. It is a lition, indeed, that only calls for ment from the fact that the time and gy absorbed in political affairs at the itute during the last two or three s have been somewhat exceptional.

ome of us think that a great deal of trouble and irritation—which all t deplore—might have been avoided the late Council been more consider- of the interests of members and less ious about their making "sacrifices" ursuit of a line that has so little to mmend it. Whatever assumptions be made to the contrary, and how- persons may be attacked or dis- ged for thinking so, there is much to said against the policy of admitting rchitects of the United Kingdom into Institute. But to read some of the ments made on it one would imagine visdom was not open to question, and those who oppose it are responsible introducing the present aggravated ical condition into our affairs. It othing of the kind, and the Defence gue is in no way responsible for a ation it did not create.

rom enquiries made I am assured, on highest authority, that when the ical Register was obtained, or the te recent) Dentists' Act was passed, e was never any question of granting omas or degrees to those who had n no pains to obtain them, or depart recognized conditions of member- , and so lower the status of medical surgical colleges. Why our "Unifi- onists" should seek to do differently, mbark on a policy that is probably out parallel, and to take a line, more- , that conflicts with the Registration ciple they are professing to assist, fficult to understand.

is this, as I think, disastrous and lly unnecessary policy that is at the of our present acute troubles. And , presumably, in the interests of its rn to the forefront of our, now, ical stage that some familiar, and highly respected, names are in- d; though even a remote connection reen Unification (so-called) and the e of good architecture is not apparent. , moreover, certainly in support of Emergency Committee's list of nations that a notice has appeared ne general Press drawing attention e names of architect knights as being er known, or more attractive, "from public's point of view," than certain r candidates—a quite new feature in the conduct of our elections. We are accordingly left to conclude that those who, in recording votes for an Institute Council, seek for titles and such things may be expected to turn, instinctively, to the Emergency Committee's list. The rest can presumably be trusted to use their intelligence—an older but not yet discredited method.

FREDK. R. HIORNS.

*To the Editors of* THE ARCHITECTS' JOURNAL.

SIRS,—Referring to the letter of the President of the R.I.B.A. in your issue for May 9, I think that I am not alone when I express my feeling that it is nothing less than deplorable that our President should publicly take sides in the forthcoming election.

Hitherto the office of President and Chairman of Council has been honoured because it has been exercised impartially.

It is said, in the letter referred to, that electors "would look to me (the President) for guidance." I am not aware that electors are in the habit of seeking such advice, nor can I see how it is possible for such advice to be given by an impartial President.

The President says, "I have striven to conduct the deliberations and resolutions of the Council with loyalty to the Council itself. . . ." I am glad to think that it is so; why then does the President publicly advertise the fact that he is going to help turn out that Council and that he hopes others will do likewise? Is this loyalty? It appears rather to be a stab in the back.

The present Council was elected to put a stop to the so-called Unification proposals, and it has been working hard, with its President's loyal support, to this end. If the Associates of the R.I.B.A. wish to elect a Council such as the Emergency Committee nominated, they must not be surprised if they find, in a year's time, that they have been "Unified" with all and sundry. The door will then be wide open for "any Architect" to walk in, and presumably for "any Associate" to walk out.

ARTHUR WELFORD,
Associate of the Royal
Institute of British Architects.

*To the Editors of* THE ARCHITECTS' JOURNAL.

SIRS,—Mr. Herbert A. Welch, in a recent issue of your paper, expresses doubt as to his memory. I take this opportunity of refreshing it.

At the meeting held at the R.I.B.A. on February 7, 1922, statements were made that the "great majority of Associates were in favour of Unification." Such statements were challenged, but no information was forthcoming.

I also take this opportunity of stating that even after allowing most generously for the source of this imaginary information, there were less than 10 per cent. of the Associates of the R.I.B.A. who favoured these views. Such are the data of the idea of a great majority.

In relation to the comment as to the methods of the present Council, Mr. Welch states that "long agendas stood unreached for months at the sacrifice of much urgent business." I would ask him to verify such statements, or to state the source of his information.

If the letter under review is the candidate's election address, I would refer him to the so-called report of the late Associates' Committee and inform him that the Associates R.I.B.A. do not approve of it, neither do they appreciate certain regrettable incidents in relation to it. Most of the Associates R.I.B.A. have not forgotten that report, neither have they overlooked the contentious proposals it contained.

The Associates as a body are determined not to have their class filtered in any way, and they will view with great distrust any further dilution of the Fellowship class, as they wish this to be the highest distinction the Institute can bestow.

I advise every Associate who desires to maintain the honoured name of the Institute and to uphold its traditions to vote *en bloc* for the candidates of the R.I.B.A. Defence League, which I joined after realizing the methods employed by a section of the disbanded Associates' Committee.

If you carefully read the address of the "Emergency Committee" you will see that they are in favour of Unification, only they have not the pluck to say so definitely.

H. G. FISHER.

*To the Editors of* THE ARCHITECTS' JOURNAL.

SIRS,—The election of officers and members of Council of the R.I.B.A. seems fated to turn upon one question of policy viz., Registration, which certainly must vitally affect the profession, but really is not the only thing upon which the well-being even of the profession turns. There was progress before registration was heard of, and I venture to think that if nothing more were heard of it the advancement of the art and the profession in all directions in which the Institute can foster true advance would not come to a standstill.

In the present election we have the curious spectacle of two opposing groups which appear to differ not so much in their views of the policy in question as on the mode of approach to the actual end—Registration—which the one thinks can be reached *per saltum*, while the other thinks that, if it is to be attained, there is an intermediate stage first to be conquered, whether, in fact, it may lead to Registration or not.

Personally I do not think that Registration is either desirable or necessary. I fail to see that it will do anything for the profession, and it will afford no sort of safeguard to those who need the services of architects. The entrance to the profession will certainly not be better guarded against incompetence by any system of Registration added, though it may be to the sifting accomplished by the professional societies; there is, at any rate, danger of a lowering of standard as a result. Apart from purely professional interests, it is, of course, quite clear that Registration can do nothing for the advancement of the art of architecture.

It is sincerely to be hoped that the object which has in the past been kept in view in the choice of officers and members of Council, viz., that men really representative of the profession in its widest outlook and concerned for the advance of architecture as well as for professional interests will not be allowed to be obscured in the pursuit of a policy in relation to one object of Registration or non-Registration or the means of securing or avoiding the adoption of Registration.

H. P. BURKE DOWNING, F.S.A.

*To the Editors of* THE ARCHITECTS' JOURNAL.

SIRS,—As its contribution to the correspondence appearing in your JOURNAL in this matter, I am directed by the Council of the Bristol Society of Architects to state that, whilst deprecating public discussion of the domestic affairs of the R.I.B.A., it is compelled (as a result of the experiences of the past twelve months) to express its conviction that the return of the present Council of the Institute, or its nominees, would be disastrous to the prestige and utility of the Institute, and would be likely to prove destructive of the federation with the allied societies of which it has for so long been the acknowledged and honoured head.

In the circumstances, though placing on record its reprobation of the system of "bloc" candidature inaugurated by the present Council of the Institute, the Council of the Bristol Society wishes it to be known that it gives its hearty and unanimous support to the candidates nominated by the 1922 Emergency Committee.

W. J. STENNER.

Hon. Secretary of the Bristol Society of Architects.

*To the Editors of* THE ARCHITECTS' JOURNAL.

SIRS,—May we support Professor Adshead's very sound advice to members, given in his letter published in your issue for April 18.

In our view, general action on such lines would not only guarantee the best possible Council, but would happily destroy the "political" rift which is to be deplored on every count.

We are of opinion that nothing but good would result if members voted freely and independently on the entire list of nominations which will be submitted to them for such as they know and would wish to represent them, and put into the waste-paper basket the separate party lists.

We are convinced that to merely choose between the two "political" parties is sowing the seed of further conflict.

NICHOLAS AND DIXON-SPAIN.

*To the Editors of* THE ARCHITECTS' JOURNAL.

SIRS,—As Mr. Perks persists in misrepresenting in the Press the views of the 1922 Emergency Committee's candidates, I am requested by them to state :—

1. That they have no intention of "shattering the examination system," and that they regard the position of the Associate who has qualified by examination as inviolable.

2. That the sentence "bringing of all the architects of the United Kingdom into membership of the R.I.B.A." was, as Mr. Perks knows perfectly well, taken from a report which was particularly careful to define the word "Architect," where used in the report, as referring only to the properly qualified man.

It should also be understood that the 1922 Emergency Committee's candidates are *not* standing for any particular method of obtaining registration and are *not* pledged to support the old Unification Committee's scheme, but they *are* pledged to consult the different interests concerned before committing the R.I.B.A. to definite proposals.

MAURICE E. WEBB.

Hon. Sec. 1922 Emergency Committee.

*To the Editors of* THE ARCHITECTS' JOURNAL.

SIRS,—As a member of the Institute who is neither a Defence Leaguer nor an Emergency Committeeman, may I comment on one aspect of the R.I.B.A. election.

I have just examined the rival lists of candidates for election and notice that, while the majority of those nominated by the Council regularly attend the Institute meetings, those nominated by the Emergency Committee, with the notable exception of Mr. Keen and perhaps two others, never, or very, very rarely attend the meetings.

What earthly use will it be to elect candidates who cannot take sufficient interest in the Institute to attend its meetings? Many of the nominees of the Council, although not so well known as their opponents, have given a lifetime of service to the Institute.

"AN ASSOCIATE."

## "An Academic Dress"

*To the Editors of* THE ARCHITECTS' JOURNAL.

SIRS,—May I help to enlighten the anonymous "Associate of the R.I.B.A." who found a document bearing on the above subject upon his drawing board?

This document is a poor example of the use of ridicule as a weapon in place of argument.

If the anonymous "Associate of the R.I.B.A." thinks the document to be historic, and feels that research as to its origin would be worth while, he might have an easier task than he imagines.

ARTHUR WELFORD.

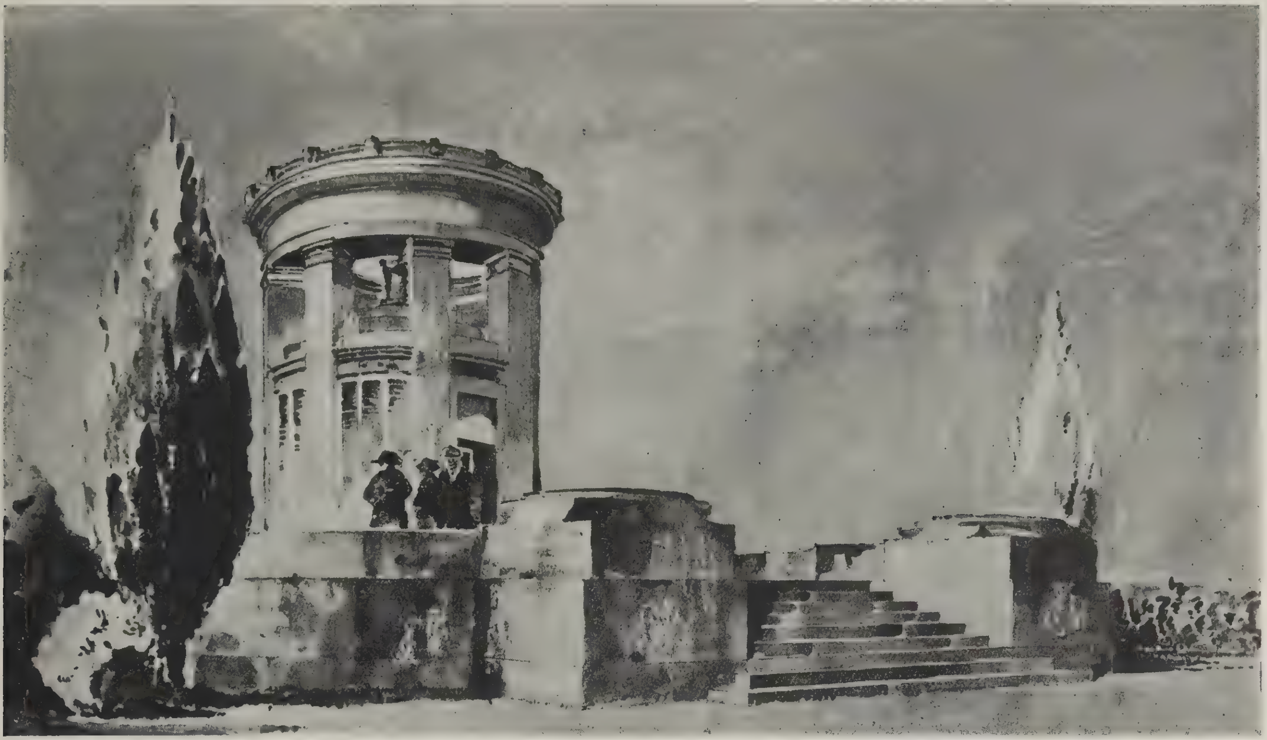
## Gowns and Hoods

With regard to the decision of the R.I.B.A. to adopt an academic dress "The Times" says :—

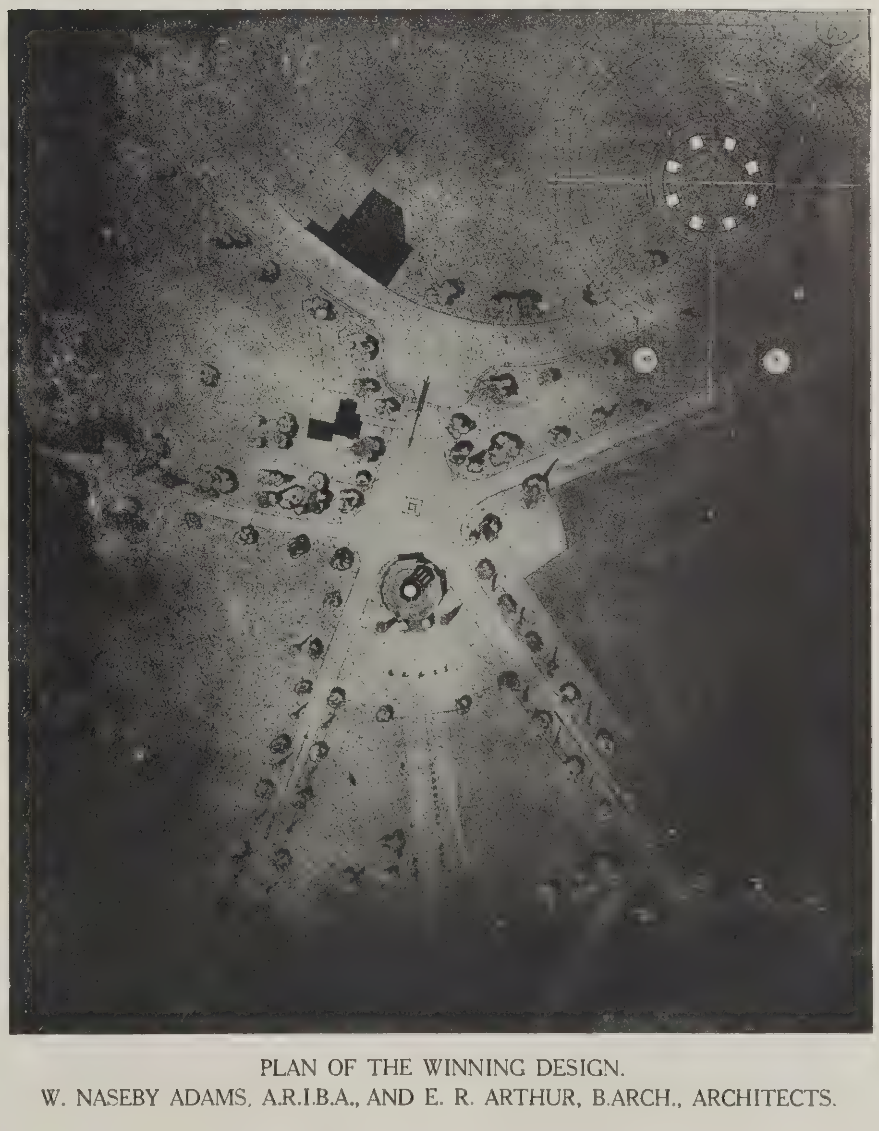
An actual majority in a meeting of the Royal Institute of British Architects have
resolved to appropriate to their professi
a hood and gown, after the academic sty
for ceremonial purposes. Hitherto th
have possessed no insignia of their o
by which they may be distinguished fr
their fellow-men on occasions of state; b
henceforth (if the resolution stands) t
world will have the advantage of knowi
an architect when it sees one at
assembly of architects, or, perhaps,
the laying of a foundation-stone or t
formal opening of an architect's creatio
There are, however, so many gowns a
hoods, of different cuts and colours,
existence, that to add to their number
not necessarily to impart much disti
tion to the architects. It may be
gretted that the proposed form of th
sartorial heraldry does not show m
originality, difficult though it be, at th
stage in the history of costume, to inve
an effective new uniform. The B
Scouts have succeeded in doing so, it
true; but most uniforms, even when ne
have a long ancestry behind them, a
most official robes and vestments a
when their origin is remembered, no m
than archaic survivals, or garments co
mon in a former epoch, and retained by
caste after their obsolescence among t
general. Hoods, it is well known, beg
to be worn by academics at a time wh
schools were draughty; their gowns w
once nothing out of the usual. Why, the
should any modern body of men, clothi
itself officially for the first time, des
to hark back to them ?

The tendency of the age, moreover, is
obliterate such distinctions, and most
us are shy of dressing up. Convers
ziones at which academic dress is p
scribed are usually voted a bore by th
whose coloured silk has to be hired for t
evening or whose white fur has, for wa
of airing, become shabby. Again, co
sider the artizan who wears a genui
official dress every day—the apron
cobbler and the rest; the various serva
of Government and great companies, t
postmen, the railwaymen, the omnib
men, and the bank messengers. Th
habit is to get out of their occupatio
clothes when they are off duty—on t
principle, apparently, of leather a
prunella. Their instinct is sound. W
they wear at their work is mainly t
result of the evolution of personal c
venience; but it stamps them sincer
as what they are and as no gown
stamp a professional man. Just as the
are ancient coats-of-arms, granted wh
men wore such things, and modern o
designed when they do not, so there
old official robes and new ones. But
the real robes of modern life we must lo
to those who wear them daily, and thou
it is often said that all men are now ali
in the street, few things will appear l
true. The chauffeur would be inco
venienced without his gaiters; not so t
Dean. The Bishop could dispense wi
his apron; not so the butcher. But t
Dean's gaiters and the Bishop's apron
at least worn daily; the architect's go
will not be his working dress. Yet w
should we seem to raise objection
We do not, unhappily, recognize arc
tects at present as such; but we may
so at some sublime and solemn concla
hereafter, if we are invited to be prese
In that case—doctors, masters, a
bachelors, as we may ourselves be
we must take care not to appear
nobodies.

# Dewsbury War Memorial Competition



A GENERAL VIEW.



PLAN OF THE WINNING DESIGN.
W. NASEBY ADAMS, A.R.I.B.A., AND E. R. ARTHUR, B.ARCH., ARCHITECTS.

ROFESSOR C. H. REILLY, F.R.I.B.A., the assessor, has made the following awards in the comtition promoted by the Dewsbury rporation for designs for a war memoal in Crow Nest Park :—

*First.*

No. 66. W. Naseby Adams, A.R.I.B.A., . Ladbroke Grove, London, W., and . R. Arthur, B.Arch., 22 Westbourne ardens, London, W.

*Second.*

No. 118. Willink and Dod, Cunard uilding, Liverpool.

*Third.*

No. 54. A. Spence Atkinson, M.S.A., Richmond Terrace, Blackburn.

*Highly Commended.*

No. 104. Grayson and Barnish, 606 ver Building, Liverpool.

No. 95. John Williams, Knabb House, vo Dales, Nr. Matlock.

No. 107. E. Berry Webber, 8 New uare, Lincoln's Inn, W.C.2.

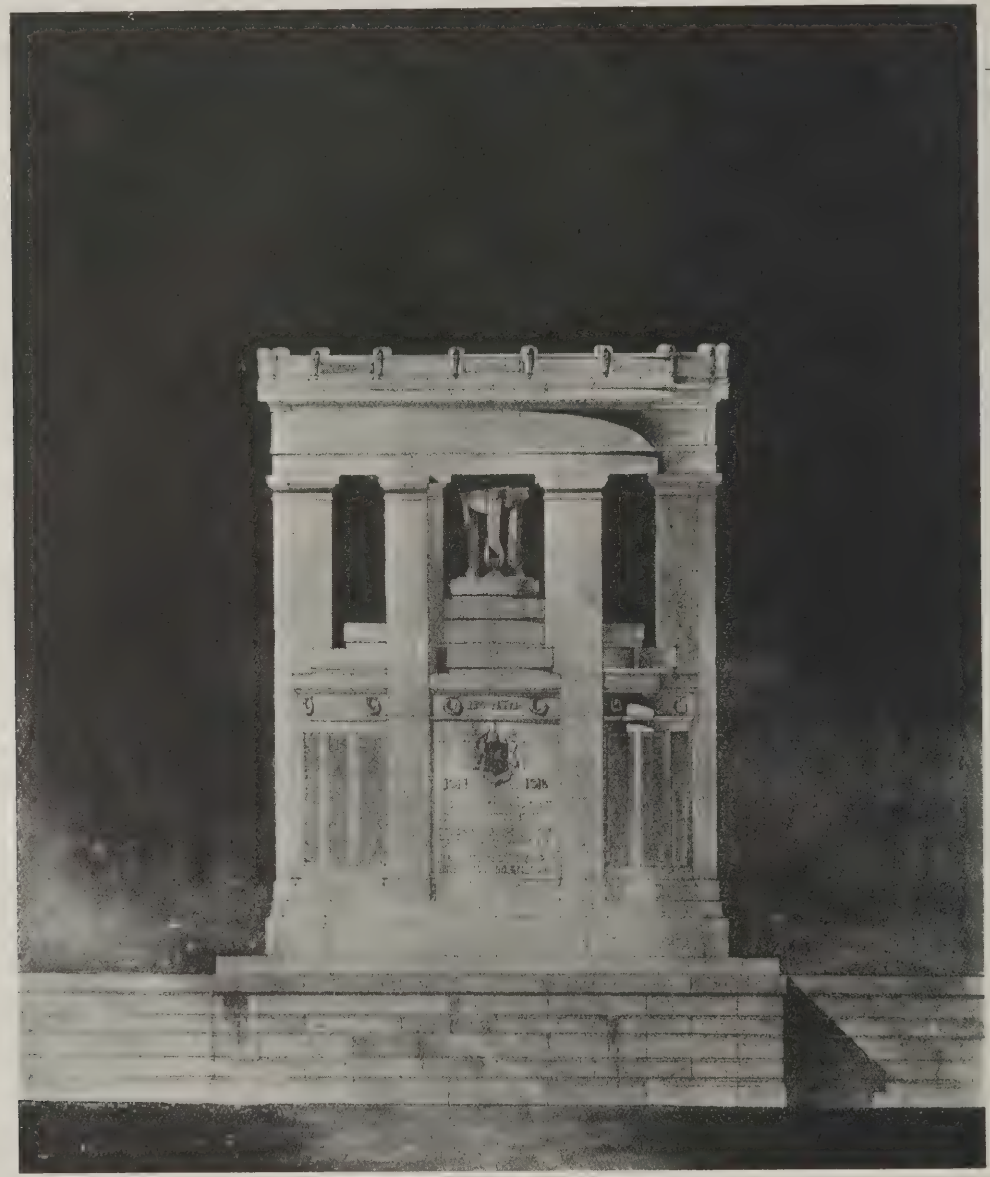
No. 36. Wm. Henderson Duthie, and 6 Throgmorton Avenue, London, C.2.

No. 1. James MacGregor, A.R.I.B.A., hool of Architecture, the University, anchester.

*The Winning Design.*

In their report the successful competirs state that paramount attention has en given to the disposition and display the thousand names of the men of wsbury which are to be inscribed on e memorial. The area of wall space quired for this purpose is the nucleus m which the design has sprung. ghteen panels 5 ft. 5 in. high and

1 ft. 6 in. wide are provided, which allows of 1 in. letters and $\frac{1}{4}$ in. spaces with a 2 in. margin, and provides for 1,008 names. The lettering will be in incised V section Roman capitals after the manner of the lettering of the Trojan column at Rome.



DETAIL OF DEWSBURY WAR MEMORIAL FACING THE NORTH GATES.
W. NASEBY ADAMS, A.R.I.B.A., AND E. R. ARTHUR, B.ARCH., ARCHITECTS.

To evolve a scheme which will provide good views not only from the park entrance and the footpaths in the immediate vicinity, but also from the surrounding hills across the valleys was another important factor. This, together with the fact that there are no means of placing the memorial axially in relation to the park entrance, left only one scheme to be developed, that of a memorial circular on plan.

The finished scheme, therefore, consists of a circular podium 4 ft. 6 in. high and about 58 ft. in diameter, with a broad flight of steps to the south and two minor flights on the north side leading direct to the existing pathways. This podium is placed at the apex of the triangle formed by the boundaries of the site, this being the highest point obtainable.

It is suggested that the part of the site not covered by the podium should be cleared and re-turfed as it is desirable to provide as large an expanse of green grass as possible to give the scheme its most beneficial setting. This grass space would then be available for ceremonial functions which might at any time become necessary. If a green ride could also be provided on the space immediately south of the site allocated for the memorial the dignity of the lay-out would be enhanced considerably. This idea is suggested on the block plan.

The memorial itself is erected on the podium. It consists of eight square piers carrying an entablature which supports a cresting upon which the names of the more important engagements of the Great War are inscribed. The lower two-thirds of the space between the piers is filled in with a wall, and it is here that green stone panels will be let in carrying the names of the fallen. The space facing the park entrance, not being required for names, is utilized for the inscription and the coat of arms of the town of Dewsbury. In the southern space a door of small dimensions filled by a decorative grill is pierced through into the interior vaul This door is designed so that it will obtai and direct shafts of sunlight both morning and evening on to the sunk ring provided in the floor, where relics of the wa could be preserved.

The foundations are of concrete an brick construction, and the memoria including the circular podium, is of ston a York stone from the Darley Dale district being suggested as the most durabl The paving to the podium is of gree Westmorland stone in small squares, t harmonize with the panels on which t names are to be incised, which are of similar material.

The total cost of the scheme is estimat at £4,550, made up as follows :—

| | |
|---|---|
| Drainage, foundations, brickwork, and mason's work complete .. | £3,9 |
| Lettering to names and inscription .. .. .. .. | 4 |
| Carving as indicated .. .. | 1 |
| Metalwork to door grille and urn | 1 |
| Total .. | £4,5 |

The winner of the second prize h

gned a cenotaph in local stone, with names of the fallen inscribed in bronze els, the whole to cost £4,522.

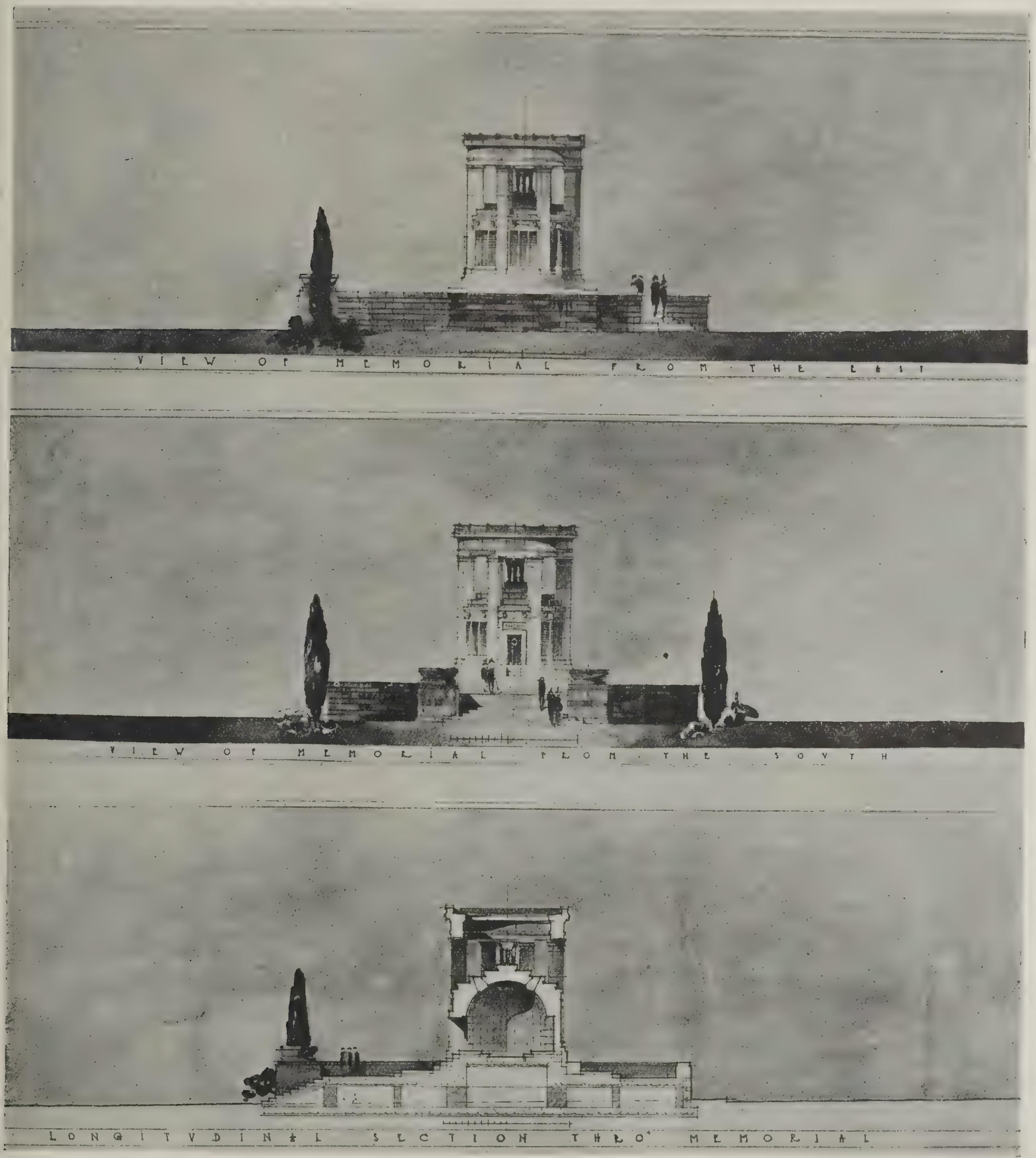
he third design takes the form of a ular colonnade containing a circular estal surmounted by an urn.

n his report Professor Reilly says: ne competition has been an extraor- rily good one, and I heartily con- late the committee on the result. imilar competition of recent years roduced anything like the same high ard of design and presentation nor ny serious entrants (140) as this has. ith regard to the winning design, 56, I have carefully considered the and have as well consulted a contractor, and as a result have no doubt it can be built for the specified amount. A circular monument meets the difficulty of the converging lines of approach better than one of any other shape. This particular design has great power and originality. Its mass is sufficiently stong and defined to carry to a distance, while the strong Roman forms employed are more suited to the character of the war monument than the lighter and more elegant ones in some of the other circular structures. The vaulted chamber under the urn for war relics is an interesting idea, and gives reason for the solidity of the monument.

"No. 118, the design placed second, is a very beautifully designed rectangular monument, with very good detail, but, being rectangular, does not suit the site as well as the circular ones.

"No. 54, the design placed third, is a very elegant circular monument, more suited, perhaps, as an ornament to a park than as a solemn war memorial. In general shape and detail it follows the very beautiful monument erected in America to Mrs. Eddy, the founder of the Christian Science movement."

One hundred and forty designs were submitted. Premiums of £100, £70, and £30 respectively were offered by the promoters to the authors of the designs placed first, second and third by the assessor.


VIEW OF MEMORIAL FROM THE EAST
VIEW OF MEMORIAL FROM THE SOUTH
LONGITUDINAL SECTION THRO' MEMORIAL

DEWSBURY WAR MEMORIAL COMPETITION: THE WINNING DESIGN.

W. NASEBY ADAMS, A.R.I.B.A., AND E. R. ARTHUR, B.ARCH., ARCHITECTS.

# The R.I.B.A. Council Elections

*The following letters were received too late for inclusion in our correspondence columns :—*

*To the Editors of* THE ARCHITECTS' JOURNAL.

SIRS,—The most that can be inferred from the President's letter is that his amour-propre has been offended by the advent of some newcomers on the present Council, whose presence there was unacceptable to his ideas. No one will question the right, if they question the propriety, of a President of the Institute expressing his opinions on a political issue at the eve of an election. Whether those opinions have greater value, if they carry more weight, than those of any ordinary member, is a matter for the opinion of the electorate.

Mr. Waterhouse evidently thinks they have, and his letter seems intended to impress upon voters the greater importance of a presidential lead upon a very debatable subject. Possibly he is correct in his assumption that certain electors will be looking to him to point a direction. On the other hand, there will as certainly be others who will no more look to him for guidance on this particular issue than they did from his predecessor in the chair; and perhaps it would have been well, if not wise, to have given his fellow-members of the Institute, other than those whose policy is inseparably bound up with one side or the other, credit for clear thinking and voting accordingly. His professed detachment from party will, of course, be valued according to his own contradiction thereof, and whilst none will in the least question his loyalty to the best interests of the Institute, we hope he will not withhold some credit from those whose aims are similar, as he well knows, but who propose attaining it by a different way.

After all, the differences at issue are not such as can be expected will be settled at a single election, as his contact with the existing Council should have warned him, and to some it might have appeared more consistent with the office of President, without in any way compromising his future liberty of action, had the few remaining weeks of that office rather been devoted to doing something, however little, towards reconciling conflicting policies. Not that there has existed any doubt as to what the President's ultimate course of action would take, but apparently so anxious is he that the verdict of the Institute Electorate shall be to his and his friends' liking, that in his concern he has thrown aside a tradition, one regrets to note, which for precedent may one day be turned to another account.

It is, of course, a call to the younger members, the real voting strength of the Insitute: an appeal to those very men who, at the invitation of the Institute Constitution, have worked long and hard to secure the qualification that Constitution was to protect; and which the policy of the party the President identifies himself with was designed to undermine. It is easy to talk in generalities, but of the details of what policy that party now proposes to further, he tells us little or nothing; for, like the manifesto of the new Emergency Committee, his letter is notable for that one particular omission. The Institute Electorate, and the Associates in particular, however, are entitled to know whether his party still stands for the policy of absorption by the Institute of the Society of Architects and all outsiders: failing which, they will doubtless draw their own conclusions.

WILLIAM H. ASHFORD.

*To the Editors of* THE ARCHITECTS' JOURNAL.

SIRS,—I have a strong distaste for party politics and electoral polemics, and deplore, like so many others, their introduction into the elections of our society.

At the present moment, however, such grave issues are at stake that no loyal Fellow or Associate of the Institute can well avoid the fray or forgo his individual duty of influencing the electoral verdict in accordance with his convictions.

I therefore assume the privilege of the "sere and yellow leaf," a condition that has so few privileges, to exhort my contemporaries, my many juniors, and my few seniors in the Fellowship ranks, to use their votes in this approaching election, on either political issue or upon none, for one list or the other, in accordance with their conscience, but to vote; and thus, if the result proves on the morrow of declaration to be other than what they desired, to avoid the unhappiness of self condemnation for slackness or apathy.

EDWARD WARREN, F.R.I.B.A.

*To the Editors of* THE ARCHITECTS' JOURNAL.

SIRS,—To my letter in your last issue on the subject of the R.I.B.A. political controversy Mr. Perks replies by changing his ground, and now states that the controversy was started by the Unification Committee and not by the last Council as stated in his previous letter.

I challenged Mr. Perks to prove his statement "that the late Council started the political controversy," and this he has failed to do. I appreciate, however, his frankness in admitting his mis-statement.

The mis-statement having been admitted we can now leave it, but this wriggle for the purpose of dragging into the arena the old Unification Committee really won't do.

Does Mr. Perks recollect that he was a member of that committee? Does he also recollect that that committee—composed of all societies in the British Isles representing architecture, as well as representatives of unattached members of the profession—merely reported progress to the profession from time to time while pursuing its investigations and preparing its report?

If Mr. Perks was then against such a usual procedure, why did he—as a member of the committee—not protest?

I was a member of that committee, and I have no recollection of a discorda voice from Mr. Perks regarding the repor issued.

As Mr. Perks has not attempted disprove any of the statements made my last letter we may consider that t case as therein presented was fair a accurate.

Now as to the Council's reasons striking out from the Kalendar the Co of Professional Conduct. Mr. Perks te us that "during the years 1916 to 19 the Practice Standing Committee pass four resolutions against a code." Th may be accurate, but as a member that committee prior to and since t war, I should be interested to know t nature of these resolutions.

It may be that there were points in t old code which were not altogether he ful. I think there were—but that wo surely suggest modification and deletion of that code.

In point of fact a sub-committee (w Mr. Perks as one of its members) was up by the *present* Practice Commit to consider the terms of the code. T sub-committee presented to the *pres* Practice Committee its report, which adopted by the Practice Committee a recommended to the *present* Council adoption.

It is strange that the Council sho have declined to adopt the Pract Committee's recommendations, esp ally in view of the statement now m by Mr. Perks that "the Council was doubt influenced by the Practice C mittee's recommendations"!

This line of argument really wo do. It is contrary to fact. There is case against a Professional Code.

HERBERT A. WELCH

## R.I.B.A. Code of Ethic

*To the Editors of* THE ARCHITECTS' JOURNAL.

SIRS,—Mr. Perks, in your issue of 9th inst., says "during the years 191 1922 the Practice Standing Commit passed four resolutions against a Cod from this statement the uninformed mi think "that's the end of that."

In point of fact, and at the biddin the previous Council, the Practice Sta ing Committee in 1922 went most c fully into the whole subject and rec mended the present Council to print code, as revised and approved by committee, in the next and all fu issues of the Kalendar and that a notif tion of the Council's action together the document itself be forthwith publis in the "R.I.B.A. Journal." The Cou turned it down. *Verb. sap.!*

HENRY K. ASHLE

A member of the Practice Commit

## An Academic Dress

*To the Editors of* THE ARCHITECTS JOURNAL.

SIRS,—Mr. W. W. Scott-Moncrieff c plains in his letter on the Academic D in your issue of May 9, of "this mas litical opposition to those who are ing to advance architecture." How n the wearing of such a garb as the one posed, or any other affectation of the d upon ceremonial occasions, advance art of architecture ?

Perhaps it might more truly have been scribed as an attempt to advance the lividual interests of the Royal Institute.

In any case, the many architects in s country who do not happen to be mbers of the Institute will doubtless preciate the delicacy of its action in s providing its members with a dress ich will, at any ceremonial function, are them the mortification of being one moment confused with those hitects who presume to practise the stress Art, although not members of Institute.

And so architecture is "advanced" in present age.

V. S.

*To the Editors of* THE ARCHITECTS' JOURNAL.

SIRS,—I suffer from the disadvantages a university education and therefore, suppose, from "Bee Disease." That st be the reason of my intense surprise the implied enunciation of Mr. Scott-ncrieff in his letter published in your t issue that education not only does t assist but is actually detrimental to execution and appreciation of real, al, living art. A reactionary doctrine eed ! Can one of those diseased bees e found a home in Mr. Scott-Moneff's biretta ?

As for words and statistics, Mr. Scott-ncrieff will have none of them. He l have no literature of architecture r of anything else). He will have no ct science of building. He would the us in Trappist raiment; he would e us take Trappist vows as well. He the British Doctor Kapek who will e our "Bee Disease" by turning us into lumb race of groping insect-men and world into a real-life R.U.R.

But does that prevent Mr. Scott-ncrieff from rushing into print in er to let the universities know that stands, as it were, in a velvet suit and collar making long noses at institus which have stood the test of time a thousand years ? It does not. And will suffer the usual fate of the makers long noses.

can see him arriving at the gates of dham, standing there, fingers to face ntil the ghostly figure of a smallish appears, in a flowered waistcoat haps, but not, I'll warrant, in academic ss.

Who are you, O Dabbler in Words, ures and Statistics ?"

Sir, my name is Wren; you insult my a Mater; have a care lest my wrath rtake you."

A DISEASED BEE.

## The Deterioration of Stonework

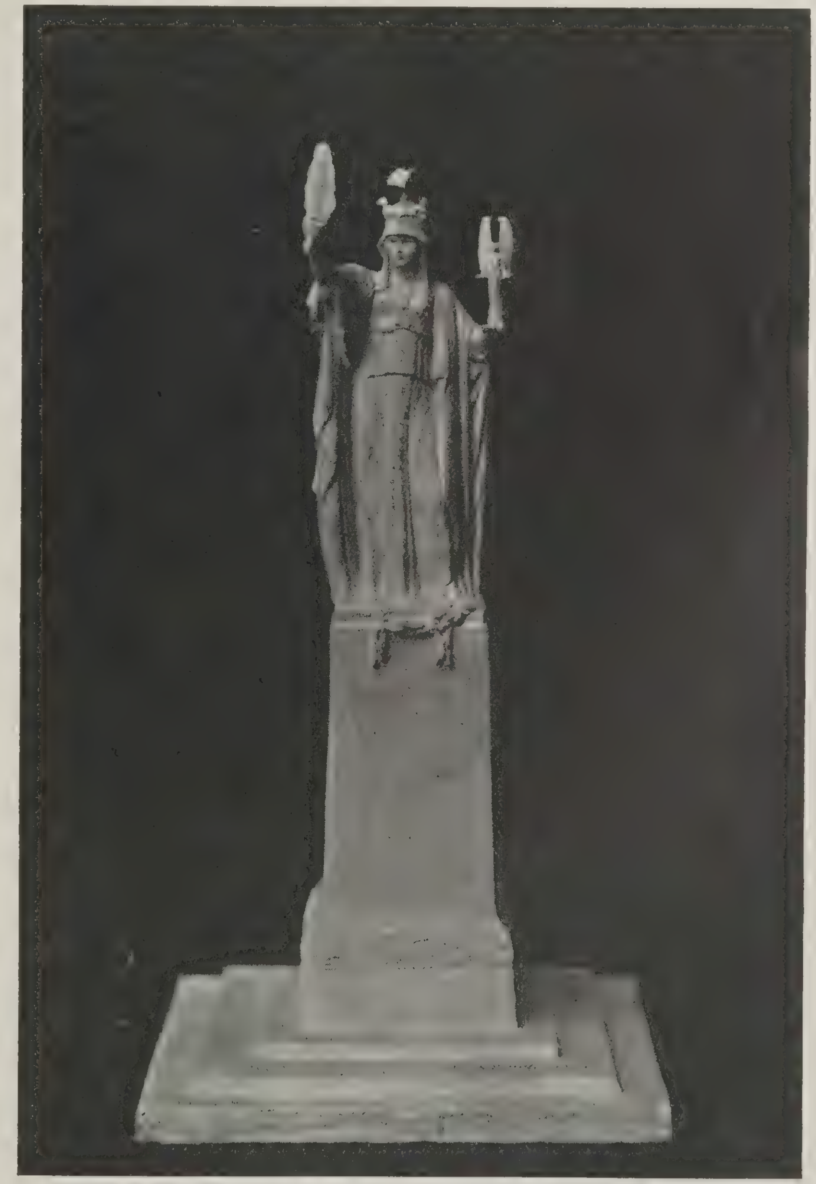
he question of the deterioration of ework in buildings is a matter of eral economic importance. But in the s of our historic buildings and ancient uments prevention of the serious decay and gradual demolition of tooled surfaces and main structures constitutes a special problem which has engaged the attention of many investigators for a considerable time without, however, finding any generally satisfactory solution. The investigation involved is very complex and needs to be approached from different angles with the help of wide scientific knowledge. Accordingly, it has been decided to set up under the Department of Scientific and Industrial Research a special committee of the Building Research Board to report on the best methods by which decay in building stones, especially in ancient structures, may be prevented or arrested.

The Chairman of the Committee will be Sir Aston Webb, K.C.V.O., P.R.A., and the other members will be: Mr. R. J. Allison, C.B.E., F.R.I.B.A.; Professor C. H. Desch, F.R.S.; Mr. A. W. Heasman, O.B.E.; Mr. J. A. Howe, O.B.E.; Sir Herbert Jackson, K.B.E., F.R.S.; Dr. Alexander Scott, F.R.S.; and Mr. H. O. Weller, M.I.C.E., Hon.A.R.I.B.A. All communications should be addressed to the Secretary, Department of Scientific and Industrial Research, 16 Old Queen Street, S.W.1.

## Troon War Memorial Competition Awards

The following awards have been made by the assessor, Mr. James Miller, in the Troon War Memorial Competition:—First place: Premium £25—"Lift up Your Hearts," by Walter Gilbert, Birmingham. Second place: Premium £15—Design marked No. 25, by W. B. J. Wright, architect, and Robert Gray, sculptor, both Glasgow. Third place: Premium £10—Design "C" by "Rex," F. W. Doyle Jones, R.B.S., Chelsea.

The winning design represents Britannia erect and majestic, with the victory in her hand, and the chains of bondage snapped, holding out the palm to those of her sons who lie buried beyond the seas. Britannia stands on an island girt by the sea, as represented by the archaic treatment above the plinth. The names of the fallen are to be incised on the pedestal. The inscription reads as follows:—"This statue was placed to commemorate the men of Troon, who, seeking the welfare of their country, gave their lives in so doing, and are now resting in and beyond the seas. 'Lift up your hearts.'"



TROON WAR MEMORIAL COMPETITION.
MR. WALTER GILBERT'S WINNING DESIGN.

# Societies and Institutions

### *The Architectural Association.*

Lord Burnham has been compelled to cancel his engagement to speak at the A.A. general meeting on May 28, and Mr. Carl Brummer is unable to be in England to give his address on "Danish Architecture," until the end of the month. The following arrangement has therefore been made: May 30—Mr. Carl Brummer, "Danish Architecture." Election of Officers and Council for session 1923–24.

### *The Royal Technical College, Glasgow.*

On recent Saturday afternoons the students and staff of the architecture and building day and evening classes of this college held their annual class visits, which were largely attended.

The first visit was to the warehouse at present being erected at the corner of George Square and Miller Street, Glasgow, for Messrs. Wm. McLaren, Sons & Co., from plans by Mr. James Miller, A.R.S.A., F.R.I.B.A., architect.

The second visit was to the concrete block-making works of Messrs. Wm. Wilkie & Co., Limited, Bridgeton.

### *Hants Architects' Assistants.*

The Hants and Dorset branch of the Architects' and Surveyors' Assistants' Professional Union are arranging a series of educational visits to places of interest during the coming months. The first of these, to Messrs. Bailey and White's joinery works at Portsmouth, was made on May 12. Other visits in course of arrangement are as follows: June.—Visit to some place of interest in London at the invitation of the Metropolitan Branch. July.—Visit to the Elm Park and Corsham Down Stone Co.'s quarries, Bath.

### *A. & S.A.P.U. Visits.*

Appended is the social programme for this month of the Metropolitan branch of the Architects' and Surveyors' Assistants' Professional Union:—

Friday, May 18.—Visit of inspection (second party) to the Biscuit Manufactory, Keetons Road, Bermondsey, by kind permission of Messrs. Peek Frean & Co., Ltd. Meet outside at 2 p.m. Tea provided.

Thursday, May 31.—Visit of inspection to the New Marylebone Town Hall, Marylebone Road, W.1 (Baker Street Station). Meet outside at 6.30 p.m.

The visit arranged for the biscuit manufactory is limited to fifteen in each party, and has been arranged principally for members' wives.

### *Welsh Architects at Dinner.*

There was a large attendance at the annual dinner of the South Wales Institute of Architects, held at Cardiff, under the presidency of Mr. Percy Thomas, O.B.E., F.R.I.B.A. (President of the Institute). Giving "The Royal Institute of British Architects, the Society of Architects, and Allied Societies," the President said they were gratified at the presence of Mr. Waterhouse. When he was last with them the hope was expressed that the conferences between the various bodies of architects would lead to greater unity between them. That had since been more than realized, largely owing to the efforts of Mr. Waterhouse. In reply, Mr. Waterhouse said that despite differences of opinion, they were in reality a united body with one cordiality, one sympathy, and the little rifts would make no difference.

### *The Town Planning Institute.*

Ever since the establishment of the Town Planning Institute in 1913 it has had in view the formation of a compact but comprehensive library dealing with the various aspects of this subject, so that its members and others would be able to study them without having to disentangle the material elsewhere. Only a beginning had been made, but recently an exceptional opportunity arose when it became possible to acquire on very favourable terms the collection of maps which Mr. Brook Kitchen had spent many years in gathering together. The institute decided on the purchase, as the collection will form a most appropriate nucleus for the library it has in view, comprising as it does maps and views of places in all parts of the globe, of all periods within the last three centuries. A dance in aid of the funds required for this purpose was held recently at the R.I.B.A. Galleries at 9 Conduit Street, the decoration of which was the work of talented students of the Architectural Association, while Miss Mary Adshead designed the central feature, a "Jazz" Town cartoon. The works of Mr. W. Walcot which hung on the walls materially enhanced the decorative effect. The president and Mrs. Lanchester were supported by the past-presidents and council of the Town Planning Institute.

# St. Paul's Cathedral Filmed

For the benefit of the Restoration Fund a film of St. Paul's Cathedral has been taken by Pathé Frères Cinema, Ltd. A private exhibition of this was given at the West End Cinema on Friday last, Sir Banister Fletcher, F.R.I.B.A., providing beforehand a brief sketch of the life of the architect and a description in outline of the architectural features of his masterpiece.

The Cathedral was, on the whole, shown fairly comprehensively. First there were views of the west front from Ludgate Hill, then a "close-up" near the steps, showing a typical midday crowd of people feeding the pigeons. Though not particularly architectural, this certainly provided a very human and characteristic touch. Followed one or two views of the exterior, including one with the camera tilted backwards to give a view of the dome, necessarily much foreshortened.

The views of the interior were taken at night by means of the "sunlight arc." Though many very impressive pictures were thus obtained, we cannot help wishing that the photography had been done by daylight. Particular features came out very well under the concentrated brilliance of the lights, but the surroundings were inevitably thrown into a nebulous shadow bordering on gloom. General views would have been much more impressive and, we imagine, more to the public taste; and though the producers were indubitably right in showing the tombs of the great in the crypt, this part of the film struck us as being a trifle long.

We saw the library with its models and other relics, but nothing of the geometrical staircase nor of the interior of the dome. We wish that more had been made of the dome. A dramatic view could have been got of the floor space from the Whispering Gallery, and another of the great drum with its sense of aching void. And what a climax would have been a panoramic view of London from the lantern! But perhaps these parts of the Cathedral were not accessible.

In any case, Messrs. Pathé Frères have produced a film of great interest, and one that all architects will have to see.

# List of Competitions Open

| Date of Delivery. | COMPETITION. |
|---|---|
| June 1 | New Municipal Buildings and Town Hall, Cork. Total cost not to exceed £120,000, Assessor Mr. Lucius O'Callaghan. F.R.I.A.I., A.R.H.A. The successful competitor will be appointed to carry out the work. Second and third premiums £200 and £100 respectively. Apply Mr. William Hegarty, Town Clerk, Cork. The competition is limited to architects living and practising in Ireland. |
| June 12 | Concert Pavilion, Bournemouth, to seat 2,000. Estimated cost £100,000. Assessor, Sir Edwin Cooper, F.R.I.B.A. Premiums: £300, £200, and £100. Apply Town Clerk, Municipal Offices, Bournemouth. Deposit £2 2s. (cheque). |
| June 30 | Bridge over Nygaardsstrommen in Bergen. Apply Department of Overseas Trade (Room 50), 35 Old Queen Street, Westminster, S.W.1. |
| June 30 | National War Memorial at Melbourne to cost £250,000. Competition, in two stages, open to Australians, not necessarily residing in Australia, and British subjects resident in the Commonwealth. Preliminary designs to the Right Hon. the Lord Mayor of Melbourne, Chairman of the Executive Committee, Town Hall, Melbourne, Australia, by June 30. Apply Agent-General in London, Victoria House, Melbourne Place. Strand. Deposit £2 2s. |
| June 30 | Pavilion to serve as Public Hall at Largs Premium £25. Apply Mr. Peter Morris Town Clerk, Largs. |
| July 3 | Pavilion in Calverley Gardens, Tunbridge Wells. Assessor Mr. E. Guy Dawber, F.S.A. F.R.I.B A. Premiums £150, £100, and £50 Apply Town Clerk. |
| Aug. 25 | Public Swimming Baths and Washhouses East Greenwich. Assessor, Mr. Henry V Ashley, F.R.I.B.A. Premiums: £300, £200 £100. Apply Mr. Frederick J. Simpson Town Clerk, Town Hall, Greenwich |
| Nov. 5 | Art Gallery for Hull. Assessor, Mr. John W Simpson, PP.R.IB.A. Apply (with chequ for £2 2s.) to Mr. H. A. Learoyd, Tow Clerk, Guildhall, Hull. |
| No date | Designs for lay-out of about three acres o land as burial ground at Yeovil. Premiu £20. Apply Mr. H. C. Batten, Clerk to th Burial Committee, Yeovil. |

# Coming Events

### *Wednesday, May* 16.

Royal Society of Arts.—"Industri Lighting and the Prevention of Acc dents." 8 p.m.

University College.—"Dutch Archite ture in the Sixteenth, and Seventeent and Twentieth Centuries." 5.30 p.m.

### *Friday, May* 18.

Art Workers' Guild.—"Shop Fron and Shop Fittings." 8 p.m.

Architects' and Surveyors' Assistant Professional Union.—Visit to premis of Peek Frean. Meet outside at 2 p.m.

Edinburgh A.A.—Visit to Falklan Palace. Leader: Mrs. Reginald Fairley

# The Week's News

*Extension of Ealing Hospital.*

12,000 is to be spent on the extension Ealing Hospital.

*New Church for Northwood.*

new Wesleyan church is to be built Northwood at a cost of £10,000.

*Wallsend Hospital Scheme.*

he question of establishing a hospital eing considered by the Wallsend Town ncil.

*Power Station for Pickering.*

t is proposed to install electric lighting Pickering and build a power station.

*The Condition of a Kentish Tower.*

uilt in 1100, the tower of Lympne nt) Parish Church is declared in ger of collapse.

*Electric "Tube" under the Tyne.*

nother scheme is being propounded the construction of an electric tube way under the Tyne between North South Shields.

*oposed New Hospital for Newcastle.*

t a meeting of the Northumberland, ham, and Newcastle Infirmary for eases of the Eye it was reported that ew hospital was urgently required.

*Housing at Guildford.*

lans of a new housing scheme, in ping with the conditions governing new Housing Bill, are to be submitted the Housing Committee to the Town ncil.

*Professional Practice.*

r. Edgar R. Griffiths, M.S.A., P.A.S.I., commenced practice at 12 College eet, Swansea (Telephone, Central 75), will be pleased to receive catalogues,

*Bridge at Selby.*

new bridge over the Aire and Calder al is proposed. In the event of the me materializing about 50 per cent. he cost would be contributed by the istry of Transport.

*New Park for Watford.*

he Town Council have decided to chase from a local syndicate thirty- e acres of the Cassiobury estate for ooo. The new land will be thrown the present public park.

*Scottish Housing Bonds.*

cottish local authorities, who are still ing housing bonds, are requested by Scottish Board of Health to ensure the rate of interest is 4½ per cent. in ect of bonds issued after May 7.

*he Manchester Society of Architects.*

ccording to the last annual report of Manchester Society of Architects was subscribed by the members ng the session to the Manchester versity School of Architecture Fund, £60 15s. 6d. to the R.I.B.A. Fund he restoration of St. Paul's Cathedral. ing the session the council again perated with the Manchester Univer- and the Institute of Builders in arranging a series of public lectures on architecture, many interesting papers were read, and a number of students' competitions were held. The total membership of the society is now 317.

*Hastings Band Pavilion.*

A Willesden firm's tender to pull down the East Sussex Hospital to make room for the proposed band pavilion has been accepted, the Corporation to receive £265 and the firm to retain the materials.

*New Bridge for Rotherham.*

Plans have been prepared for a new main road bridge at Rotherham, at an estimated cost of £25,000, to replace the present narrow structure. As there is no other bridge over the river at this point, a temporary track will have to be provided.

*Lord Leconfield's Linton Estate.*

The Linton Estate, situated between Wetherby and Woodhall, embracing 671 acres of land, has been sold to Captain Hudson, M.C., and Mr. H. Crossley, of Wetherby. Many building sites are to be developed.

*Reconstruction of Bridge over Tweed.*

The Roxburgh County Council have approved the reconstruction of Drygrange Bridge, over the Tweed, near Melrose, at an estimated cost of £7,500, provided that a grant is received from the Ministry of Transport.

*The Condition of a London Church.*

The Archbishop of Canterbury and the Bishop of Southwark have given their support to an appeal for £2,000 for the restoration of St. John's Church, Waterloo Road, one of the four churches built by the nation as a thanksgiving for the victory of Waterloo.

*New Partnership.*

Mr. Arthur W. Curtis, who has been closely associated with Mr. Robert Angell, Licentiate R.I.B.A., of Keith House, 133 and 135 Regent Street, London, W.1, in his profession for about twenty years, has now become his partner, the title of the firm being "Robert Angell and Curtis."

*Proposed New Bridge for Newcastle.*

The General Purposes Committee of the Newcastle Chamber of Commerce are considering the proposal for the erection of a new high-level bridge over the Tyne. The bridge, which would accommodate vehicles and passengers, is estimated to cost £1,000,000.

*Bishop Jacob Memorial Church.*

The foundation-stone has been laid of the church that is to be built in the new parish of St. Andrew's, Ilford, as a memorial to Bishop Jacob. The new church has been designed by Mr. Herbert Baker, A.R.A. It will, when completed, have accommodation for about 650 people.

*York City Memorial.*

A meeting has been held by the Councils of the Yorkshire Philosophical Society and the Yorkshire Architectural and York Archæological Society to consider what steps should be taken to protest against the erection of the York City War Memorial on the mounds of the City Wall near to Lendal Bridge.

*Peterborough Cathedral Restoration.*

The Peterborough Cathedral Restoration Committee have received over £2,000 in the past few weeks. Enough money is now available for making the bell tower safe. Another £1,850 will be required for the bells. The gift of one bell has already been promised.

*Local Bonds for Housing.*

His Majesty's Treasury have decided that the rate of interest on local bonds issued on or after the 7th instant shall be 4½ per cent. per annum. If, however, a local authority satisfies the Minister of Health that a different rate can properly be fixed, he will be prepared to ask the Treasury to fix a special rate for that authority.

*The Masonic Memorial Temple.*

A site in Broad Street, Birmingham, has been selected for the new Masonic Temple for the Province of Warwickshire. The Temple—a memorial to the freemasons who fell in the war—will be the subject of a competition limited to architects who are subscribers to a masonic lodge in Warwickshire.

*Eastbourne Park to be Extended.*

The Corporation of Eastbourne have bought the Manor House, near the Royal Eastbourne Golf Links, for the extension of Gildredge Park. The price paid is £19,000. The house has a great deal of interior decoration by the Brothers Adam. The old-world gardens in which is an Adam summer house, extend to nearly nine acres.

*New Dance Hall for Liverpool*

A new dancing salon, capable of accommodating 1,000 persons, is to be constructed in Liverpool. It will be known as "The Grafton Rooms," and will be situated in West Derby Road, next to the Olympia Theatre. Plans for the venture have been passed by the Theatres and Public Entertainments Committee. The hall will involve the expenditure of £15,000 to £20,000.

*Bournemouth Improvements.*

The Ministry of Health have held an inquiry into an application of the Town Council for sanction to borrow £7,600 for the purchase of a property on the sea front near Boscombe Pier for the purposes of public walks and pleasure grounds, and the widening of the road leading to the sea front. The Corporation propose to erect seventeen bungalows and refreshment rooms.

*York Minster Ladye Chapel.*

Extensive alterations have been made to the Ladye Chapel of York Minster. The altar, the gift of Dr. John Ellerton, consists of a large slab of Derbyshire black marble measuring 15 ft. by 4 ft., 8 in. thick, and weighing two tons. This is placed upon a massive oak base which is inscribed. The reredos above the altar is of stone and represents the visit of the shepherds and the magi to the manger.

*The Week's News—continued.*

### *The Norwich Housing Exhibition.*

The third Norwich Housing and Home Life Economy Exhibition and Fair will be held in the Agricultural Hall, Norwich, from October 5 to 20. The exhibits will comprise everything consumed or required in the home, and will include building materials, furnishing, sanitary appliances, and decorations. The orchestral band of the Royal Marines (Chatham Division) has been engaged. Full particulars with regard to the exhibition may be obtained from Mr. H. W. Larcher, at 27 Eccleston Square, London, S.W.1.

### *Housing Progress in Scotland.*

The following figures show the progress that has been made in State-aided housing schemes in Scotland to March 31, 1923:—Permanent houses completed, 15,935; temporary houses completed, 665; reconstructed houses completed, 101; houses completed under the private subsidy scheme, 2,241. Total 18,942. There are 4,956 houses at present under construction in connection with housing schemes carried out by local authorities and public utility societies. The total amount paid by the Scottish Board of Health in respect of the 2,241 houses completed under the private subsidy schemes is £541,137.

### *Sanctuary for Somme Dead.*

In honour of the dead of both nations who fell on the battlefields of the Somme, an Anglo-French sanctuary is to be built outside Amiens and dedicated for ever to their memory. The sanctuary has been designed by a well-known French architect. It takes the form of a "Pantheon," with side chapels, which can be dedicated to special divisions. The British headquarters of the Memorial Fund are at Surrey House, Marble Arch, where all subscriptions should be sent. They should be addressed either to Lord Burnham (the chairman) or to Mrs. C. F. Leyel, the organizing secretary for the British Empire.

### *Hill Top Open Space for London.*

Negotiations are proceeding for the acquisition of the estate of Jackwood, of 22 acres, near the summit of Shooter's Hill, as an open space. The price of this woodland is £2,250, towards which the Metropolitan Public Gardens Association has promised to subscribe £750, including a contribution of £500 from the Poulter Trust, and the Woolwich Metropolitan Borough Council will contribute one-third, not exceeding £500, of the balance of the purchase money.

## Openings for British Trade

There is an opening in Florida for cement. A dealer in building materials in Montreal is desirous of getting into touch with United Kingdom suppliers of brick. The type of brick required is a good red brick not necessarily uniform in colour but sufficiently tough to withstand the rough handling involved in loading and unloading from the steamship, as the brick would have to be shipped loose. United Kingdom firms desirous of obtaining the name and address of the enquirers should apply to the Department of Overseas Trade, 35 Old Queen Street, Westminster, S.W.1. Reference 19237/F.W./M.C.(2) should be quoted for the first enquiry, and reference 10933/E.D./M.C.(2) for the other.

## A Correction

Owing to a misunderstanding the illustration on page 718, in our issue of April 25, was described as a Fresco Painting by J. D. Batten. Mr. Batten informs us that this is not his work, and that the fresco is made up of exercises he had set to his students.

## Parliamentary Notes

[BY OUR SPECIAL REPRESENTATIVE.]

### *State-aided Housing Schemes.*

Lord E. Percy informed Mr. Millar that the State-assisted housing schemes of local authorities and public utility societies in England and Wales were limited to 176,000 houses, of which 159,000 had been completed on April 1 last, and 16,998 were either in course of construction or had not been commenced. It was estimated that the total Exchequer charge in respect of the 176,000 houses in England and Wales would amount approximately to £8,750,000 per annum in the early years.

### *Scottish Housing.*

Capt. Elliot informed Mr. Millar that the number of houses allocated to local authorities and public utility societies in Scotland under the Housing, Town Planning, etc. (Scotland) Act, 1919, was 25,550. Up to date about 16,600 of these had been completed. The amount of the State liability was estimated to be not less than £1,000,000 per annum.

### *The Cost of Materials.*

Mr. T. Johnston asked the Minister of Health to what extent the cost of building materials decreased after the withdrawal of the housing subsidy in 1921; and what percentage it had again increased since the introduction of the new Housing Bill.

Lord E. Percy, who replied, said that although a limit was put upon the assisted schemes in 1921, construction continued under the private builders' subsidy scheme until June 1922, and the whole of the houses under the local authorities' assisted scheme were not yet completed. The decrease in the cost of materials as required for the construction of a working-class house in the London area, between July 1921 and April 1923, was about 42 per cent. There was no evidence of any average increase of price since the introduction of the new Housing Bill.

## New Inventions

### *Latest Patent Applications.*

10486.—Landmark, H.—Manufacture of jointless floorings. April 17.

10830.—Mason, S. J.—Construction of walls, buildings, etc. April 21.

11064.—Beal, E. T.—Device for showing colour-schemes for house decoration, etc. April 24.

11005.—Booton, H.—Expanded metal. April 23.

11045.—Brown, H.—Facing bricks
slabs, etc. April 24.

10955.—Francis, J. H. E.—Vitreou
enamelled tiles, bricks, et
April 23.

### *Specifications Published.*

195724.—Duncombe, S. L.—Grip fo
slats used on the floors an
roofs of vehicles, on lifts, stair
corridors, and for other lik
purposes.

195859.—Kahn, M.—Centering or fals
work for concrete floors and th
like.

195909.—Ryan Manufacturing and Con
struction Co., Ltd., and Ryan
J.—Process of manufacturin
ceiling and partition slabs, o
building-blocks manufacture
according to said process an
apparatus for the said manu
facture.

196033.—Kirk, R. H., and Martinez, H.–
Method of constructing th
outer walls of bungalows an
other buildings.

196072.—Fowler & Co. (Leeds), Ltd., J
Wood, D., and Wood, E.–
Tar heating and spraying de
vices applicable to steam road
rollers.

### *Abstract Published.*

194056.—Roofs.—T. Furniss, of 36
Bradford Road, Fartown, Hud
dersfield.—Collapsible cores fo
hollow walls are made in sec
tions and of greater height tha
the shutters, and the top align
ing bar which enters grooves i
the cores is adapted to carr
a shutter-supporting frame wit
clamping screws at the lowe
ends of the depending leg
The cores are spaced long
tudinally by bars which ente
slots in the cores and suppo
transverse reinforcing stirru
to the ends of which are a
tached the horizontal and ve
tical wall reinforcements.

194627.—Building-blocks.—Hultin, V. K
6 Linnegatan, Stockholm.—
building-block of trough or bo
form is provided on its uppe
surface with longitudin
grooves flanked by upstandin
flanges and two parallel tran
verse grooves at or near th
centre thereof. The ends of th
block are provided with groov
in continuation of the longitu
dinal grooves, and the botto
edge is rebated so as to produ
flanges on all four sides. Th
transverse grooves are intende
to engage the flanges of ad
jacent blocks. The blocks ma
be made of a mixture of saw
dust, cork dust, peat litter, ha
clay, straw, earth, pine needl
and cones, and any kind of lig
rubbish, floor sweepings, etc
stirred together with a mixtu
of magnesite and chlorate
magnesium, etc.

The above particulars are specially prepared
Messrs. Rayner & Co., registered patent agents,
5 Chancery Lane, London, W.C.2, from whom readers
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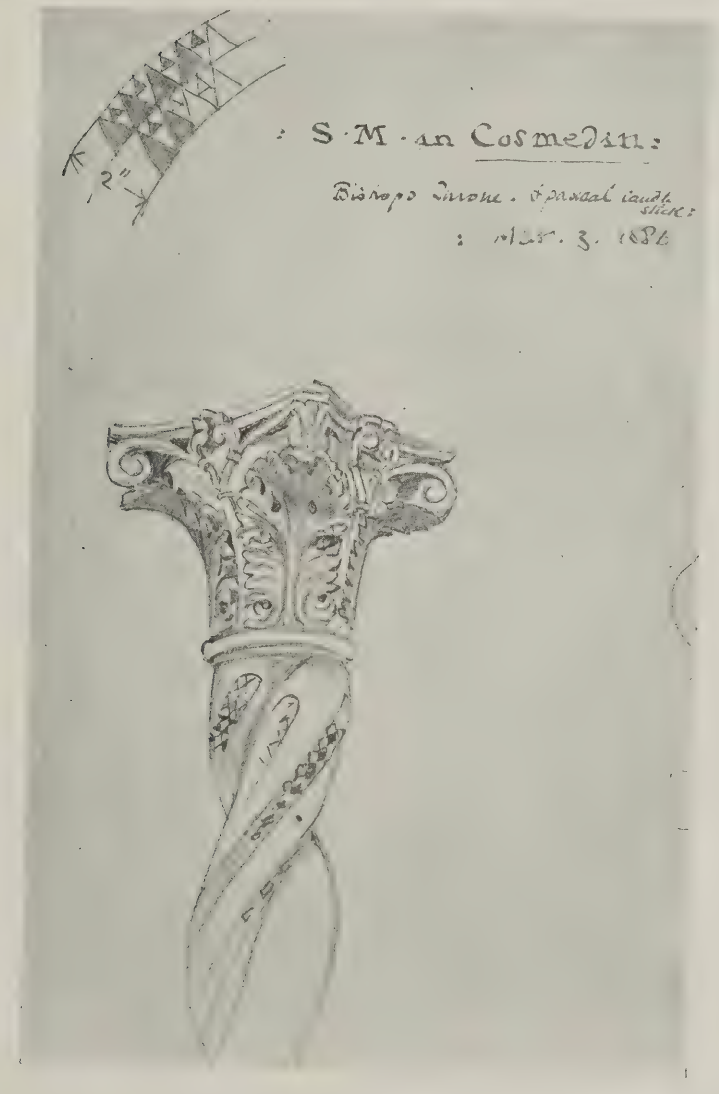
ednesday, May 23, 1923.
Vol. LVII. No. 1481

# THE ARCHITECTS' JOURNAL & Architectural Engineer

*With which is incorporated "The Builders' Journal."*



DETAIL OF A CANDLESTICK.
*(From the Sketch-Book of the late Gerald Horsley.)*

27-29 Tothill Street, Westminster, S.W.1.

# Church Row, Hampstead

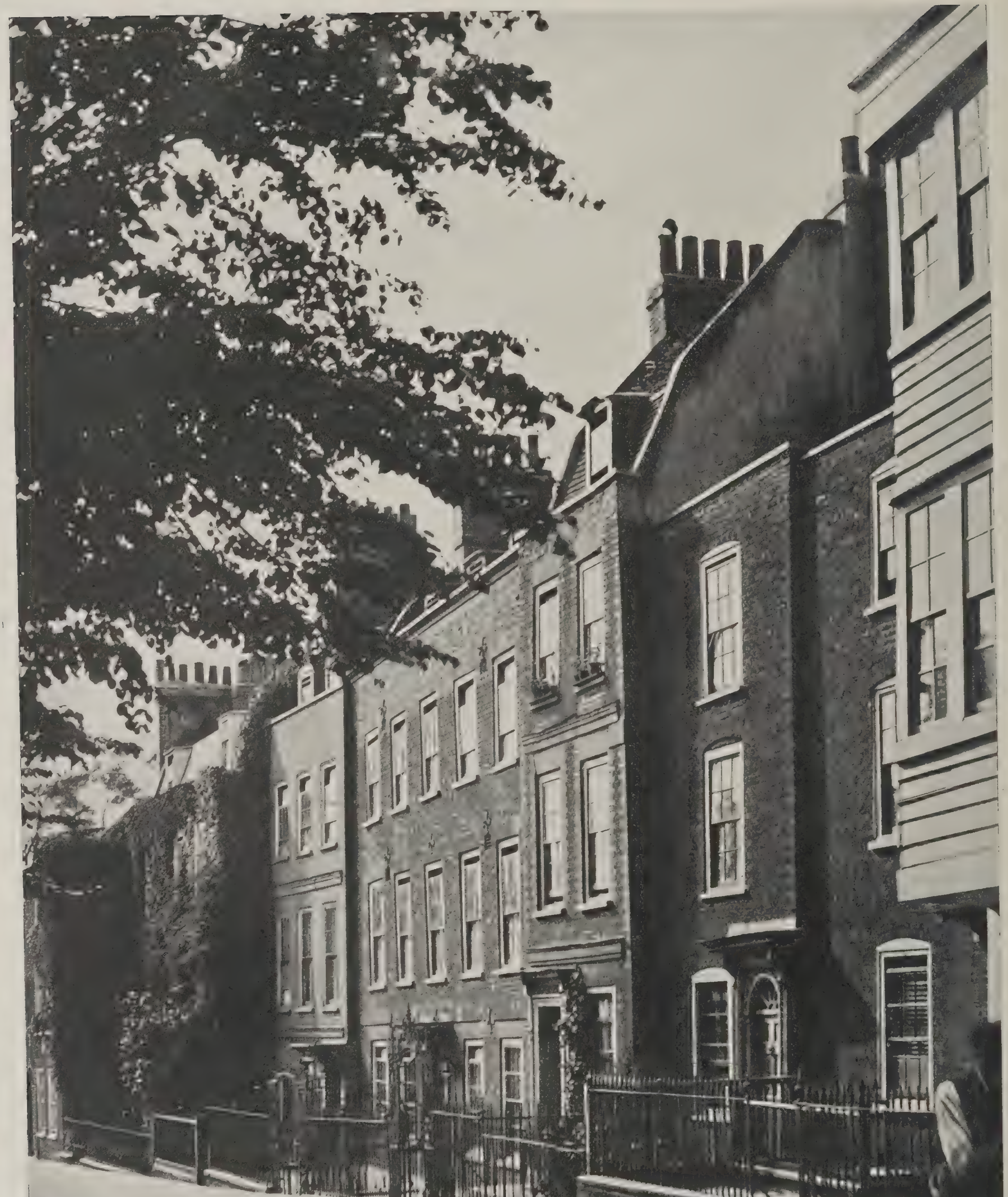


*Photo: E. M. Hick.*

The houses which line this quaint backwater off Heath Street, leading to the Parish Church, possess a quaint charm and dignity which are characteristic of their period. The manner in which some of the houses break forward gives an added interest, and the doorcases and wrought-ironwork repay careful study.

THE

ARCHITECTS' JOURNAL

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# Colour and Concrete

NOWHERE, perhaps, is conservatism in matters connected with building more consistently displayed than in the method of using concrete. Its value constructionally has long been realized, ut never fully exploited, and there is scant appreciation n England of its decorative qualities. This is all the more trange in view of the growing desire for colour in building, quality which concrete is particularly able to provide. n England we have become so accustomed to the cold, rey surface of concrete that we are apt to regard it as an evitable disadvantage which generally compels us to ide the concrete with a veneer of some more costly aterial. Actually, however, the surface that is presented our view is, for the most part, not concrete but cement, asmuch that in the process of tamping the plastic material etween the shuttering a film of cement is floated to the utside. The bulk of concrete, however, is the aggregate, it ay therefore be said that the real nature of the material not exposed to view unless some special steps are taken fter the removal of the shuttering. If, therefore, an ggregate having a natural colour were employed, and if, fter the removal of the shuttering, steps were taken for moving the thin film of cement, the result would be a rface which would present the prevailing tones of the ggregate.

In America a considerable amount of experimental work as been done with concrete surfaces, the systems employed ing of two kinds; either the removal of the outside ment skin, and so exposing the aggregate, or, by the plication of a special mortar, making this surface skin ore attractive than it is if left to itself. The usual ethods employed for exposing the aggregate are by eans of scrubbing, sand-blasting, and tooling. Scrubbing carried out by means of a fibre or wire brush, or, indeed, ordinary scrubbing brush, and water while the concrete yet green. To judge the precise moment when the uttering should be removed is a matter of experience, r this will vary according to the mixture and the climatic nditions. Scrubbing by means of a concrete brick or a rborundum stone has also been tried. Sand-blasting is rried out by means of an air-compressor which directs a eam of fine sand against the surface and so removes the tside mortar. Where for some reason it is not possible remove the forms until after the concrete has set, mmering, by means of a specially cut hammer, may hieve the desired effect. For large buildings this process carried out by means of pneumatic tools. A variation the surface can be obtained according to the kind of w that is applied; whether it be perpendicular or ncing. In works of monumental character, and where t is not the first consideration, specially selected aggre- es are used, such as marble, granite, and flint, but even vel or shingle can be productive of beautiful effects. re by careful grading of size and colour there is an mense range of possibilities. After the outer skin has n removed according to one of the methods already described, the colour of the aggregate may be yet further enhanced by treating the walls with a wash containing muriatic acid. It is also possible to obtain a highly polished surface, power grinding machines being available for this work.

The other method, by means of which a special outer surface is applied, is probably on the whole cheaper, but it does not lead to such beautiful results as aggregate exposing. An iron sheeting is slipped down inside the outer main shuttering from which it is separated about 1½ in. by means of distance pieces. Thus the cavity is divided. The main cavity is filled with the ordinary mixture and the small cavity is filled with a specially mixed mortar. So soon as each section is filled the iron sheet is withdrawn and the whole tamped into a homogeneous mass.

These, briefly, are the lines along which beauty in colour and texture in concrete are being obtained, not only in America, but on the Continent, where the use of concrete is far more extensive than it is in England.

It is now seven years since the L.C.C. framed special regulations for reinforced concrete; during that time the use of the material has certainly not spread with the rapidity which its suitability for certain types of building would suggest. The explanation lies, we think, in a national and deep-rooted conservatism, both among architects and builders. If a comparison is made between steel framing and concrete framing, the only advantage of the former seems to lie in the greater speed of erection, and this we grant, in cities where huge ground rents are demanded, is an important consideration. But it is doubtful if even this is more than a temporary disability due to the lack of organization and experience in the building trade in connection with the extensive use of concrete. The fact that other countries, whose conditions are more or less similar to our own, use the material with advantage should be sufficient to prove that our failure to do likewise amounts almost to a prejudice.

Since the war there has been a decided extension in the use of concrete for small houses. Although these houses are structurally and financially satisfactory their appearance has often left much to be desired. Where every consideration is sacrificed to that of economy this is almost inevitable, and the result would have been equally depressing whatever the material. Often, however, the cause is due to an unenterprising use of the material. It is no difficult matter to produce coloured concrete blocks, and this fact opens up great possibilities, for by the use of two or three different colours on a house, or on a housing scheme, most original and delightful effects might be obtained, such as dark-toned plinth, light-toned main walls, and a tinted frieze, or perhaps a dark plinth, light walls, with quoins and lintels picked out in colour.

Such devices are a legitimate use of the material, far more so, indeed, than that of imitating various stone dressings on the face of the block. For the larger house, where the importance of colour and texture is amply realized by the consideration given to the selection of the brick, concrete could be used with equal effect in districts where good bricks were not plentiful. In countries where the same brick-building traditions do not exist it is, of course, easier to break new ground. But in art, no less than in other spheres of activity, it is always impolitic to ignore new developments. We hope, therefore, that the revived building activity which has become manifest during the present year may see the growing desire for colour in our buildings gratified by the skilful use of concrete.

## The Building Trade Wages Award

The arbitrator's award in the building trade dispute may not give complete satisfaction to either side; if it did there would be little hope of that peace without which there can be neither prosperity nor progress for the industry. The award is obviously a compromise reached after a careful consideration of the merits of both sides. Neither party has won its case entirely, yet, on the other hand, neither has to suffer the humiliation of defeat. Both have the satisfaction of knowing that their cases have been considered fully and impartially, and that the award provides a reasonable basis of peace. Briefly, the meaning of the award is that the employers get half the reduction in wages that they claimed, the operatives being safeguarded against further reductions except those that automatically come about as a result of the fall in the cost of living. The firm establishment of the sliding scale removes the grievance of the operatives that their wages were subject to reductions for reasons other than the cost of living—general depression in trade or wage changes in other industries, for example. Rightly or wrongly they feared that the demands of the employers were merely the prelude to a general attack on wages; that fear is finally removed. The employers may not find the small reduction in wages of very much use in cheapening the cost of building, but at least it is something in the right direction. For a real reduction in costs we must look to lower prices of materials, the reduction of transport charges, and, of course, increased output by the operatives. This is the most important point of all, and with good will on both sides there should be no difficulty in securing it. On the question of the validity of the National Agreement, Sir Hugh Fraser gave no ruling. He found that it "requires revision by mutual consent in the interests of the entire industry, and in order that the purposes and intentions of the parties thereto should be more clearly indicated." A very just decision; any other must have precipitated a new crisis.

## The Consequences of a Broken Tradition

We note that the Architecture Club's "Twenty Years of British Architecture Exhibition" has migrated to Manchester where, in the City Art Gallery, it is carrying on the good work of showing the public something of the capabilities of living architects. Professor C. H. Reilly, in the course of an able criticism in "The Manchester Guardian," says that one "cannot help coming to the conclusion that the success of the last twenty years' building has mainly lain in the larger country houses. Here the individualism which has been the most marked characteristic of English architecture since the Gothic Revival in the middle of last century broke the long and slowly moving line of Renaissance tradition has done least harm." Later Professor Reilly observes that it is in "public buildings that the success achieved is less marked." A just if somewhat adverse summary of the situation. The professor is, of course, speaking broadly, and he does not fail to point out that there are notable exceptions to redeem what might otherwise be regarded as an unhappy state of affairs. But if our monumental work has on the whole been more ornamental than reticent, it has at least been full of character; it has avoided the barren bleakness that is the predominant characteristic of much of the work of the Classic Revival, for example. We have been passing through the period of transition that is the inevitable prelude to better things; and the better things are already upon us.

## The Decay of Building Stones

The decision to set up under the Department of Scientific and Industrial Research a special committee of the Building Research Board to report on the best methods by which decay in building stones may be prevented or arrested, is very welcome if rather belated. This should have been done years ago, for the problem is an old one—as old, indeed, as history itself. There is no need, however, to go too far back into the remote past, for it is only since the beginning of the industrial era, with the growth of the great cities and their air-contaminating factories, that the problem has developed to a state of acuteness. Until electricity becomes the universal means of manufacture it is likely to remain acute. Our predecessors through all time have known this problem of decay almost as well as we know it; but until about a century ago they had the advantage of us in so far as they were battling only with the elements, and knew nothing of the man-created vapours that disintegrate our buildings to-day. Our forefathers patched and repaired as necessary, or pulled down and built up again. Then, however, the problem was not of the same economic importance as it is now. You may pull down and rebuild your shire hall where you cannot, or must not, pull down and rebuild your Houses of Parliament, to say nothing of your abbeys and castles. The problem is one that is urgently in need of the closest possible investigation. If the committee succeeds in discovering a method of preventing or arresting decay in building stones (we believe, by the way, that there are already compounds in existence that claim these powers) it will have rendered a universal service of incalculable value.

## Terra-cotta Redivivus

The terms of their inquiry will not, we imagine, allow the committee referred to in the preceding note to take cognizance of those manufactured materials which are already known to be immune from the effects of time and weather—concrete and terra-cotta, for example. The development of concrete has undoubtedly been much hindered by the difficulty of getting a satisfactory surface treatment for the material, but the same objection no longer applies to terra-cotta, which, we notice, is being increasingly used for architectural exteriors. With the more attractive surface finish which is now obtained as a result of improved methods of manufacture, its remarkable cleanliness and its great fire-resisting properties, terra-cotta promises to become a highly popular building material in the near future.

## The Repair of Ancient Churches

Bishop Welldon in a letter to "The Times" records the fact that the central tower of Durham Cathedral, which has been closed for repairs for more than ten years, has now been re-opened. A sum of £10,000 has been spent on the restoration of this tower alone, and it is estimated that no less a sum than £50,000 is required to make good the ravages of time in other parts of the Cathedral. It is only huge figures like these that can bring home the cost of merely preserving such ancient fabrics. When the plight of other great buildings is remembered—Westminster Abbey, York, Lincoln, and Exeter, for example—the figure involved becomes enormous. And the irony of it is that all our reparations must themselves in course of time require repair, and re-repair, *ad infinitum*. In many of our ancient churches little of the original work can now remain. So far as these buildings are concerned, the committee which is now searching for a stone preservative begins its work centuries too late.

# Professor Reilly on Some Faults in Architecture

PROFESSOR C. H. REILLY, of Liverpool University, recently advised the members of the Manchester Luncheon Club on the relation between cities and their architecture. "The ppearance of our town," he said, "is the symbol of our vorth; there is no art so intimately connected with our ves, no art to escape which is so difficult."

It had often been said that the town was eating up and poiling the country, but how seldom was it realized that he country was in fact spoiling the town! The country, e contended, had spoiled men's dress; the late poets of he nineteenth century taught men to forgo the nicety of ell-cut clothes and proper town garments. So also in the uburbs the houses were trying to look like country houses. ut in earlier days there were real town houses. There ust be some old squares and streets of them still in anchester. Real town houses with porticoes and fanghts, beautiful small town houses, were to be seen, for stance, in St. John's Wood, with acacia, willow, and burnum—a wise selection—about them. It was not only the suburbs that towns suffered from the illogical ixture of ideas. During the last fifty years towns had own too elegant; one saw romantic chateauesque outes; a roof of split Gloucester stone, than which only atch could be more inappropriate.

The business of townsmen to-day, Professor Reilly id, was to become really urban again, and to make sure their towns were first of all clean and efficient. It was no use to think of marble palaces like those of America so long as a filthy pall of smoke came falling down over their heads. Beyond the duty of cleanliness they had the duty of building, but they must be very good citizens before they could build a good town. The town was a reflection of its citizens. If they looked back to the long terraces of the eighteenth century they would discover that the cut of the houses was like the cut of the gentlemen's clothes. All the houses were more or less alike, sedate and dignified. Nowadays, with the rustic idea in full swing, everyone tried to be different, and by trying to be different, he argued, everyone was less of a good citizen.

"The choice of an architect," he continued, "is the most serious duty in life. It is as serious as if a man could choose his own father, and the work of the architect, remember, belongs to the town and not to you. We have got to be worried in our souls about our buildings or else we shall never have good ones." He thought that the only means to recovery of the fine renaissance spirit was to be found in the modern universities and in the schools of architecture growing up there. The Manchester school, he concluded, was one of them, and the city had in it a chance of making its young people missionaries to interpret to the future the great idea of a great city, but until then, he said, "choose your architect as you would your wife."

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# An Exhibition of the Work of Dutch Students at the A.A.

AN exhibition of Dutch architecture was opened on Thursday at the Architectural Association, 34 Bedford Square, in the form of some plans and drawings by Dutch students. The idea, appar- ly, was to compare their work with that of the dents of this country. Mr. Jan der Meyer, a Dutch hitect, opened the exhibition.

The work shown was altogether of a very high standard, general feeling seeming to be that it was very ad- nced work for students. It was work on original lines, . As Mr. H. M. Robertson said, in introducing Mr. n der Meyer to those present, "we do not see any ditional work."

he feeling almost of astonishment that prevailed, vever, was soon banished when Mr. Jan der Meyer, in speech opening the exhibition, explained that in lland they did not have a regular school such as in this ntry, the students only had lessons in the evening as—Mr. Jan der Meyer somewhat cryptically put it—"we not think you can keep architects at school." Architec- l students in Holland—and this is the point—have to n practice. They have to be in practice for two years re they can join a school. It seems, perhaps, rather a nge method to work on, but, nevertheless, from what shown at the exhibition it is successful enough. The stion still remains, however, if in Holland you are not wed to go to a school unless you have been in practice two years, how is it possible to gain the necessary cation to start practising?

he course of lessons Dutch students undergo lasts over riod of four years. Nearly all of the drawings in the bition were by students in their fourth year. The shown was a programme of different years. There one of five years ago and one of twelve years ago, so the progress that has been made could be seen. It was evidently the very best work that had been done that was shown.

A point Mr. Jan der Meyer emphasized was the fact that they in Holland always fought for the freedom of each architect. The architects in this country, he said, were for him "too classic"—the fact that Dutch architects were the opposite was borne out by the exhibition. The most ideal work, he went on to say, that Dutch students had had to do was to make designs for some new state buildings, of which some examples were shown. One by a gentleman who instead of signing his name always drew a half-moon in the top right-hand corner of his design was particularly fine. He planned the buildings on a vast scale, and altogether had made a most elaborate design.

At the conclusion of Mr. Jan der Meyer's speech, Mr. L. S. Sullivan gave him a very hearty vote of thanks, remarking on the fact that it was Mr. Jan der Meyer who had the idea of getting together the theatrical exhibition at South Kensington which proved such a success some time ago. The designs in this Dutch exhibition, he continued, were made in much the same way as the designs were made in the Design Clubs of the Architectural Association.

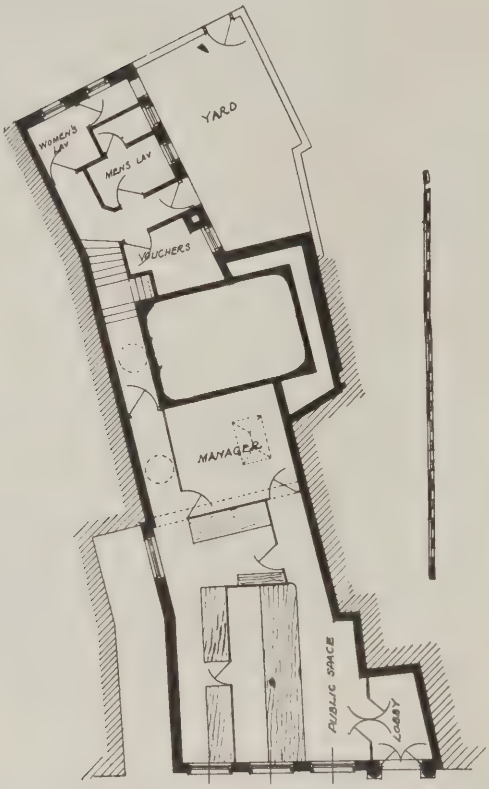
He also bore witness to the sporting good fellowship of Mr. Meyer when he lost his hat the other day; he (the speaker) thought they all admired very much the way in which he took the somewhat extraordinary hat that was returned to him.

The exhibition was in every way most interesting. It was not large—there could not have been the work of more than ten people there. The greater part consisted of various designs for a university, the plans for a group of state buildings, before mentioned, and one or two minor designs by students under their fourth year. As can be seen it was all big work—there were hardly any examples of Dutch domestic architecture.

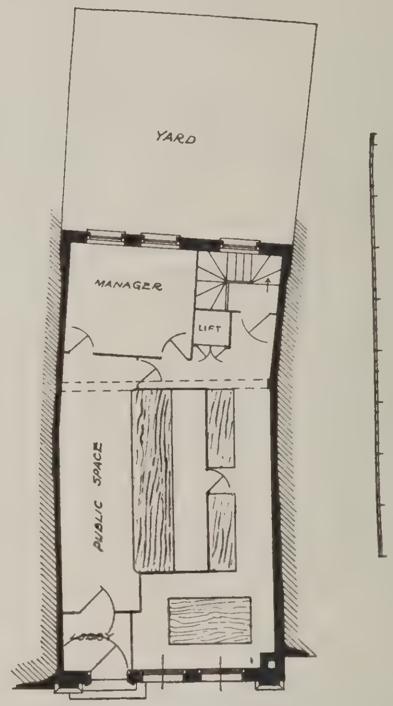
# Some Recent Bank Premises

## GOTCH and SAUNDERS, FF.R.I.B.A., Architects

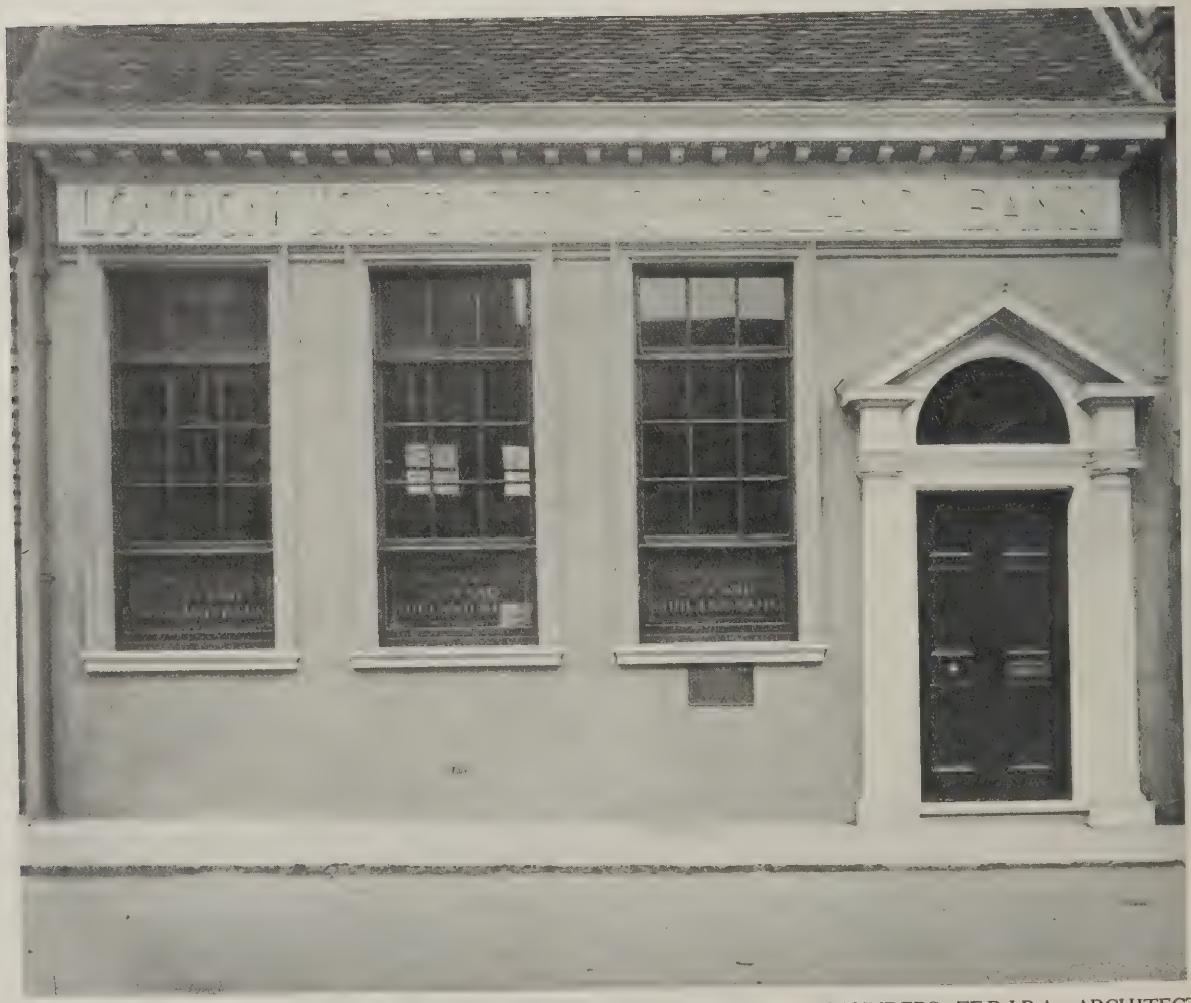
*(Particulars of these Banks will be found on page 909.)*



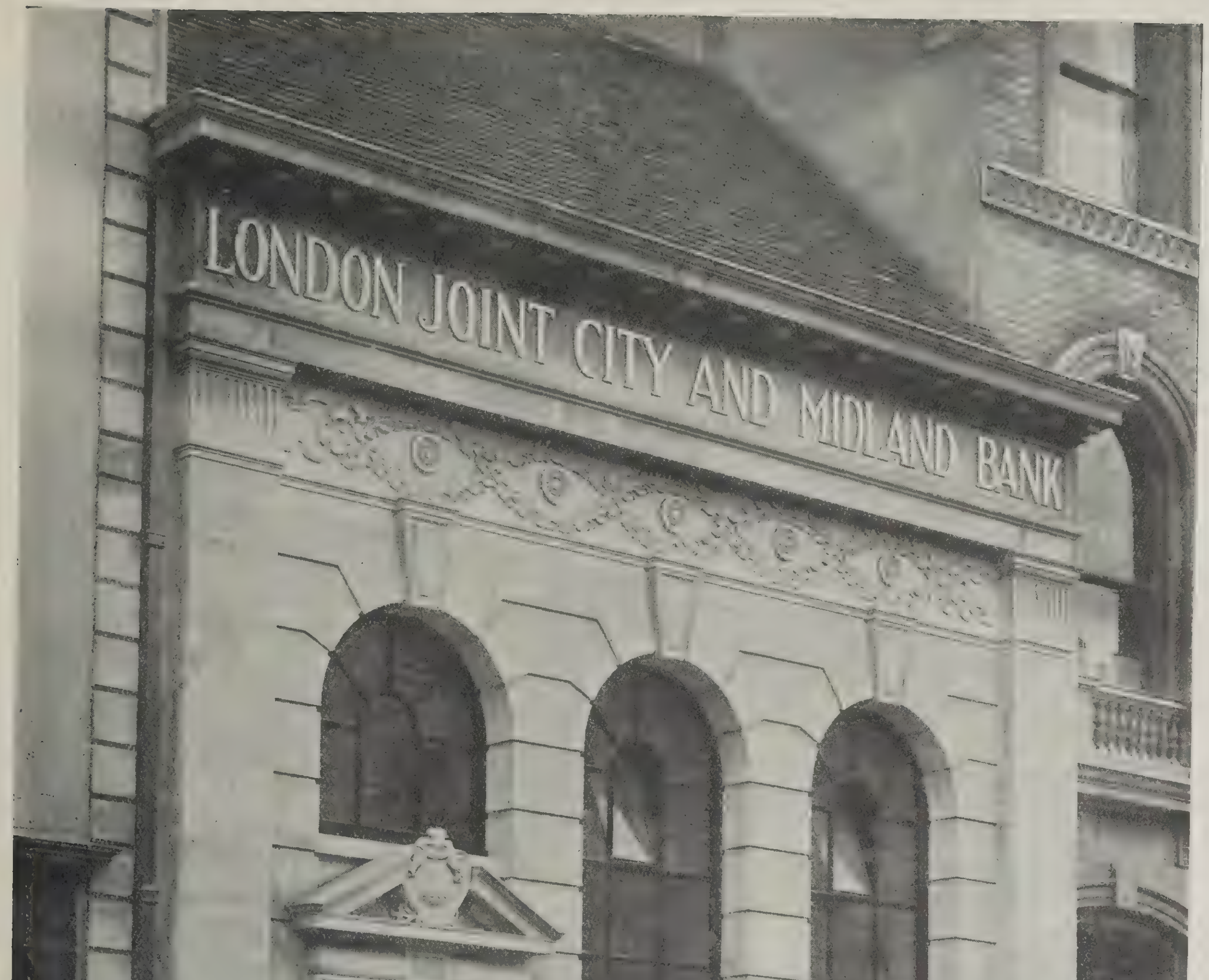
BANK AT FORDINGBRIDGE.



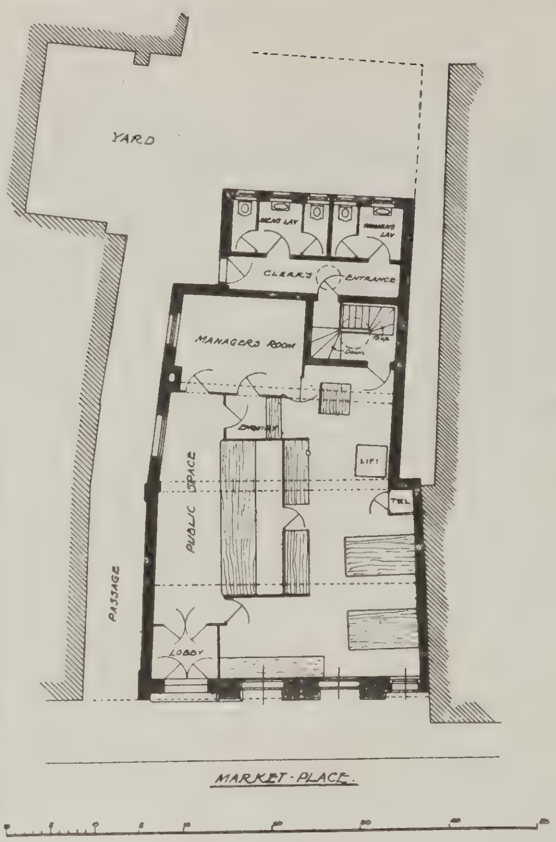
BANK AT LEWES.



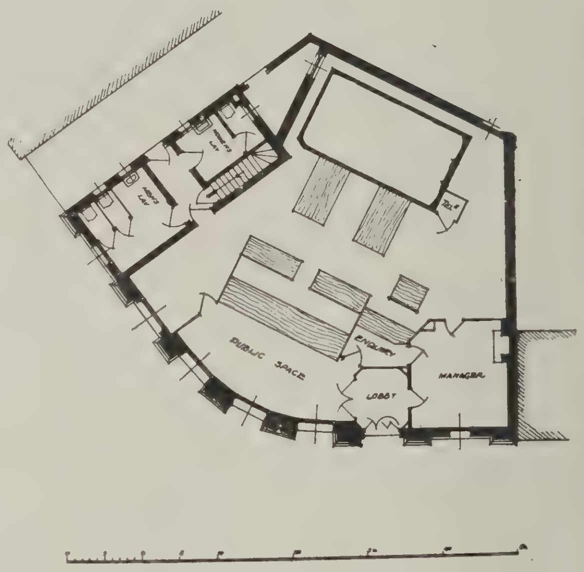
LONDON JOINT CITY AND MIDLAND BANK, FORDINGBRIDGE. GOTCH AND SAUNDERS, FF.R.I.B.A., ARCHITECTS.



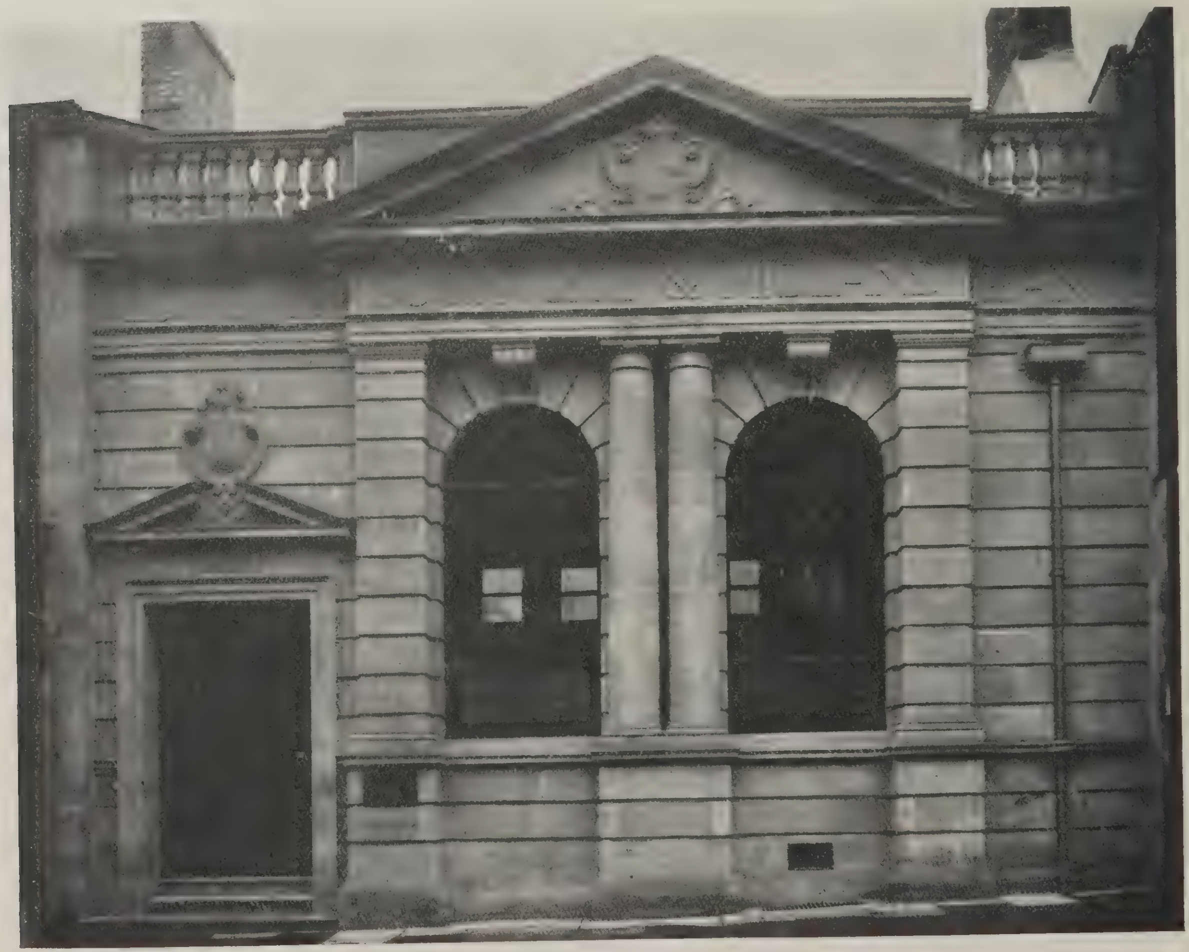
LONDON JOINT CITY AND MIDLAND BANK, LEWES.
GOTCH AND SAUNDERS, FF.R.I.B.A., ARCHITECTS.



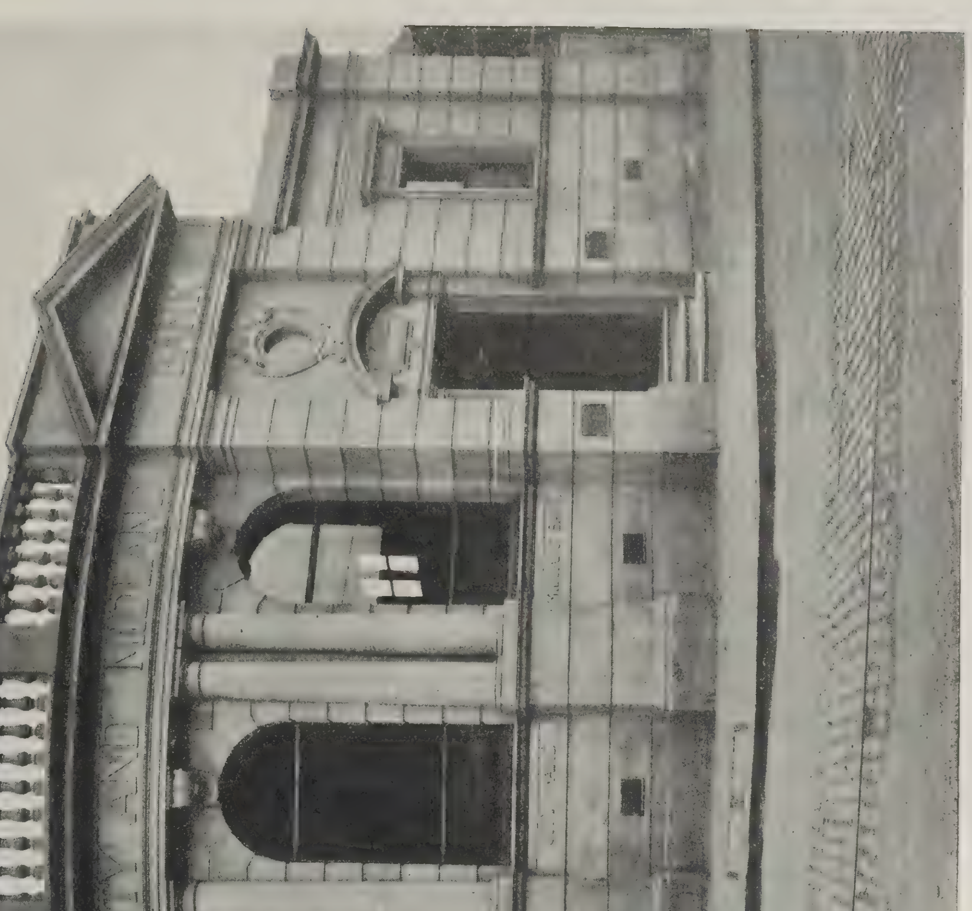
BANK AT DURSLEY.



BANK AT BLACKHEATH.



LONDON JOINT CITY AND MIDLAND BANK, DURSLEY.
GOTCH AND SAUNDERS, FF.R.I.B.A., ARCHITECTS.



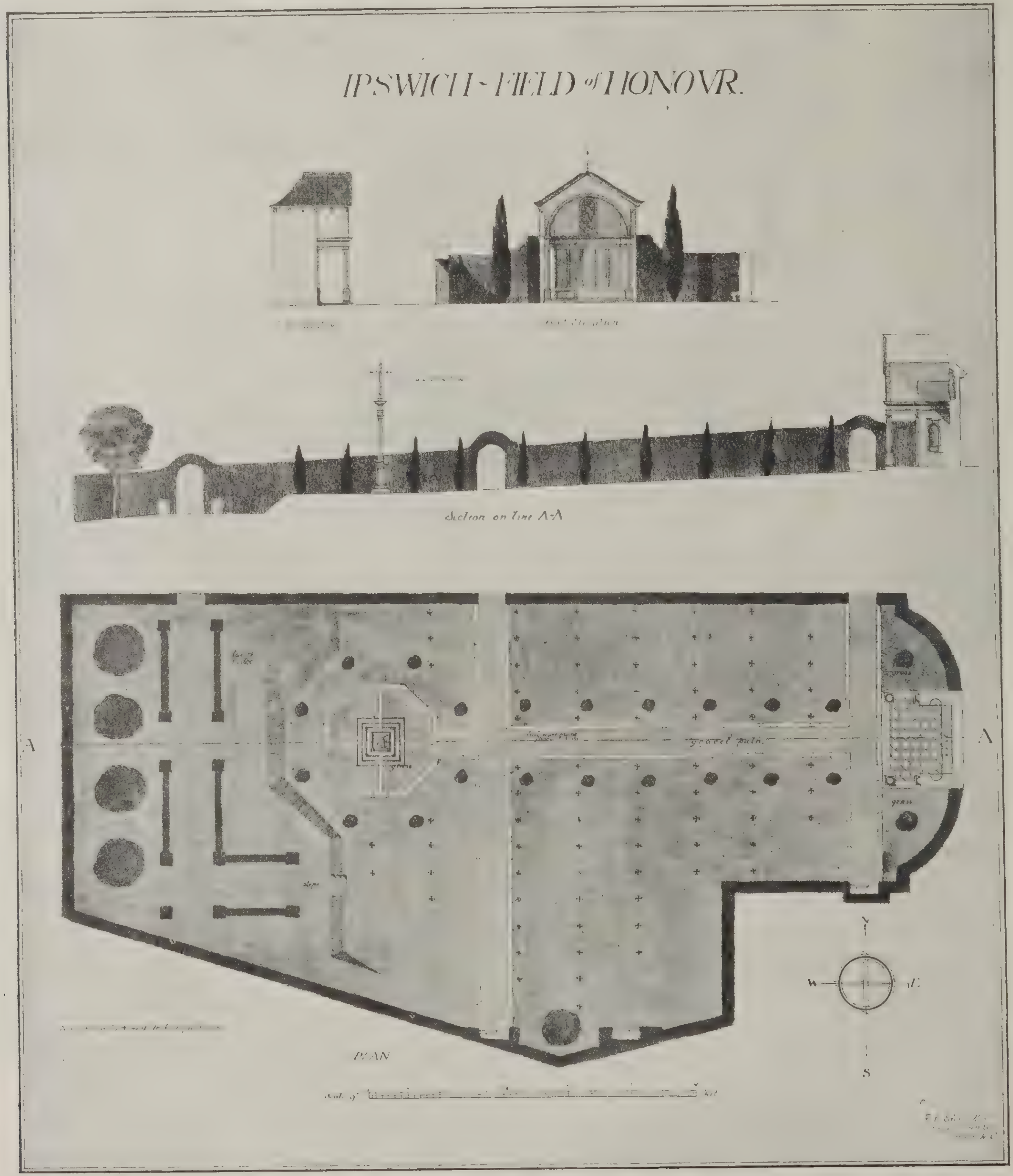
LONDON JOINT CITY AND MIDLAND BANK, BLACKHEATH. GOTCH AND SAUNDERS, FF.R.I.B.A., ARCHITECTS.

# Ipswich "Field of Honour"

## F. C. EDEN, M.A., F.R.I.B.A., Architect

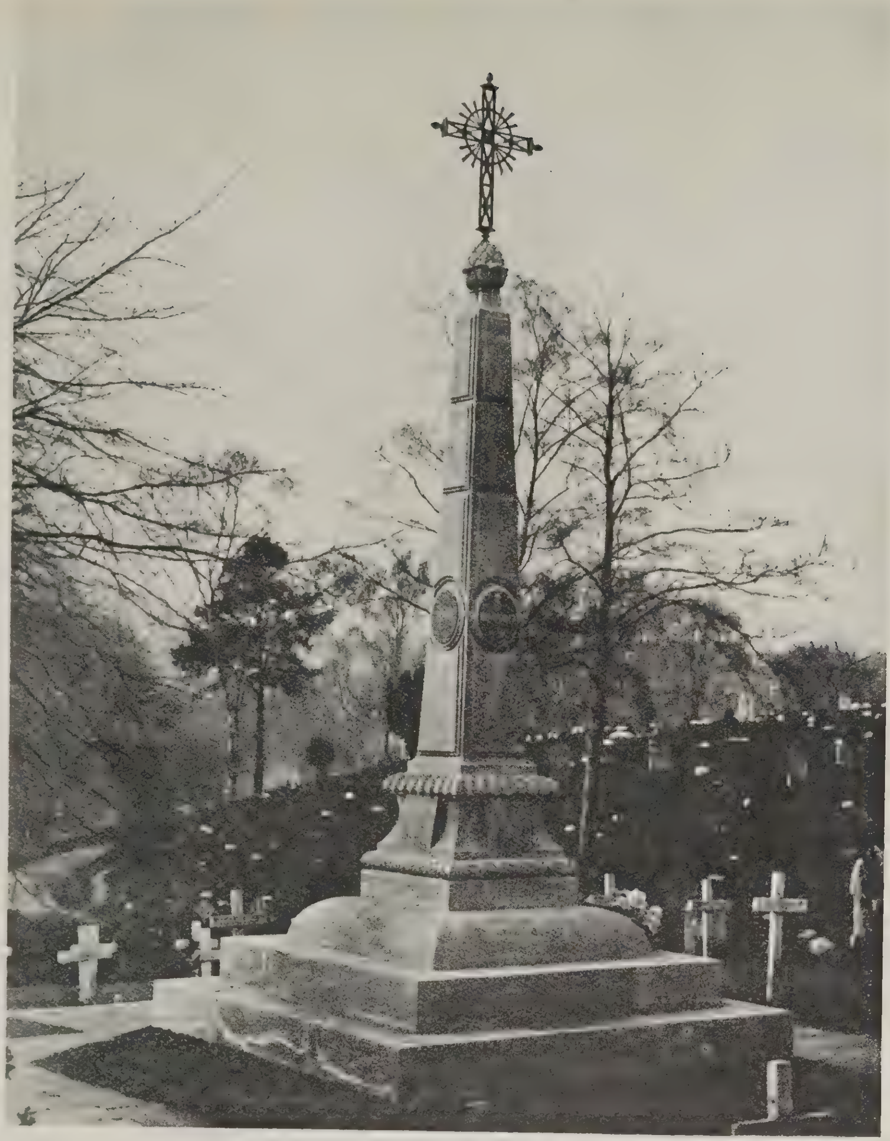
THE War Memorial illustrated on this and the succeeding pages has dignity and beauty, which many others placed up and down the country too often lack. The idea of a "Field of Honour" was one which arose naturally from the fact that a piece of sloping ground within the public cemetery at Ipswich was set apart to bury the men who died in the hospital of that town as a result of the war. This has now been enclosed, and forms a sanctuary where the bereaved may linger with their dead.

At the upper end of the enclosure there is a small portico or shelter containing a niche for an image of St. George, and slate tablets recording the names of those buried in the plot. Facing the portico is a stone obelisk supporting a cross of iron with gilt-bronze ornaments. The gentle slope of the ground from east to west must have materially helped the architects in their design. The contractors for the portico were Messrs. Gill and Reigate, of London and Ipswich; the masonry and obelisk were executed by Mr. E. E. Saunders, of Ipswich.

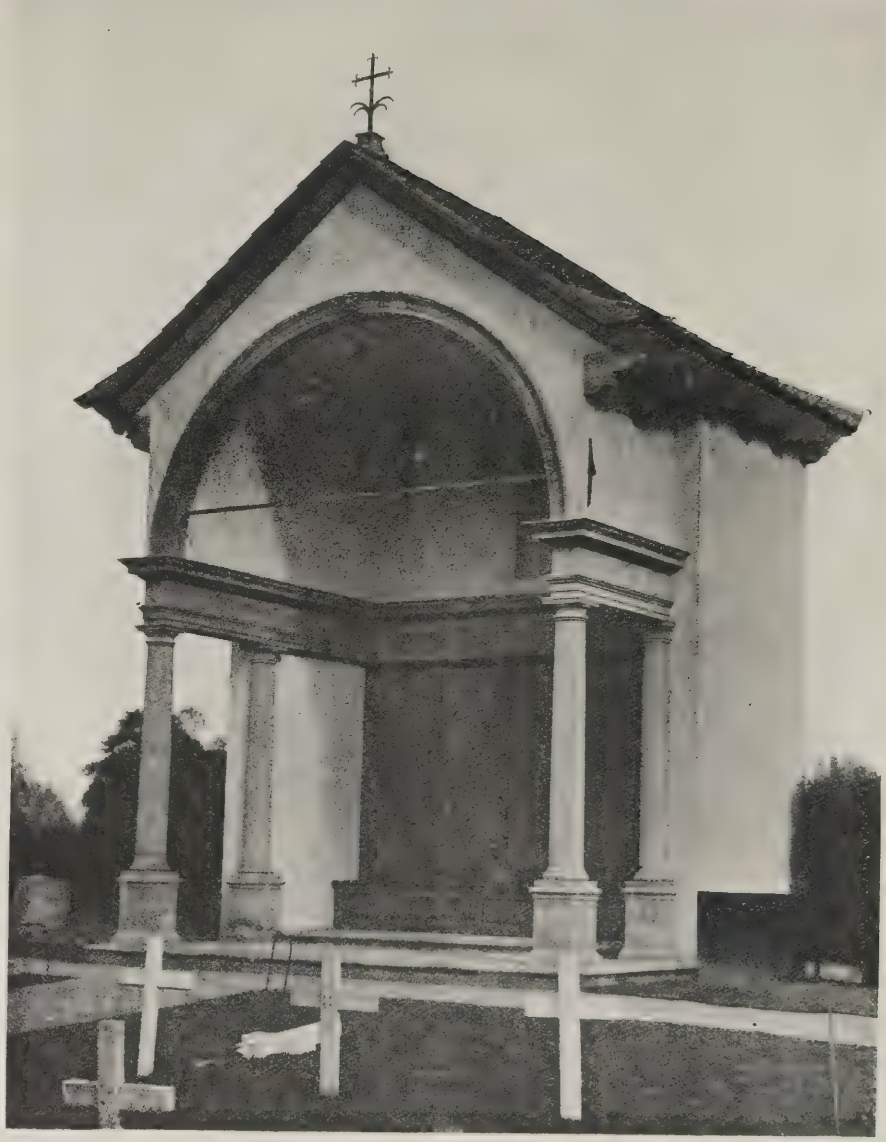


IPSWICH "FIELD OF HONOUR": PLAN OF LAY-OUT.

F. C. EDEN, M.A., F.R.I.B.A., ARCHITECT.

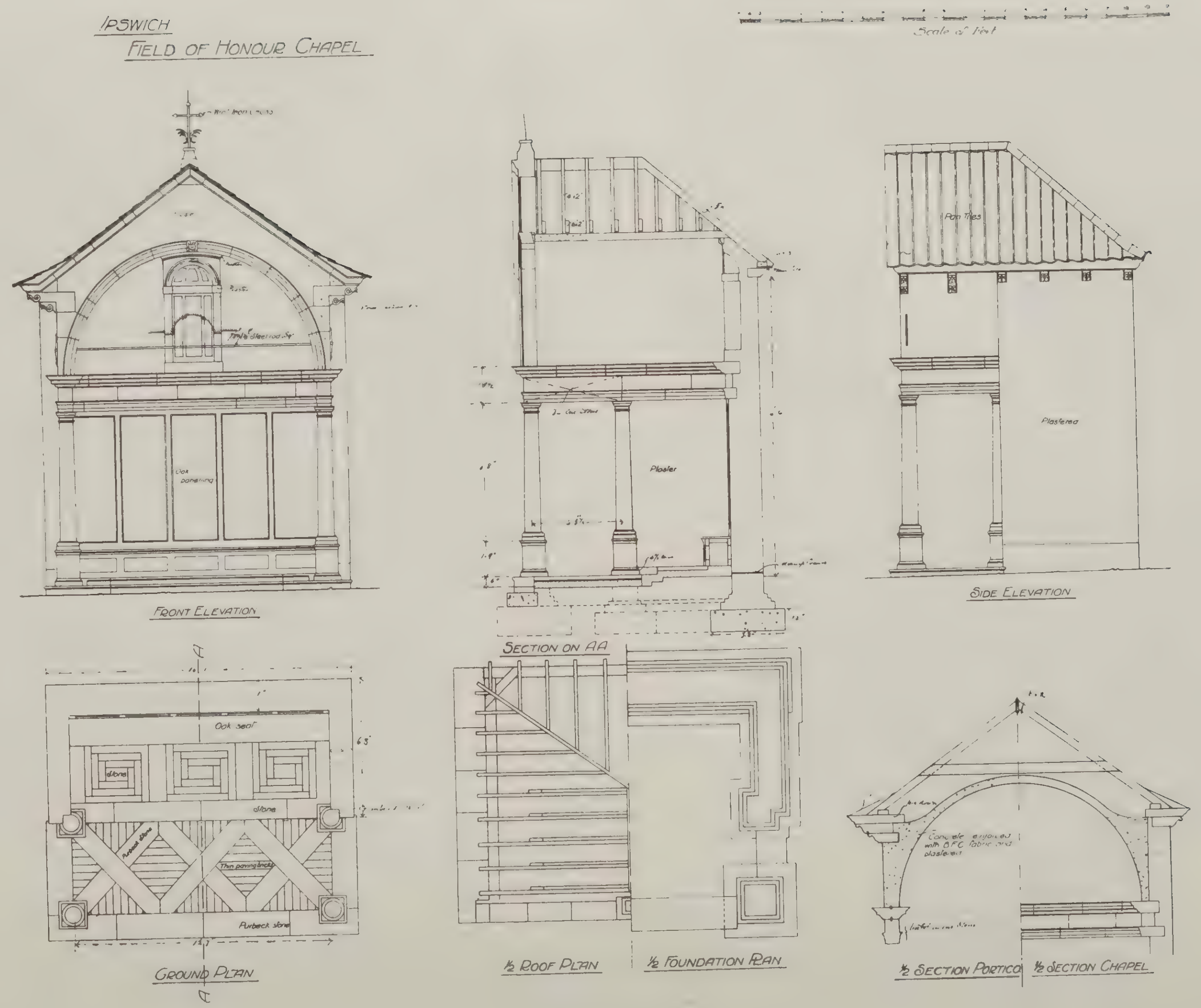


THE OBELISK.



THE CHAPEL.

IPSWICH "FIELD OF HONOUR.' F. C. EDEN, M.A., F.R.I.B.A., ARCHITECT.



IPSWICH "FIELD OF HONOUR": DETAILS OF CHAPEL

# he R.I.B.A.'s Proposed Exhibition of Arts Complementary to Architecture

### By W. W. SCOTT-MONCRIEFF, F.R.I.B.A.

MEMBERS of the R.I.B.A. will have seen in the JOURNAL and in the Professional Press that the present Council has passed the principle that the Royal Institute should hold an hibition of the following arts complementary to archi- ture :—

(i) Decorative and mural painting;
(ii) Sculpture and ornamental carving;
(iii) Furniture and woodwork;
(iv) Metal work;
(v) Tapestries, wearing and decorative hangings;
(vi) Pottery and ceramics.

This movement is a serious and far-reaching one, and it no exaggeration to say that, if the scheme can be carried t, it may mark a new epoch in the history of the art of s country and of the Institute. Hitherto the arts have en represented by many and various scattered bodies d institutions, and none of these has seriously made y attempt to bring them all together as a living force the community. This organization has stood for the el picture; that for water-colours; another for this art that craft; but not one has made a genuine and unselfish empt to unite them in endeavour in the cause of the e Art. Indeed, it seems almost incomprehensible that a ly such as the R.I.B.A. should not, long ago, have en this most obvious step. We have, in the past, been prone to speak of architecture as the Mother of the ts, not really wishing to convey any real meaning, but her by way of voicing a catch phrase or an ideal too notely idealistic ever to be accomplished as a fact.

shall venture to show in this article how such a eme as is proposed will give an outlet for a need in this ntry. I cannot, at the moment, state what form this ibition will take without prejudicing the scheme, but an say that it is intended to be founded upon original s which have never before been attempted in England, l in such a way that all the various complementary arts ntioned above may be shown as adornments to archi- ture, both to the public and to the profession. In such ay, too, that all may associate these arts as inseparable n architecture and from life, and so that the various ftsmen and artists will be displaying their work amongst temporaries and to the profession who can actually ploy them. In this way architects, painters, sculptors craftsmen will all stimulate each other to the benefit ublic taste and to the improvement of the standard of and craftsmanship in general. It is hoped that a proposal will go a long way to kill the craze buying antiques or faked antiques, and will bring to foreground all those able men who either cannot make ving or who become submerged in modern commercial s.

he present state of Art Education is such that art schools out thousands of well-trained artists and craftsmen, , being without any proper organization for the display heir talents, gradually give up their ideals and take up t is known as "humorous art," "poster designing," ellers of clap-trap ornament or makers of the shiny the showy. All this is the direct result of the popular f that art is easel picture painting and of the tendency he Institute in the past to allow itself to be over-lowed by other bodies when all the while its members, they trusted to faith in their own art and to themselves rtists, might have raised the status of their brethren height never hitherto achieved by any other organization pretending to stand for all the arts. The present Council and Art Standing Committee, at least, have faith in the profession they represent, and have the singleness of purpose to wish to stand second to none in the eyes of the community and to provide some means of expression for all the latent creative talent in the country, which, either by ignorance, apathy, or vested interest, has never hitherto been given a proper and suitable outlet.

The state of affairs is such in this country at the present time that hundreds of talented men can make a living by writing about the art they have learnt, but they are unable to make a living by actually doing it.

There is much talk now of fresco and decorative painting. But these are obviously arts to be applied to walls, and therefore architects are the people to encourage the movement. If architects do not do so, it will remain a movement in words and students' performances only. The same argument applies to sculpture, which at its best and truest should be applied to the decoration of buildings. As to furniture and woodwork, I quote from Chippendale's book on furniture, the first paragraph in the preface :—

"Of all the Arts which are either improved or ornamented by Architecture, that of CABINET MAKING is not only the most useful and ornamental, but capable of receiving as great Assistance from it as any whatever. I have therefore prefixed to the following designs a short explanation of the five orders. Without an acquaintance with this Science and some knowledge of the rules of perspective the cabinet-maker cannot make the designs of his work intelligible nor show in a little compass the whole conduct and effect of the piece. These therefore ought to be carefully studied by everyone who would excel in this branch, since they are the very Soul and Basis of his Art." (The capitals are Chippendale's.) Whatever we may think about the orders as an aid to cabinet-making, this quotation shows that Chippendale was alive to the fact that architecture should really be the Mother of the Arts.

Weaving, metal work and pottery are all to be intimately associated with decoration and use within an architectural *milieu*. It is unfortunate that the words *arts and crafts* should somehow be associated with amateurs, or quiet jobs for villagers, to keep them out of the public-houses during the long winter evenings. Architects will not be misled by this interpretation of the meaning of the words, and they can trust the Institute to devise the scheme on such lines as will admit only the finest class of workmanship in all branches. It is intended to set a very high standard of achievement, and only to accept the work of the most expert, highly trained and accomplished workers, so that the finest artists will consider it an honour to have their works shown.

It is reasonable to suppose that if the scheme can be started it will be welcomed by the Public Press, which, if it is well enough done, will be bound to appreciate the significance of the movement. There should be no doubt of public, and therefore of financial, support. The higher standard of supply should create a new demand; and trade firms, when they see the direction of public taste, will be forced to compete. Thus the whole standard of workmanship would become raised. There are many people of taste who would gladly encourage fine modern workmanship, but these do not know where to find it.

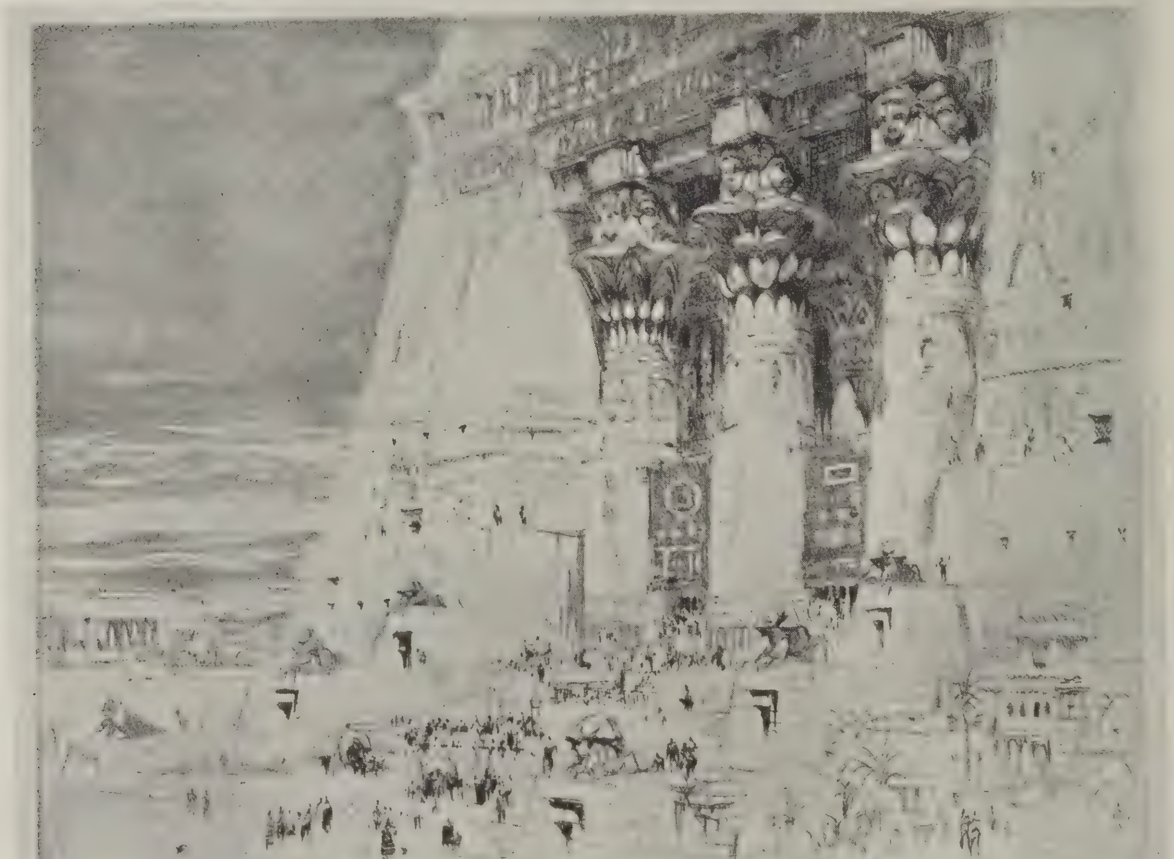
It is possible that certain exhibits might be selected to be sent round the provinces, or that the Allied Societies, seeing the success of the original enterprise, might be encouraged to establish similar centres of activity in their cities. There is a growing dissatisfaction at present-day commercialism and materialism. People—even those who make most money—are asking themselves what it is all about and what they are getting in the way of real and solid enjoyment.

There is a distinct tendency, which may be observed in the Press, to cast doubts upon the power of science to cure all the ills of mankind. Such plays as "R.U.R." and "The Immortal Hour," whatever may be our personal opinion of them as plays, are in the nature of a revolt against the vulgarity and artificiality of the age. There are various organizations starting up all over the country, such as the "Faculty of Arts," "League of Arts and Service," "Design and Industries," and others too numerous to mention. Those who have a long perspective of the past see that the history of mankind is a vast series of actions and reactions, the reaction of the future almost invariably being an exact opposite to the action which gave it birth. People are beginning to re-realize that it is largely thanks to the suppression of the Idealists and the rise of the "practical business man," with no other notion in life but to "get on," that we see the world in its present sad state. It is curious to notice that in these upheavals of the past it has been the artists and the craftsmen who, being used to the ways of construction and of creation, have stepped in to the rescue of their brothers and have restored to them that measu of faith and belief in the things which are too subtle to l believed in and appreciated while the pursuit of shado and illusions is the order. In this work there is a magr ficent field of activity for the R.I.B.A. For if the prese tendency to react to this admittedly unsatisfactory sta is in the nature of a direct negative to vulgarity and igno ance of any of the finer sensibilities, the Institute may l the means of assisting, as artists and architects have do in the past, to bring about that renaissance to which o country must come, unless it is to sink into depravity ar oblivion; and it is no idle venture to prophesy that unle the Institute remains supple to every movement towar change of thought and feeling, it will become a dec instead of that growth which anticipates the changi thought of the people.

In the last resort, then, this measure, which shall ha been the result of much careful labour and thought towar a *real unification*, must come before the General Body. the meantime I would ask all to weigh the prospects a the principles involved so that when it is presented concrete form it may be passed by the whole of our membe At the present moment the chief difficulties are those finance. These must not be allowed to damp our enthusias And practical steps are now being taken to obtain t necessary financial backing.

# The Old World—and the New

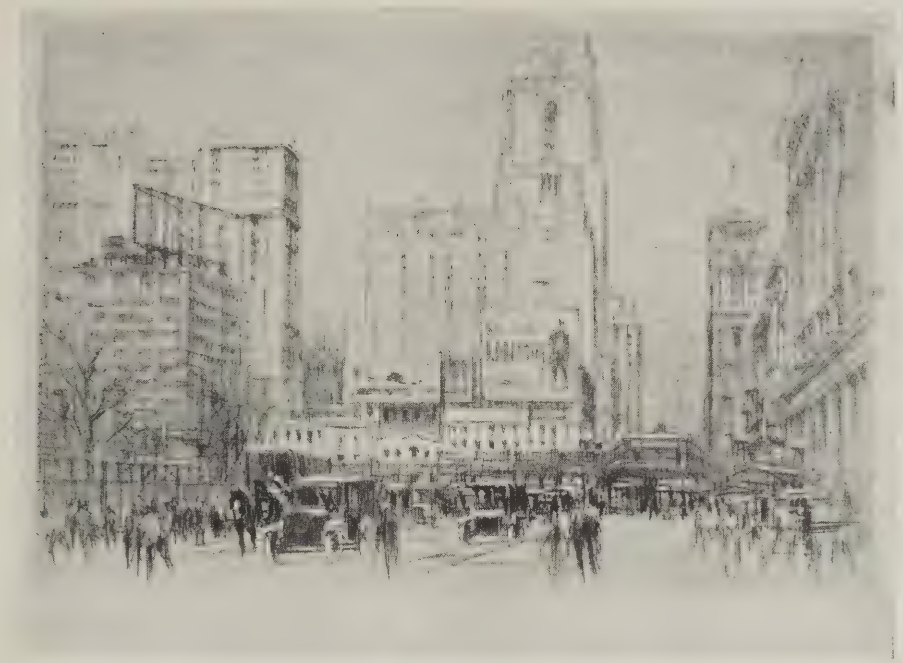
## Etchings by Mr. WILLIAM WALCOT, R.E.



AN EGYPTIAN PALACE.

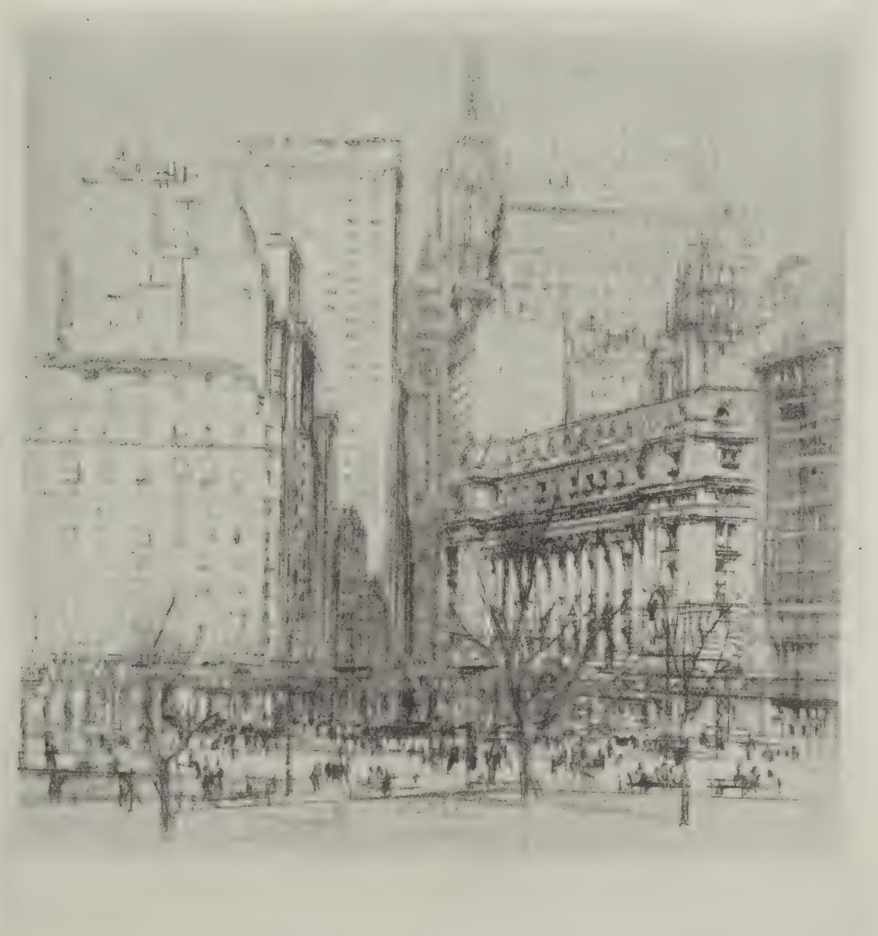
Reproduced from the original Etching by William Walcot, R.E.
(*Copyright H. C. Dickins, London. 9⅛ in. by 11¾ in.*)

# Recent Etchings by Mr. William Walcot, R.E.



42nd STREET, NEW YORK CITY.

In this reproduction of one of Mr. Walcot's latest etchings the artist takes the Bush Terminal Building for his central feature.



THE BATTERY, NEW YORK.

Some of New York's most famous buildings are to be seen in this etching. Far back in the centre, rising higher than the rest, is the Woolworth Building; just below, with the columned façade, is the Custom House. The White Star Office is on the left. Leading up to the Woolworth Building from Battery Place, like a narrow city lane leading up to a cathedral, is Broadway.

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# Dutch Architecture Old and New

## Mr. Yerbury and Mr. Lawrence Dale at the A.A.

THE extraordinary breakaway from tradition which has taken place in Dutch architecture during recent years was strikingly demonstrated at the meeting of the Architectural Association on onday last week, when Mr. F. R. Yerbury (Secretary the Association) and Mr. T. Lawrence Dale gave a cture on "The A.A. Excursion to Holland, 1922." he lecture was illustrated by a comprehensive selection om the large number of photographs taken during he trip, and also during the Easter vacation this ear, by Mr. Yerbury, and the revolutionary change om the old work to the style of the modern school Dutch architecture was forcibly brought home by the ay in which the trip was illustrated in two sections—he set of slides, confined entirely to the older work, eing shown by Mr. Yerbury, the other set, of the later ork, by Mr. Dale.

### *The Old Work*

Mr. Yerbury expressed his opinion that people were more terested in pictures than in what others had to say, and cept for some explanatory remarks relied upon the hotographs to tell their own story. The slides covered actically every aspect of the subject, and showed perps better than any words what a wealth of interest olland provides for the architect and architectural udent.

The old high houses, with their tall gables—not one which seems to find its counterpart elsewhere—the teresting doorways and fanlights, the ironwork to be und everywhere, and the windows are practically without ception of an excellent design and seem just right in their rroundings. As Mr. Yerbury said, "They are Dutch, d they *look* Dutch." The Dutch fondness of colour, th in their buildings and in their dress, and, above all, e charming vistas along the canals, combine to make the untry of fascinating interest to the artist and the archit. Although, unfortunately, the colouring was absent, e photographs gave one an admirable idea of the charm the place, and in the discussion several speakers exessed their appreciation of the fact that Mr. Yerbury is ing to publish them in book form.

Mr. Jan der Meyer, a leading Dutch architect, who s present, said he had never seen such an excellent d comprehensive set of photographs of the architure of Holland, even in his own country!

Although many of these interesting old buildings are ng used for commercial purposes, Mr. Yerbury gave an line of a society which has been formed on novel es for their preservation. This society is more or less a nmercial undertaking, and pays interest at the rate of ee per cent. on the subscriptions, with which it purchases buildings which have an historic or architectural interest. ese buildings the society lets to commercial firms or vate individuals on condition that the structures are not ered in any way. The lecturer made the suggestion that ociety on the same lines might with advantage be rted in this country.

### *Modern Work*

n dealing with the modern work, Mr. Dale showed slides the Bourse, the shipping office, a public baths, many sing schemes, and other buildings. It was, he said, a e strange to us in this country, and the measure of its ngeness was the measure of the difficulty we had in ing it. He pointed out that the shipping office was a building treated as sculpture on which the sculpture was treated as architecture, and the two arts seemed to meet in an astonishingly interesting way. The whole of the modern Dutch architecture was, he said, rather in sculpturesque treatment of building.

Most of the new Dutch schemes were on a big scale, which was, he thought, a great advantage, for while a departure from convention in an isolated building jarred on the sight, on a scheme big enough one could build strange forms which would appear to happen quite naturally.

He pointed out that this country and Holland seemed each to be taking up and developing styles which had been abandoned by the other, for while the influence of the English "New Art" school of design was to be seen in modern Dutch architecture, we in this country seemed to be going back to the Queen Anne and Georgian, which were Dutch in origin.

### *Discussion*

Mr. Robert Atkinson, in the ensuing discussion, expressed a decided preference for the older work illustrated, which, he said, he admired immensely. He thought English architecture might obtain many hints from it. With regard to modern Dutch architecture, he thought the most logical of it was quite good, but he did not think it necessary to be insane in order to be new in architecture—in his opinion much of the new work betrayed signs of mental deficiency!

He liked the lines of the modern work, but he could not see that it was logical to stick an armour-plated balcony on a brick building in order to obtain an effect representative of the sea, as seemed to have been done in one case!

Neither did he think it right to build houses for the people whether they liked them or not; the procedure should rather be to build houses which the people liked. The newer work exhibited some very good craftsmanship and technique, but he did not think it had the qualities of sane architecture which ought to be the fundamental basis of design.

The eccentricities of individualism ought to be put in afterwards if finance permitted.

### *Local Materials and a National Style*

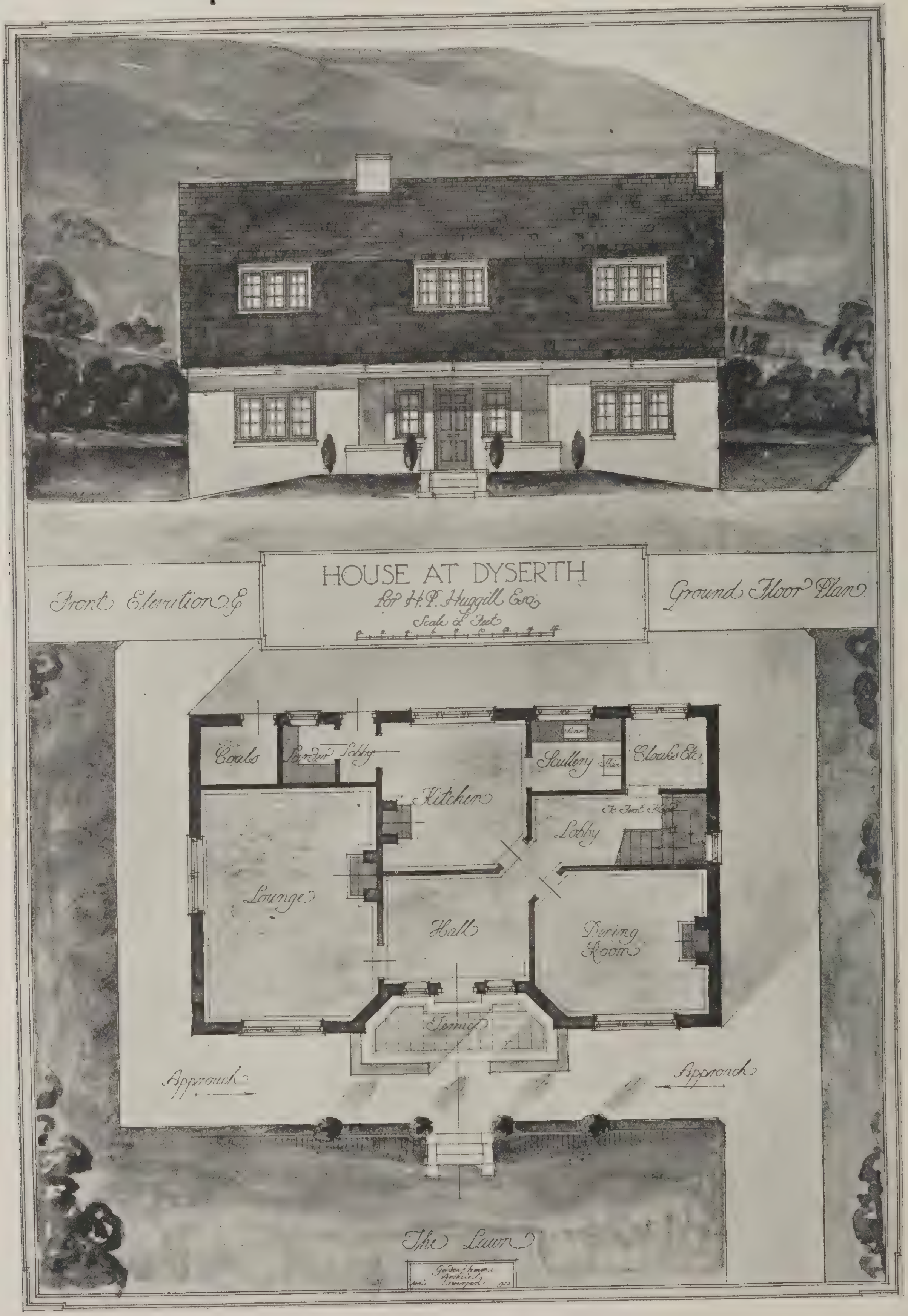
Mr. Jenkins said he was specially struck by the way in which the Dutch used their bricks; they seemed to have made up their minds not to go outside their own country for stone or any other material, and to have decided to use their own bricks to produce a national style of architecture on which they were stamping their own individuality, and which he was sure would result in some very fine work. At the moment they were in the period of transition. They had definitely broken away from tradition, but had possibly not yet found their feet. When they did so he felt sure their work would increase in beauty—perhaps by going back a little to the older styles.

Mr. Stanley Hamp (President), who occupied the chair, said, however much they might criticize modern Dutch architecture, it was quite obvious that it would lead to something extraordinarily fine. The more recent of the new work showed a restraint which was not apparent in the earlier work. The shipping office could only be appreciated by actually seeing it; the outline and form were disappointing, but the details were wonderful.

# House at Dyserth, North Wales

## GORDON HEMM, Architect

THE accompanying illustrations show a detached house now in course of erection on a commanding site at Dyserth, North Wales. From the entertaining-room windows extensive views can be had of the Welsh mountain ranges beyond the Vale of Clwyd; and to the west, of fine stretches of coastal scenery.



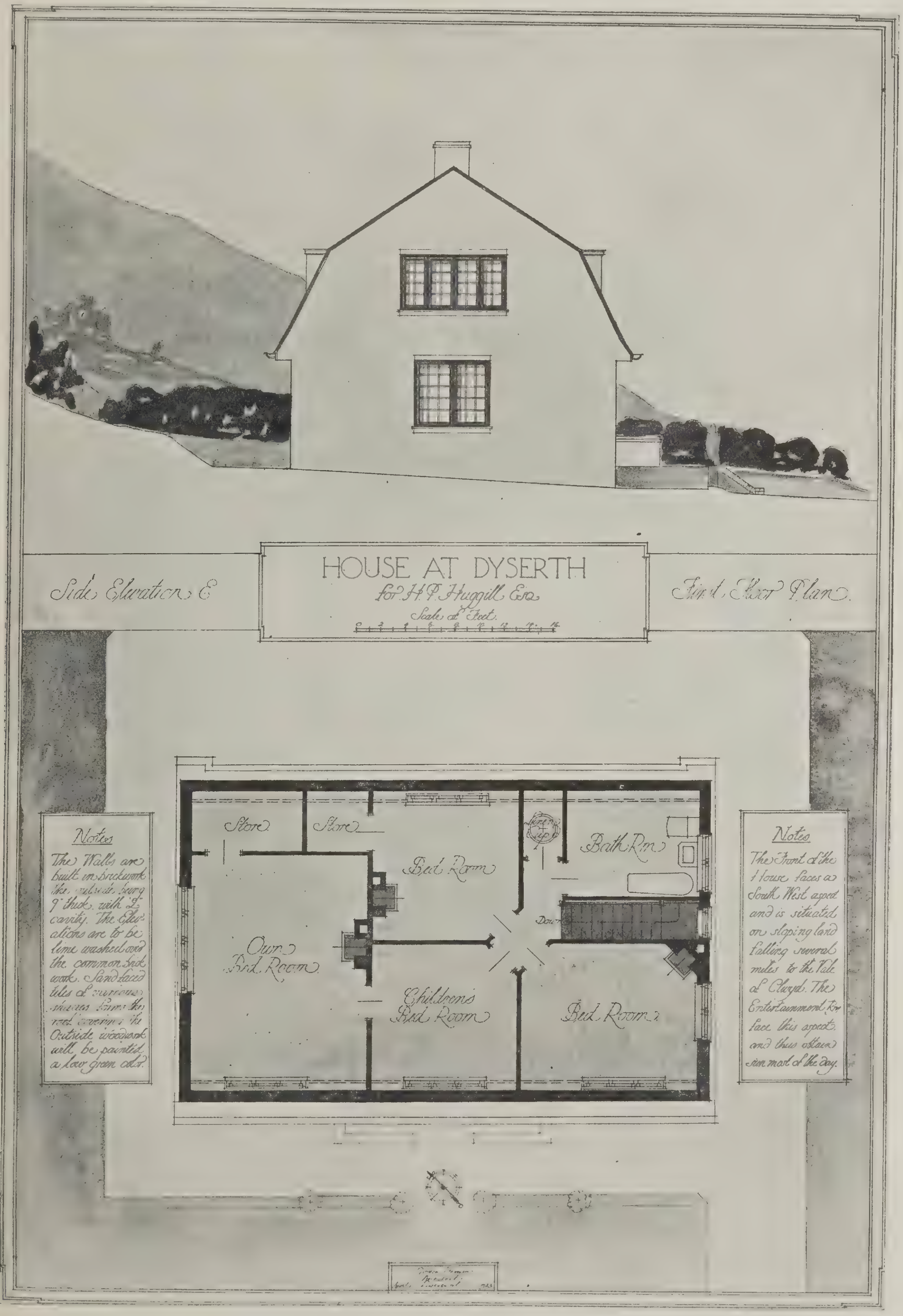
FRONT ELEVATION AND GROUND FLOOR PLAN.

The house has been planned in a simple and direct nanner. On the ground floor is a spacious entrance hall, rom which is entered the lounge. A small passageway off he hall gives access to the kitchen, the dining-room, and he staircase lobby. From the latter access to the cloak oom is gained immediately below the stairs. The kitchen, cullery, and larder have an eastern aspect.

The first floor is conveniently arranged. The bedrooms nd the bathroom being entered from a small landing.

The elevations are of simple design, and the recess, forming the terrace to the main front, breaks up in a pleasant way the plainness of the wall surface. Common bricks are being used for the facing, and the exterior walls have been prepared for colour washing. Staffordshire sand-faced tiles will be used for the roof.

The contractors are Messrs. Roberts and Sloss, of Liverpool and Prestatyn. The approximate cost of the work is £1,000 exclusive of decorating.


HOUSE AT DYSERTH
for H.P. Huggill Esq.
Scale of Feet
Side Elevation E
First Floor Plan
Store
Store
Bed Room
Bath Rm.
Down
Our Bed Room
Childrens Bed Room
Bed Room
Notes
The Walls are built in brickwork the outside being 9" thick with 2" cavity. The Elevations are to be lime washed over the common brick work. Sand faced tiles of various shades forms the roof covering. The Outside woodwork will be painted a low green color.
Notes
The Front of the House faces a South West aspect and is situated on sloping land falling several miles to the Vale of Clwyd. The Entertainment Rms face this aspect, and thus obtain sun most of the day.

SIDE ELEVATION AND FIRST FLOOR PLAN

# The Colonnade of St. Paul's Cathedral

WHEN the project of rebuilding St. Paul's Cathedral first took definite shape, and the authorities had defined the structure they had in mind, "Dr." Wren was directed "to contrive a fabric of moderate bulk but of good proportion; a convenient quire, with a vestibule and porticoes, and a dome conspicuous above the houses."

Such instructions provided the architect with a more than usually generous latitude, but, as he subsequently found, he had to submit many models and designs before his plans were finally approved.

With regard to the dome which he ultimately built, so "conspicuous" is it, that one can hardly imagine London without it. And while it constitutes in itself a symbol of the great city which nothing is likely to replace, it is—viewed architecturally—perhaps as great a triumph of constructional skill as can be found in the whole of Europe.

The great peristyle, or colonnade, which rises above the roof adjacent to the meeting of nave, choir, and transepts, consists of thirty-two Corinthian columns, whose intercolumniations are filled up with solid masonry at every fourth interval and decorated with niches and panels.

Externally, this "connected column" treatment—which occurs eight times in the circle—not only relieves the monotony of what would otherwise be an unbroken range of equi-distant columns, but gives a suggestion of strength at just those points where it would most appear to be needed.

There is, however, a practical reason for this system of grouping, as each pair of columns so linked together serves to screen a circular stairway leading up to the level of the balustraded gallery above. These eight masses of masonry are, moreover, placed vertically over the dome piers, so that their weight is directly transmitted to the foundations.

The colonnade itself is connected to the inner dome and its inward-inclining drum, by web walls forming a series of radiating counterforts, which, together with the columns, play a vital part in resisting the combined thrust of the inner dome and the cone supporting the lantern. The peristyle is thus seen to be a constructional necessity, as well as an unsurpassed architectural design. Much criticism has been levelled against Wren for making the colonnade order of a greater height than the one he employed for the upper order of the façades beneath, it being generally held that in doing so he had violated the principles of true architecture.

Nevertheless, it may be observed that the vertical planes of the two orders are nowhere less than fifty feet apart, and cannot possibly be seen in any closer association. Besides this, the base line of the colonnade order is elevated about 75 ft. above that of the façade order. Wren doubtless took these facts into consideration, and rightly concluded that the disparity would pass unnoticed.

It is most singular that, so far as the writer of these notes is aware, no architectural critic has ever discovered that in the façade of the Colosseum at Rome the topmost of the four superimposed orders—*which all occur in the same vertical plane*—is most perceptibly higher than any of the others beneath it!

The accompanying measured drawings are believed to be the only records to this scale which have so far been made of the colonnade of St. Paul's Cathedral.

W. E. Couch.

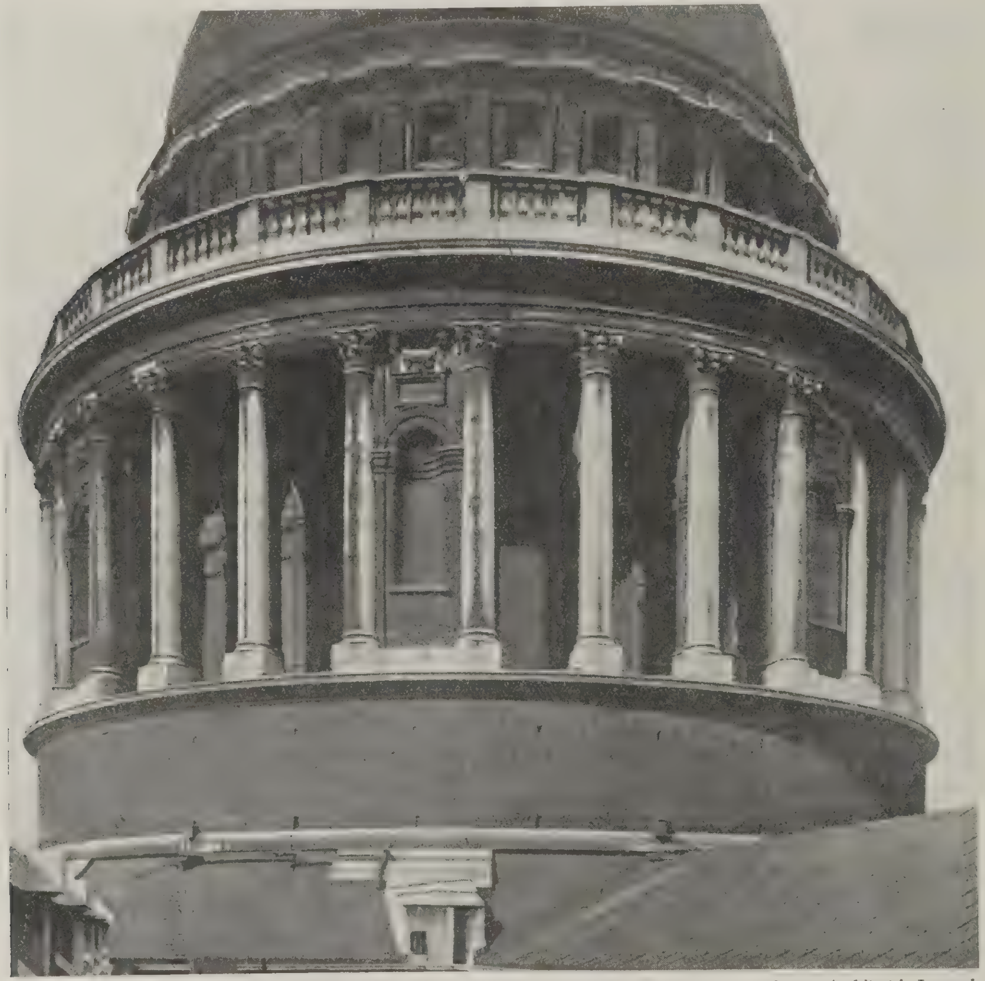
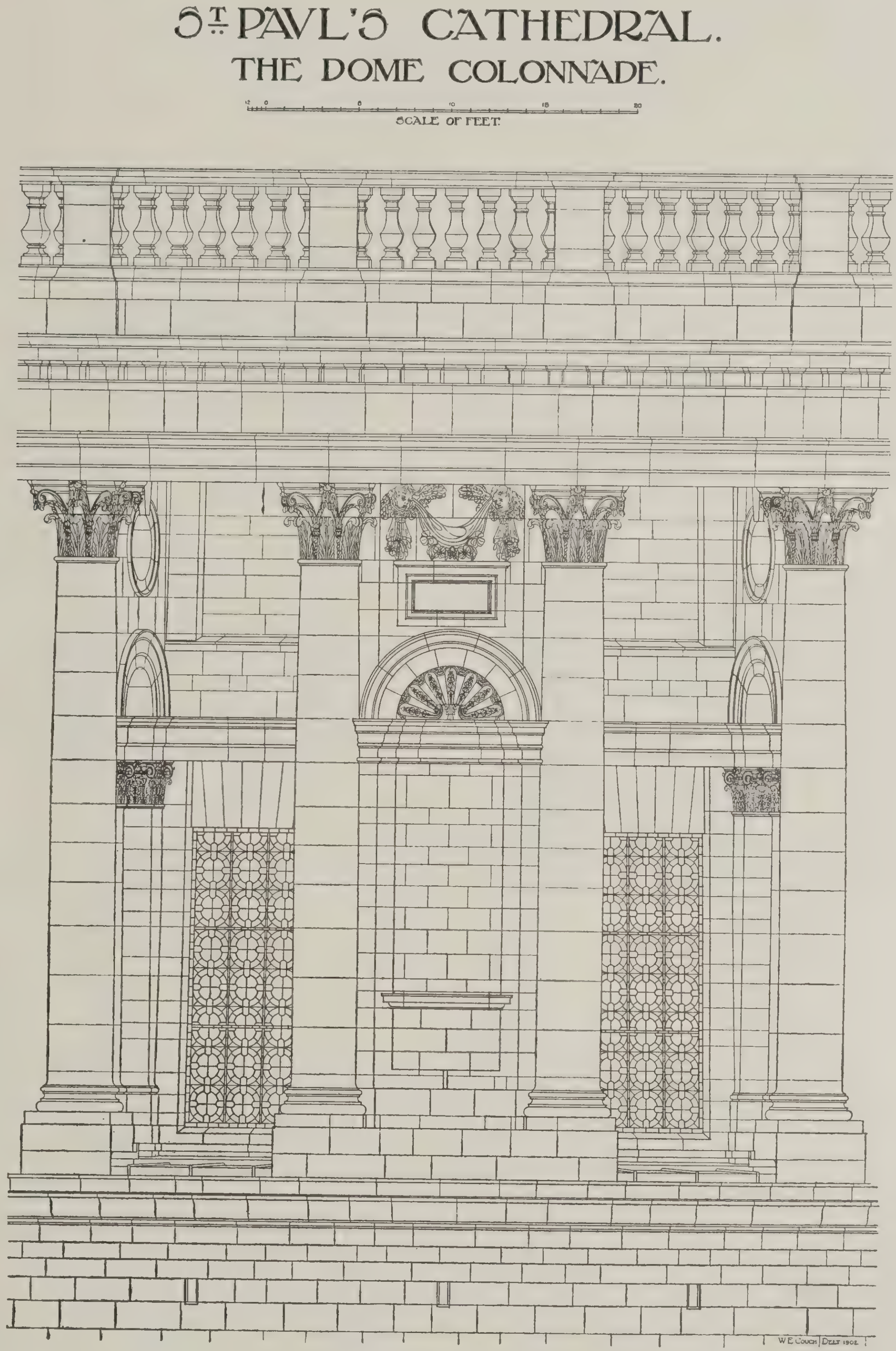


*Photo: Architects' Journal.*

THE COLONNADE OF ST. PAUL'S CATHEDRAL.

# Measured Drawings. 31.—St. Paul's Cathedral, the Dome Colonnade

Measured and Drawn by W. E. Couch, F.R.I.B.A.



ELEVATION

Though the dome of St. Paul's is probably the most familiar piece of architecture in the world it is believed that measured drawings to the scale employed by Mr. Couch have not hitherto been made.

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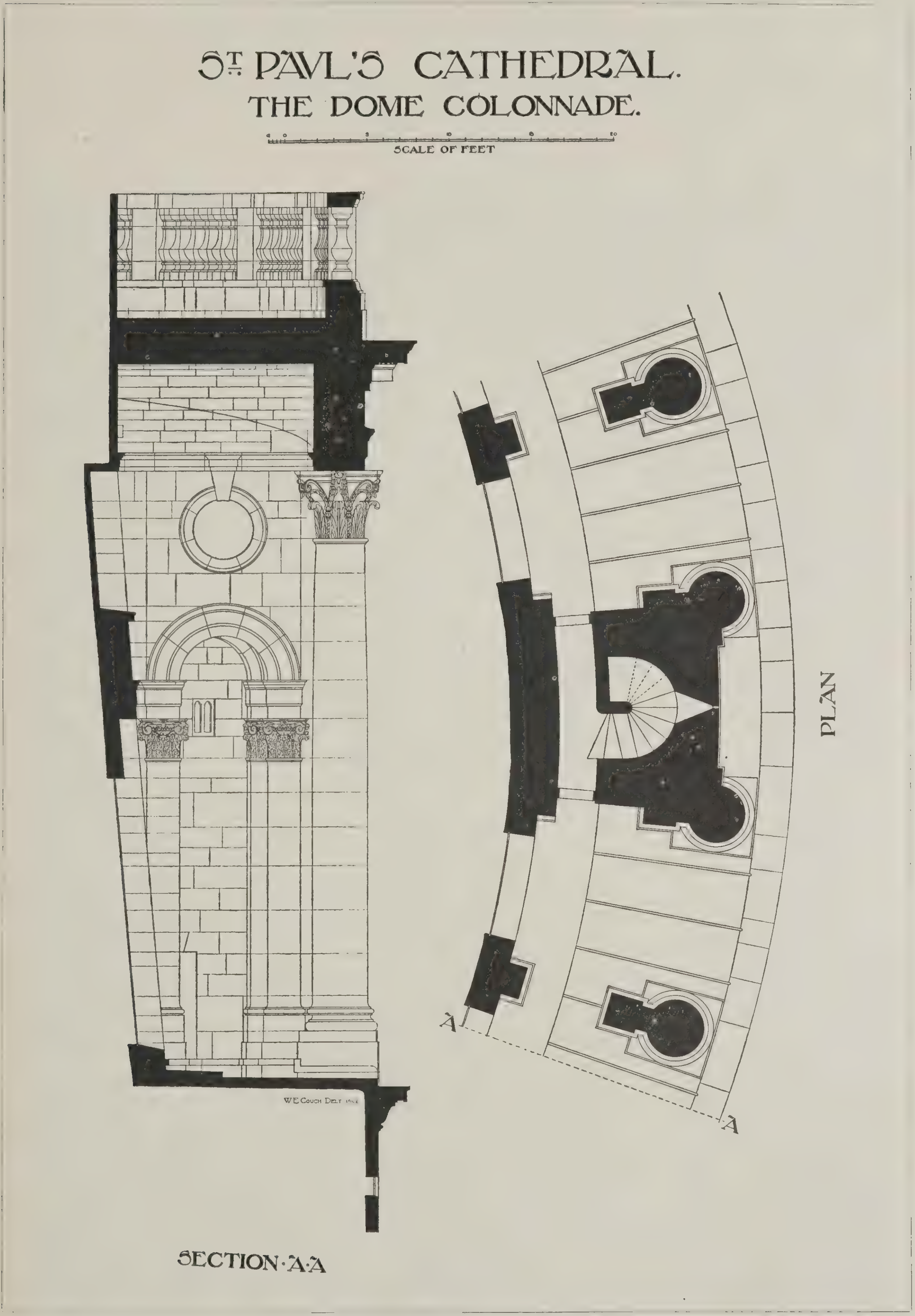
# Measured Drawings. 32.—St. Paul's Cathedral, the Dome Colonnade

Measured and Drawn by W. E. Couch, F.R.I.B.A.



PLAN AND SECTION OF THE COLONNADE.

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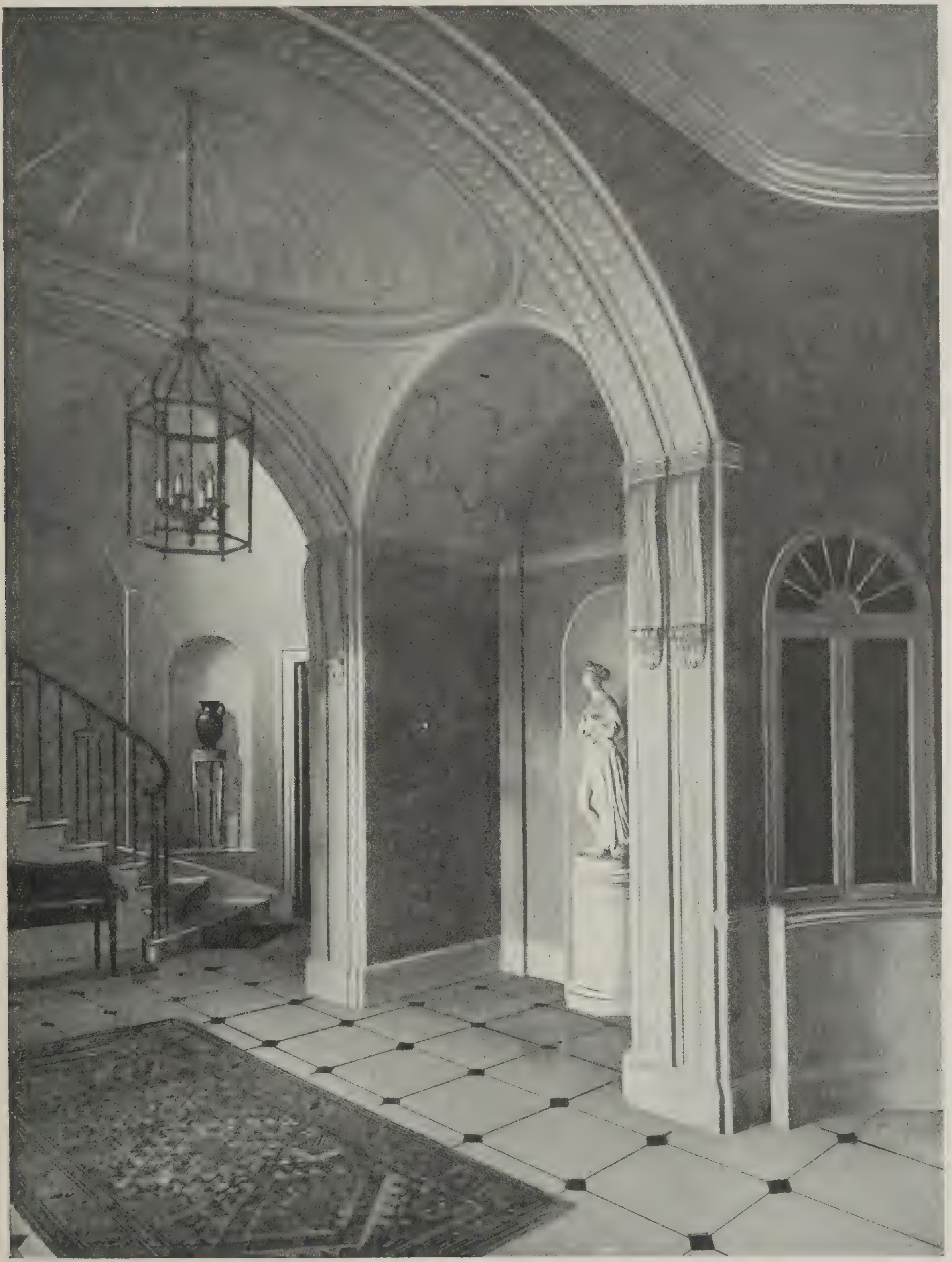
# An Exemplar of Domestic Architecture*

T is only when we compare in the mass the domestic architecture of our day with the great body of similar work, st of it now anonymous, produced in late eighteenth and early nineteenth turies, that we can fully realize the ent and depth of the deterioration of our art. By the publication of the second volume of "Small Houses of the Late Georgian Period" we are able to make that comparison very conveniently. A few of the examples illustrated in it are the work of well-known architects, such as Sir Robert Taylor, Sir John Soane, and Robert Adam. But much the greater number of the photographic plates and of the line drawings are devoted to interiors and details of relatively obscure or unknown authorship. They show that the period which the authors have selected for their study, 1750 to 1820, was in architecture happily free from certain of the vices that are most characteristic of our own. Whatever accusation can justly be brought against the work of that time—and some of it was, beyond question, dull—it was neither ignorant nor vulgar. A tradition of sober design and accomplished crafts-



ENTRANCE HALL, NO. 1 BEDFORD SQUARE, LONDON.
*(From "Small Houses of the Late Georgian Period.")*

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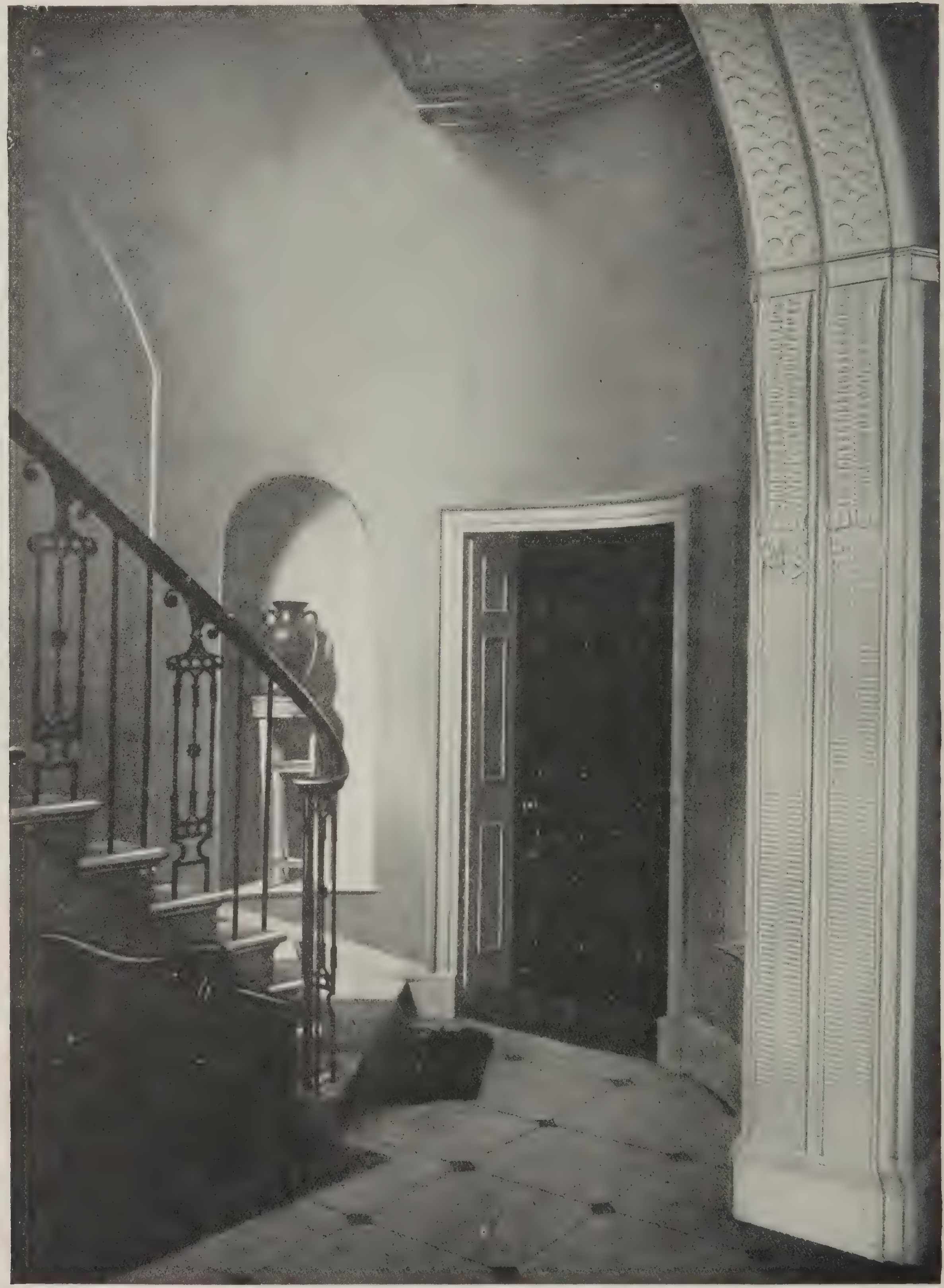
"Small Houses of the Late Georgian Period, 1750–.” Vol. II: Details and Interiors. By Stanley C. sey and J. D. M. Harvey. London: The Architec- l Press. 1923. 25s.

manship was so widely diffused that failures in propriety or technique rarely occurred. To the men who conceived these exquisitely simple rooms with their broad flat surfaces and delicate articulation it would not have been possible to perpetrate the crude rusticities that are the commonplaces of our age. If the Georgian architects were ever affected or eccentric, their foibles were polite and, to educated people, comprehensible and inoffensive. Domestic architecture as practised by them had a poise and restraint that is only now, after a hundred years of grossness and stupidity, being here and there recaptured by the schools and by individual designers. For the fruits of the combined influence to be generally effective we have still to wait. In the meantime the appearance of this book should help to direct the course of English domestic building as a whole toward a development that is civilized and reasonably in harmony with our needs.

One of the great merits of the book is that its fifty photographic plates and its forty pages of measured drawings chiefly exhibit work of a modest size and simple character. We are all of us familiar with illustrations of the achievements of the great architects who enjoyed such splendid patronage during the period under review. The interiors of the vast town and country mansions they were called upon to design gave them opportunities for effects which they very competently exploited: rather too competently in many cases. So that we become a little fatigued with the evidence of so much scholarship and with such a wealth of resource in decorative ingenuity as is

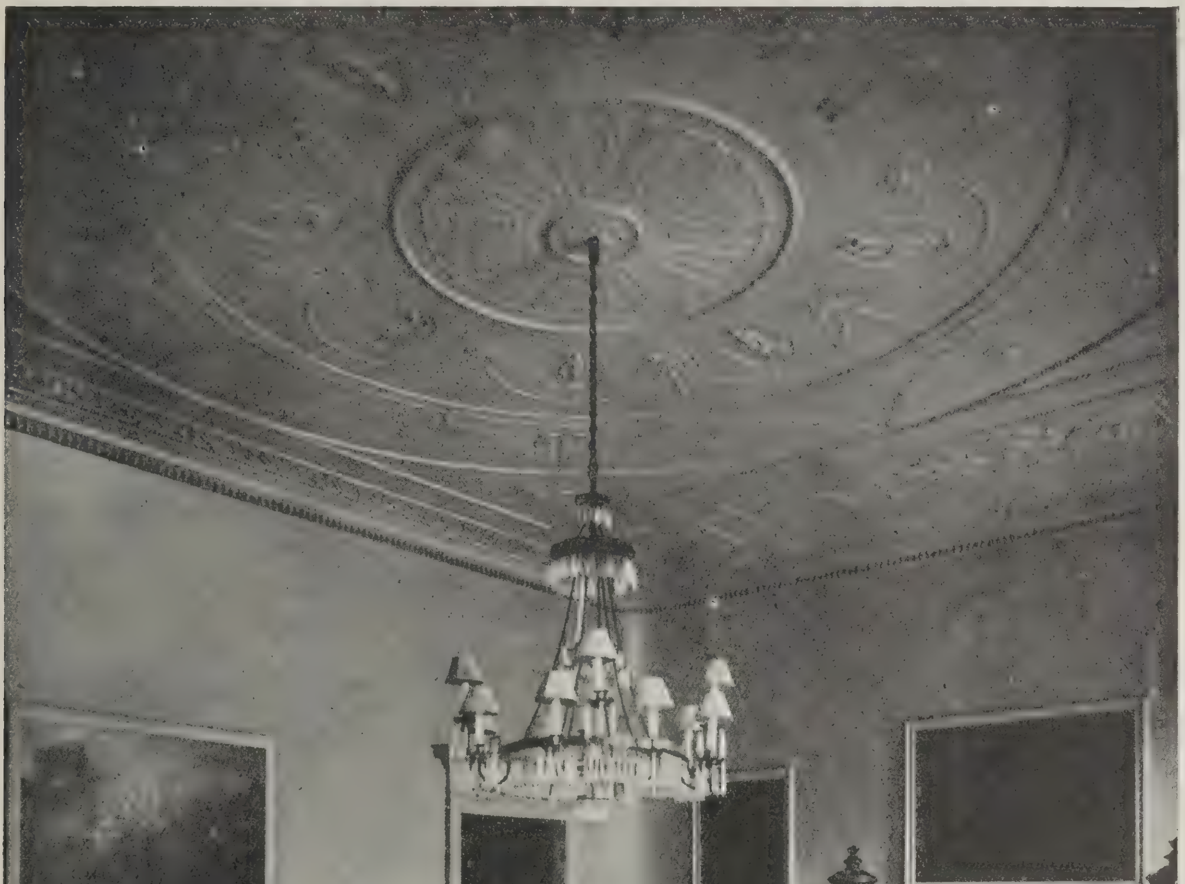


THE STAIRCASE, NO. 1 BEDFORD SQUARE, LONDON.
*(From "Small Houses of the Late Georgian Period.")*

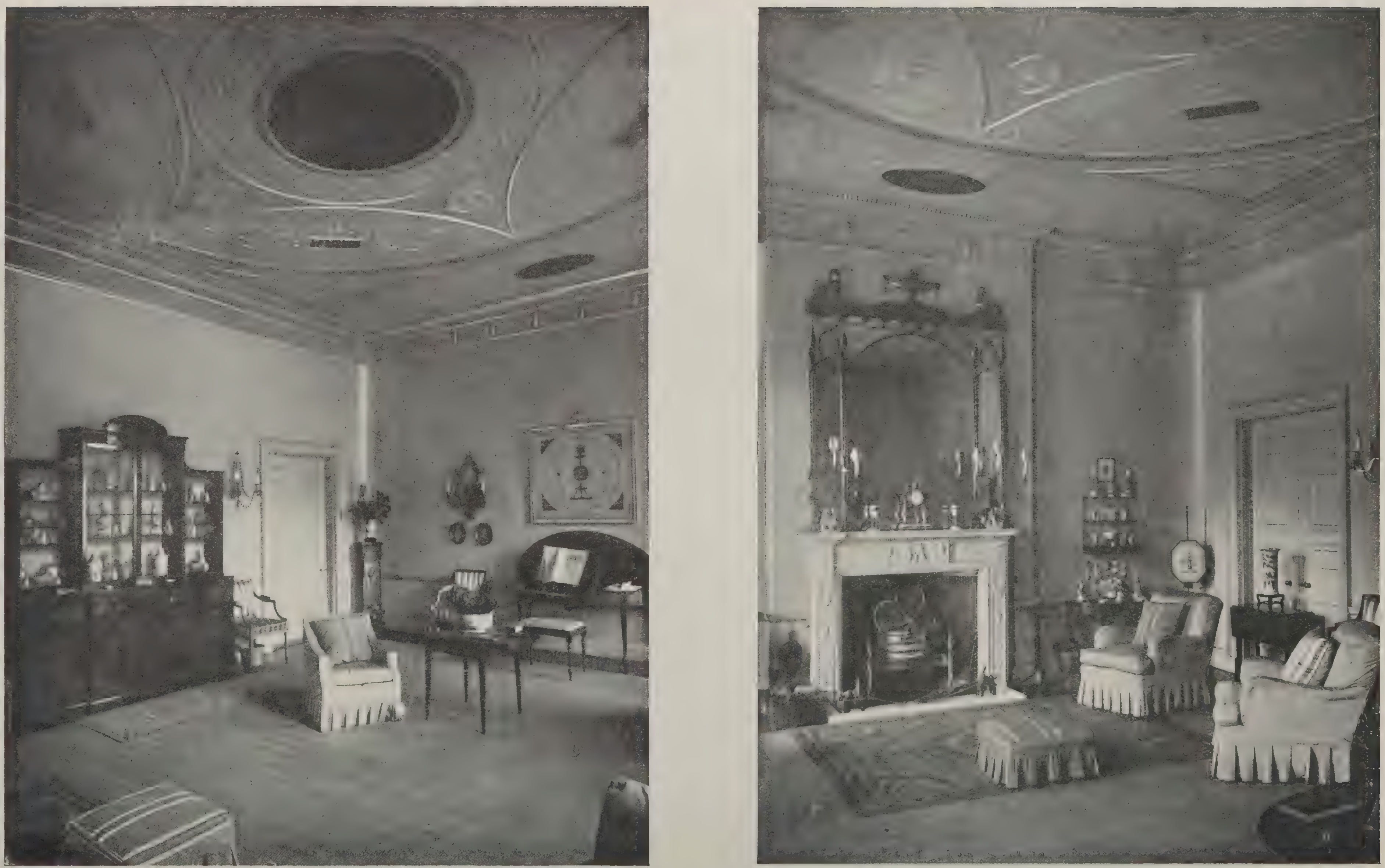
netimes displayed. However that ay be, commissions of the magnitude at fell to the lot of Robert Adam, ane, and Taylor, cannot come the way the majority of the profession in any e. What, for immediate purposes, ost of us are interested in seeing is how rk of a normal kind can be successfully ndled. Because it shows that so fully d clearly, this book is, as I have d, especially valuable. It gives to the hitect with a moderate domestic prac- e precisely the kind of models he is ely to find most stimulating and most ectly useful.

The authors have selected their material with careful discrimination. The volume which preceded this illustrated chiefly the small isolated or detached house of the country or suburban type. Here are presented a greater proportion of town houses, several of them situated in London. The subjects of the plates and drawings may be roughly classified under the following heads: Entrance Halls, Staircases, Rooms, Doorways, Windows, Ceilings, Fireplaces, Fixed Furniture, and Accessories. A number of external elevations are included, mostly in the form of measured drawings. Everything that has been chosen is at least interesting in itself, and all of it could profitably be applied or developed under present conditions. Certain of the examples are of extraordinary beauty. I would refer in particular to the photographs of the entrance hall, staircase, and rooms of No. 1 Bedford Square, to several of the ceilings and fireplaces, and to a doorcase from No. 29 Great George Street, Westminster, now in the Victoria and Albert Museum.

Mr. Yerbury, who has taken the photographs, and Mr. Harvey, who has made all the line drawings, are both to be congratulated on their work, so adequately does it complement Mr. Ramsey's valuable introduction. LIONEL B. BUDDEN.

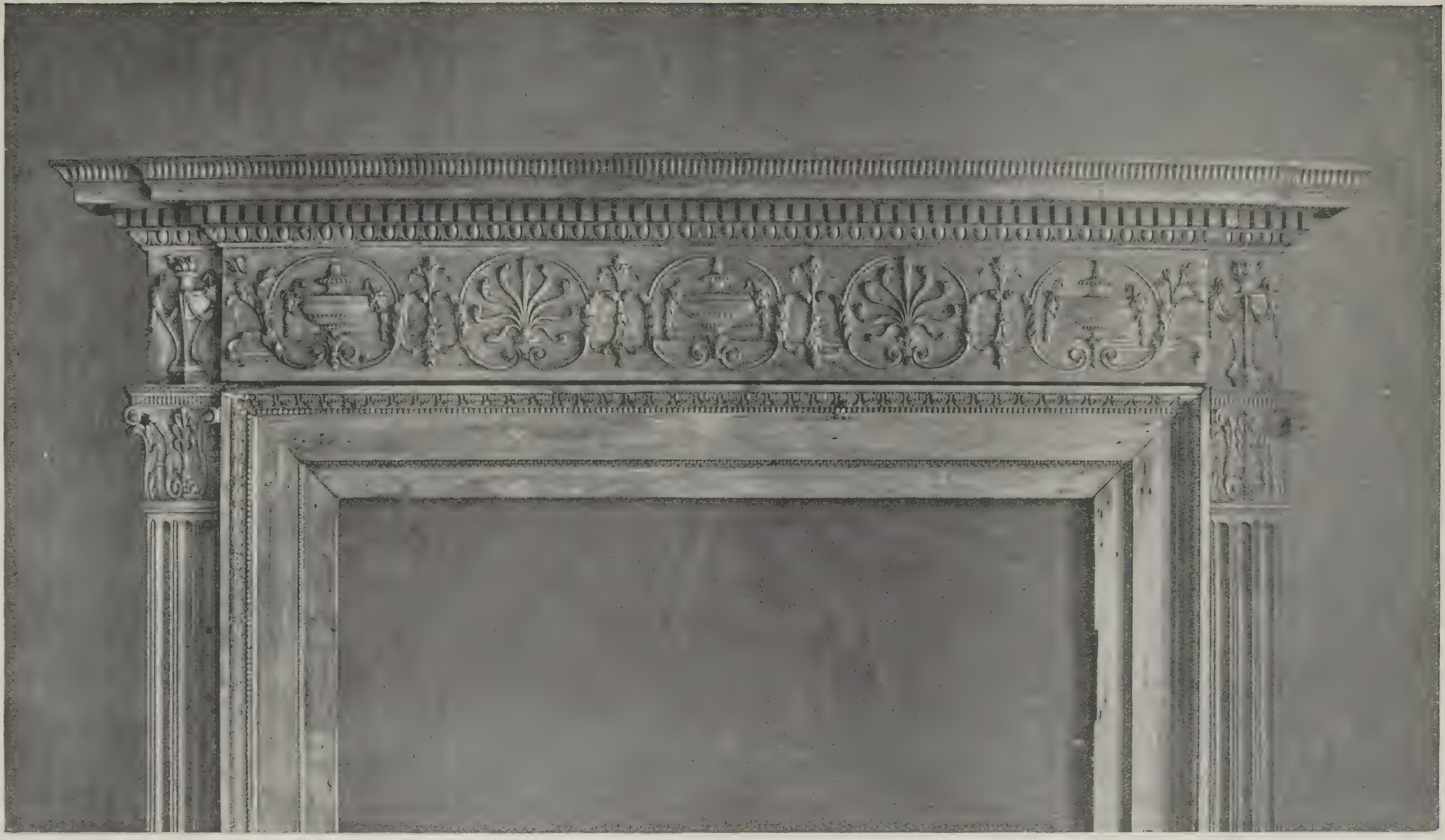


DINING-ROOM, NO. 1 BEDFORD SQUARE, LONDON.
*(From "Small Houses of the Late Georgian Period.")*



DRAWING-ROOM, NO. 1 BEDFORD SQUARE, LONDON.

*(From "Small Houses of the Late Georgian Period.")*



DOORCASE FROM NO. 29 GREAT GEORGE STREET, WESTMINSTER: NOW IN THE VICTORIA AND ALBERT MUSEUM.

(*From "Small Houses of the Late Georgian Period."*)

# Sir Edwin Lutyens on Architecture

SOME interesting opinions on architecture, expressed by Sir Edwin Lutyens, R.A., in conversation with Mr. Louis Christian Mullgardt, F.A.I.A., and Mr. Justice V. M. Ferrers, on board the S.S. "China," are published in "Architecture." Sir Edwin, in the course of the conversation, said: The world as it is constituted to-day does not, I am afraid, favour the creation of loveliness. Beauty can only be achieved by exploiting with endless care and trouble the knowledge and experience one possesses, and this the conditions among which we live do not as a rule permit. The perception of our patrons is divided like a fly's eye into a thousand different facets; their ambitions buzz continually with love of advertisement. Ugliness is the inevitable result of this lack of concentration; you will find it wherever you go; but it can always be traced to the agency of man. Indeed, it may be said that it was invented by him. It does not exist in nature. And to nature one may indeed go for many lessons; but unfortunately the proverbial injunction to do so has grown one of the most vilely abused pieces of advice ever put forward. Natural forms are mercilessly seized upon and mutilated, and directed to functions with which it can never have been intended that they should be associated. In such cases even the deepest sincerity of resolution has not availed to prevent the result from being disastrous. The failure should not be attributed to nature, but to an imperfect understanding of her processes and achievements. Nature's everlasting success arises out of her consistency to method; her results vary faithfully and accurately with the needs and conditions which they were designed to fulfil. The great masters are those who have imitated this procedure and won for themselves some of the perfection of their great Teacher. Their loyalty to a once chosen method is as unflinching as hers.

That was in former times. We learn that God created the animals, and subsequently left Adam to name them. We have done better. We put nomenclature before creation, and, it must be said, gain considerable applause in the transaction. There is no doubt that it is eminently calculated to bring popularity to the person who performs it. But as liberty and education proceed arm in arm on their march of conquest, our failure to achieve the simplest beauty becomes more and more hopeless. The work of man has become little better than a rash that denotes the presence of a disease. The deluge of books and information by which we are overwhelmed is the chief obstacl to our complete realization of its presence

Not books only have demoralized ou artistic perceptions. The facilities fo travel which our modern world affords u are equally conducive to mental indigestion.

The heads of our students are so thickly stored with facts that the movement o their brains is considerably impeded The régime of the athlete is more salutary than that of the architect. What w require is a maximum of practice combined with a minimum of facts. Such principle of tuition would, I am convinced liberate the intellectual capacities not little. As the practice extends they will begin to manifest an increasing desire fo information: as the student's horizon widens his questions will multiply and his mind will readily absorb such fact as are gradually and economically presented. The eye and mind can be trained to beauty only as the palate and stomach to food. There is a science of beauty, bu it cannot be taught by phrase and fable You cannot educate the eye by appealin to the ear. Literature, therefore (and by this word I mean to signify all kind and degrees of verbal definition and exposition), must be satisfied to remain the devoted servant of the mistress art.

# Contemporary Art

## Stained Glass

Reginald Hallward has been exhibiting at 20 Florence Road, Ealing Common, a memorial window for a private house, and some small glass medallions.

## The Fine Art Society

Sigismund Goetze exhibits fifty holiday sketches made chiefly in England and Brittany, and mostly in oil.

The Spanish artist, Louis Masriera, hails from Barcelona, that centre of vivid life and vivid colour. The strong lights of the Mediterranean sea and sun are directed or reflected upon most of his subjects, producing in Bond Street an almost overpowering effect.

In another gallery are a number of drawings and etchings by Muirhead Bone, William Walcot, Whistler, Frank Brangwyn, D. Y. Cameron, William Strang, Ian Strang, G. L. Brockhurst, and Anders Zorn: a fine show of fine work.

A number of good mezzotint reproduction engravings by the late Leopold Goetze are also on view.

## The Brook Street Gallery

One has heard the name of Katharine Kinsella every now and then since the days of Whistler, and it now appears on a catalogue of nearly seventy small pictures and water-colour drawings, most of them made in Venice and Taranto, and most of them delightful. There is the wan charm of twilight about them, although lots of them are painted in high-noon or at night with a lamp shedding its bright rays and forming strong shadows on the ground and walls near by. They form a most attractive exhibition.

## The Dorien Leigh Galleries

An extraordinarily bright, compact, efficient show of posters and decorative pictures proclaim their maker, Dorothy Burroughes, an artist absolutely sure of her way. She knows what she wants, where to get it and how to get it, and her success is manifest in the effective treatment with which she has dealt in every case with the modernist themes with which she is concerned.

## The Walker Art Gallery

Captain Lindsay Garrard is by way of being a poet in paint, and has produced some extraordinary effects in oil painting, but his "Summer Morning" and "Crabbers in the Scillies" are normal observations of a more satisfying character. Violet Garrard also shows some oil paintings, together with a number of water-colour drawings.

Mrs. Wallace Stratton (Barbara Johnson) exhibits some water-colour drawings of Sussex and some Indian subjects of interest.

Rear-Admiral Gordon Smith has studied the sea intensively, and has seen it nearly always in low tones of grey and blue. He manages to get the heave of a huge wave admirably.

## The Greatorex Galleries

Deer-stalking is the subject of some three dozen water-colour drawings by H. Frank Wallace, which produce the general impression of fine scenery for the most part veiled in a moist and only partly translucent atmosphere.

## St. George's Gallery

It is rare to find so original and so accomplished a set of drawings as that by Hilda Hechle. They are mostly of mountains, all of rocks and water, with the exception of a few monotypes o landscapes. The artist is a geologist a well, but her science has come to the aid o her art and made it as full of truth as i is of beauty. The drawings have been made in the Alps, in Wales, and in Norway, and they display a love of th scenes they represent with so much ability.

## Impressionist Sculpture

The fact that Medardo Rosso has jus been exhibiting twelve pieces of his sculpture and ten designs at Milan takes things back to the brave, strenuous days not only of Manet and Moret, from whom the great Italian sculptor, Rosso, got his ideas of impressionism, but of Rodin, too on whom he tried to enforce them, and in part, succeeded.

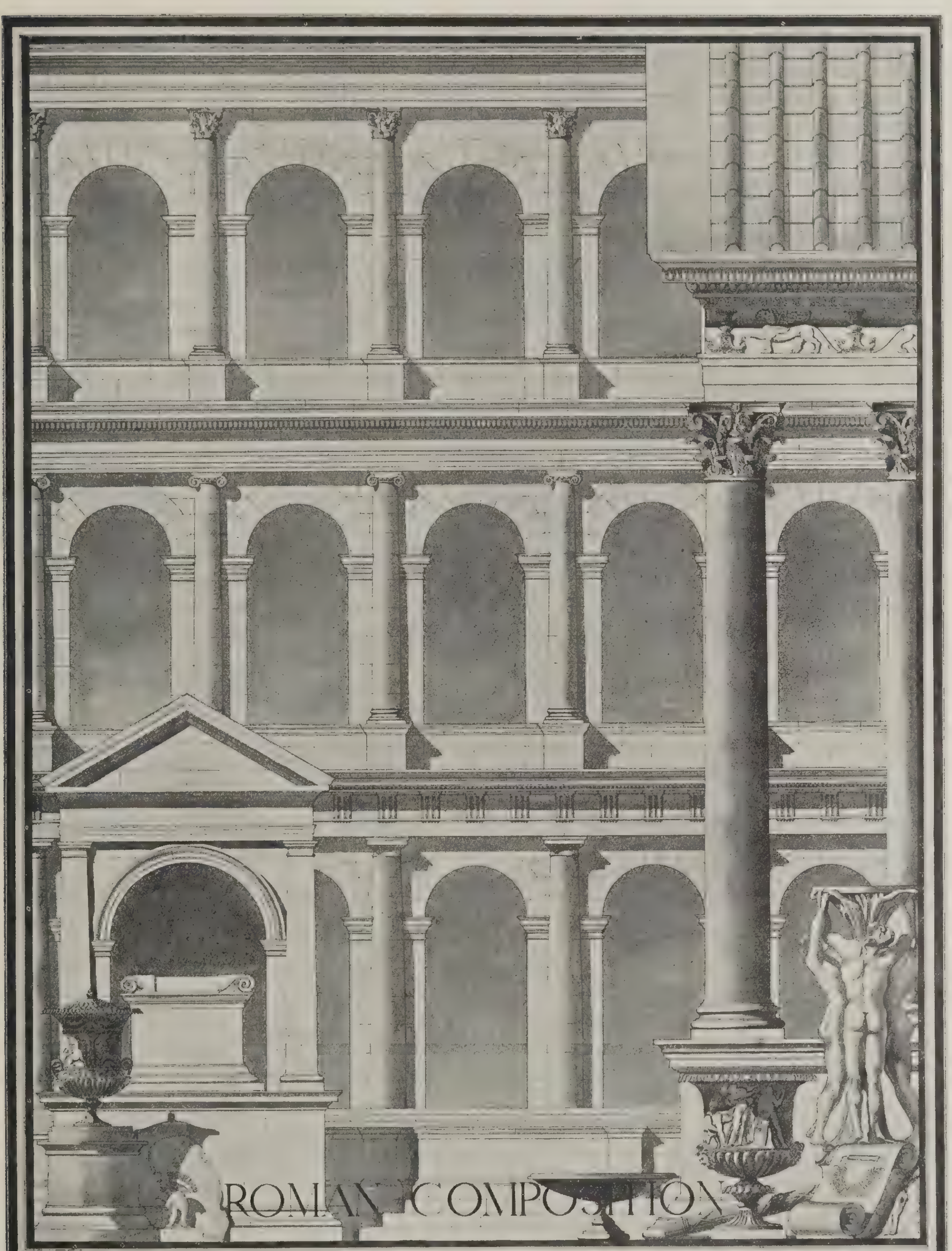
KINETON PARKES.

## English Stained-glass Work

The Victoria and Albert Museum has recently acquired through the generosity of the National Art Collections Fund six roundels of stained glass from a series representing the labours of the months These roundels were formerly at Cassiobury Park, Hertfordshire, and are rare examples of English domestic glass dating from the first half of the fifteenth century; they are painted in brown enamel and silver yellow stain, and are remarkable for the vigour of their execution. Other recent acquisitions of stained glass include two Dutch panels of the Haarlem school, dating from the early sixteenth century, purchased out of the income from the bequest of Capt. H. B Murray.

# Architectural Designs. 21.—The Roman Orders Based upon the Theatre of Marcellus

A Composition by R. Fisher



This drawing shows a Roman Order Composition executed by R. Fisher, an Evening Student in the Architectural School of the Northern Polytechnic, during the Winter Session, 1922-23, which was awarded first prize at the Annual Speech Night. It is based upon a study of the Theatre of Marcellus with the restoration of the Corinthian Order on the third story, which has now disappeared.

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# Spherical Niches—Construction and Stonecutting

By J. STIRLING BOYD, F.S.A.Scot., Licentiate R.I.B.A.

*(Concluded from our last issue.)*

### *herical Niche with Conical Beds.—Fig. 13.*

he body of this niche is similar to the previously studied, and the remarks de in connection therewith apply also this example. The hood in this exam-, as in the previous one, is a quarter-ere, but the beds are surfaces of erted half-cones, the apices of which ncide with the centre of the sphere.

or mould cutting it is advisable to w the complete plan, but only a half-vation is necessary, and the section y be omitted entirely.

Begin by drawing the centre line, the inging line in elevation, and the wall in plan. With a radius of 2 ft. draw semicircle in plan and elevation. elevation set out the radiating face ts and the level beds of the ashlar rses. Now draw the horizontal arrises he beds on the spherical surface as at nd *d′* in elevation, and the correspond- arrises in plan by projecting from the nts *a′* and *d′* to the wall line in the nts *a* and *d*. These arrises in plan are centric with the semicircle first drawn. like manner draw the other concentric ts in plan, and from the upper ex-nities of the conical beds as at *b′* ject to the wall line at *b*, describing upper edge of each conical bed as wn by dotted semicircles.

Now arrange the vertical joints in n beginning with the bottom course the hood. This is divided into five nes, three being of equal length, the face stones being each a little more n half the length of the others. These nes are allowed to extend as far as venient into the surrounding masonry working a level bed and a rough ver-l joint on each. The vertical joints ourse No. 3 are contained in the same tical planes as are those in the first rse, and the remark as to the level and rough vertical joints apply also he stones in this course. The second rse is divided into four stones of equal gth, the back edge of the stone being wn by dotted lines. In the fourth rse the vertical joints have to be usted so that they will give a proper d with the course immediately below, at the same time allow for the use tones as large as possible. The two stones are made slightly smaller n the other stone, and to prevent possibility of the face stones being odged by the forces arising from the of conical beds, as large an amount possible is left on each stone to bond the surrounding masonry. The ount these stones extend into the wall nown in the section and in the plan lotted lines. The keystone should be ured in position by "joggling," as wn in plan, elevation, and section.

ne bed mould for each course is indicated in the plan, and the elevation provides the necessary face moulds.

Although the projection of the vertical joints into elevation and section are not required for mould cutting, the projection of two such joints will be described. Select a point as C′ in elevation, and project from this to the wall line in plan. Draw from C in plan, and C′ in elevation, a horizontal line on the spherical surface, thus determining the points $a^2$, $c^2$, $d^2$, and $a^3$, $c^3$, $d^3$ in the plan. From these points project to the elevation in the points $a^4$, $c^4$, $d^4$ and $a^5$, $c^5$, $d^5$, through which the elliptical arcs are drawn. The corresponding joints in the section are drawn by first projecting across from the points $a^2$, $c^2$, $d^2$, in plan to intersect a line drawn under the section at an angle of 45 deg. From the points $a^6$, $c^6$, $d^6$ and $a^7$, $c^7$, $d^7$ on this line, project up to intersect the lines on the spherical surface projected across from the elevation in the points $a^8$, $c^8$, $d^8$ and $a^9$, $c^9$, $d^9$. Now draw the elliptical arcs through these points.

### *Stonecutting.—Stone No. 1, Figs. 14–16.*

Work the bottom bed and scribe the bed mould. At right angles to this bed form the vertical face on which scribe the face mould adjusting it to the lines already scribed on the bottom bed—see Fig. 14. Now cut the vertical face joint at right angles to the face of the stone, and bring the stone to the exact height of the face mould by working the top bed. Scribe thereon such lines of the bed mould as are required—see Fig. 15. Now cut the vertical heading joint, on which scribe such edges of the face mould as are required, the face mould now serving as a joint mould. A concave draft is now sunk to contain the lower arris of the conical bed, the templet for this draft being obtained from the corresponding curve in plan. Remove the surplus material above this draft and trammel the arris line from the top bed. Now work the concave conical bed by cutting straight drafts radiating from the centre of the sphere as shown in Fig. 16. The stone can now be completed by working a series of drafts on the spherical surface to a templet obtained from the elevation or plan semicircle. It should be observed that when templets are used to form a spherical surface, they must always be applied in planes which pass through the centre of the sphere.

### *Stone No. 2, Figs. 17–19.*

Begin by working the top bed (part of which only will remain), and at right angles thereto cut the vertical face. Scribe the bed mould, cut the vertical face joint, and scribe the face mould adjusting the latter to the face joint arris and to the lines on the top bed—see Fig. 17. Now cut the vertical heading joint at right angles to the top bed, and scribe the face mould accurately, adjusting it so that the vertical boning line scribed on the mould will correspond with a similar line lightly transferred previously to the face of the stone. To work the upper conical bed sink a draft as already explained—to contain the lower arris of this bed, and on this draft trammel the arris line from the top bed—see Fig. 18. A series of straight radial drafts cut as shown will form the conical surface. To work the lower conical bed and soffit, first form an operation bed to contain the lower arris, and on this surface scribe the two arris curves, templets taken from the plan being used for this purpose. To the larger arris curve just drawn, sink the surface of the small horizontal bed, the face mould giving the depth of the stone to correspond with the ashlar course. The lower conical bed can now be formed by cutting radial drafts as already described. The stone can now be completed by roughing-out the surplus material on the soffit and working the spherical surface by the aid of the same spherical templet used for stone No. 1. Fig. 19 shows the finished stone.

### *Keystone, Figs. 20–21.*

Work the face, on which scribe the face mould. At right angles, and to the exact height of the face mould, work the top and bottom beds, the latter being an operation bed. On the former scribe the bed mould, which is shown by dotted lines in plan, and on the bottom bed scribe the small semicircular arris—see Fig. 20. At right angles to the top bed cut the back portion of the stone, the depth being obtained from the elevation or section. At this depth sink a circular draft round the back of the stone to enable the conical surface to be worked. The radius for this draft is obtained from the elevation measuring from the centre line of the keystone to its edge on a level with the bottom of the joggle—see Fig. 21. A circular draft is also cut adjacent to the top bed, and a similar draft formed to the curve of the lower, or soffit, arris. Rough-out the superfluous material and run straight radial drafts to form the conical surface. The spherical surface is cut by the aid of the spherical templet.

Stones No. 4, right and left, have a recess cut in each to accommodate the projections left on the keystone—see Fig. 22. This "joggle," and the small horizontal beds left on all the other stones should prevent any tendency of the forces acting on the conical beds to dislodge the face stones.

### *Segmental Pediment and Pilaster Treatment, Fig. 13, I–IV.*

The architectural treatment of the wall surface surrounding this niche is

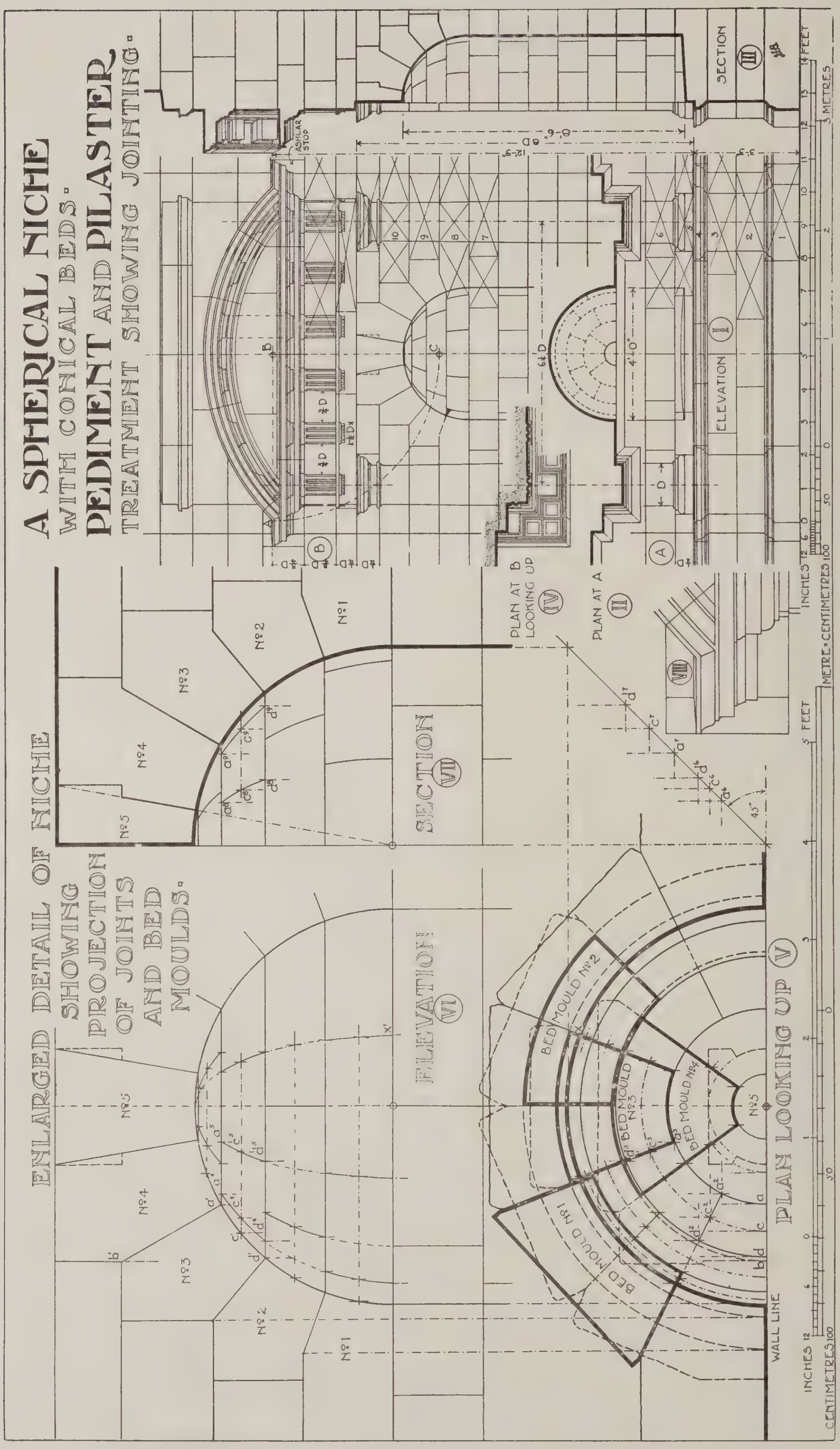


FIG. 13.—A SPHERICAL NICHE WITH CONICAL BEDS

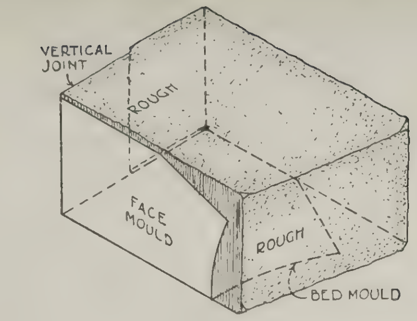


FIG. 14.

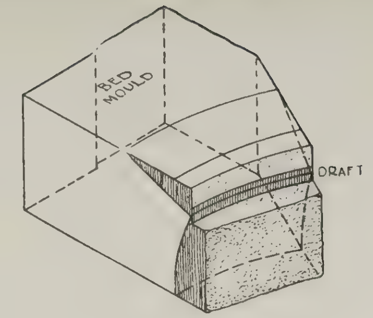


FIG. 15.

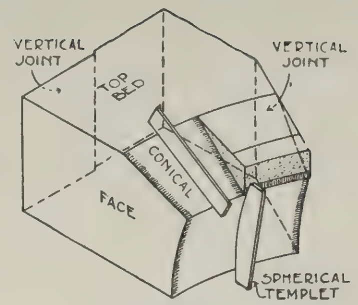


FIG. 16.

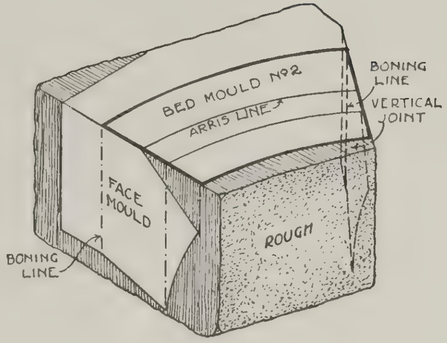


FIG. 17.

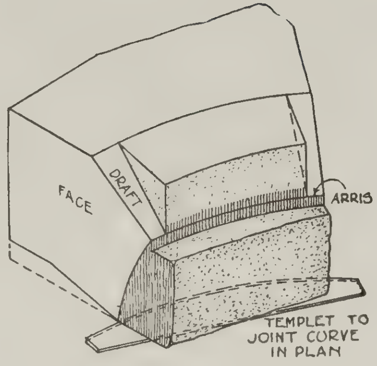


FIG. 18.

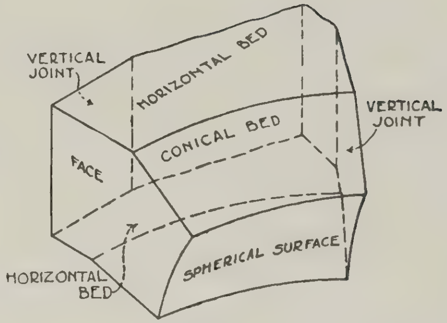


FIG. 19.

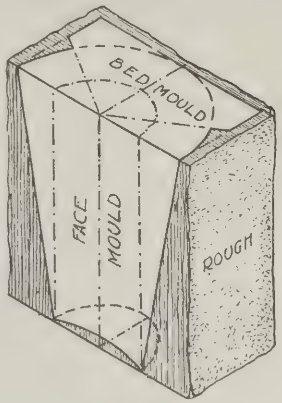


FIG. 20.

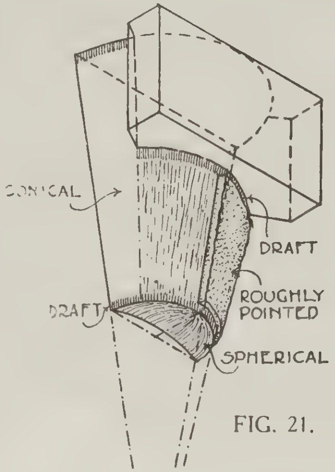


FIG. 21.

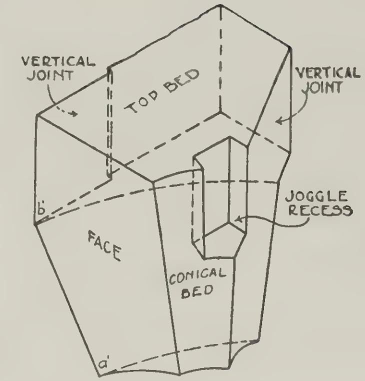


FIG. 22.

here introduced for the study of masonry jointing.

Doric proportions and details are used, and owing to the triglyph treatment of the entablature, the spacing of the pilasters requires special consideration. The height available for the order exclusive of the pedestal is 12 ft. 9 in. The pilaster is eight diameters, and the entablature two diameters high. The 12 ft. 9 in. dimension is therefore divided into ten equal parts, eight allotted to the pilaster and two to the entablature. The vertical height of the entablature is divided into three main parts, the architrave ½D, the frieze ¾D, and the cornice ¾D. Set out also the height of the base and capital, each ½D. The spacing of the pilasters is determined by the spacing of the triglyphs, the width of the triglyph being ½D, and the metope ¾D, and as the centre lines of the pilasters must coincide with the centre lines of a triglyph, the spacing of the pilaster centres would require to be either 5D or 6¼D. The latter figure gives a more satisfactory effect than the former and the centre lines are therefore spaced accordingly. The face of the pilasters project about 3 in. beyond the face of the wall containing the niche as is shown in the plan II, and section III. In setting out the section of the entablature, the face of the architrave is arranged to be in the vertical plane of the pilaster face. It will be observed that the wall surface at the outer edges of the pilasters is set back sufficiently to show a half-triglyph on the end of the frieze. This is clearly shown in the plan IV, which also shows the soffit of the cornice.

In the design of the pediment a light effect is obtained by arranging the segment to rise from a point A, about 9 in. from the extremity of the cornice. Project from A to the point B on the centre line, and with BA as radius determine the point C, which is the centre from which the segmental curve is described. All the members of the segmental cornice are of the same profile as those of the horizontal cornice, the upper member of the former meeting the upper member of the horizontal cornice in a correct mitre—see enlarged detail at VIII. The mutules or soffit blocks on the segmental cornice have their edges vertical, being projected directly from the mutules on the horizontal cornice. From the section—III—it will be observed that the entablature, tympanum, and the wall over the pediment are all in the same vertical plane.

The die of the pedestal supporting the pilaster is the same width as the base of the latter, and, as shown in the section, the face of the pedestal is in the same vertical plane as the front of the pilaster base.

After completing the drawing of the moulded coping and base, the jointing of the whole wall treatment may be studied.

The height of the ashlar courses should, as far as possible, be made alike throughout, but certain courses require to be modified to correspond in height with the various details of the order, e.g., bases and caps of pilasters, architrave, frieze, cornice, etc. The beds in conjunction therewith should be so arranged that they can conveniently be worked, and that they are so placed as to stand the action of the weather. The vertical joints also require careful consideration in order to secure a sufficient amount of overlap between the consecutive courses. Stone No. 1 in the base course of the pedestal has only about 3 in. of bond at each of its vertical joints. Although this is small, the stone is of a fair length, and there is therefore no great objection to the small amount of bond. The next stone, No. 2, has one joint at the left edge of the die of the pedestal, and the other joint at the "break" where the wall surface is set back. Stone No. 3 has the vertical joints in reverse order, the amount of bond between the two courses being about 8 in. The position of the joints of the coping stone No. 4 are arranged as shown with a view to economy and convenience of working. Stone No. 5, which forms the base of the pilaster, has its vertical joints coinciding with the width, and stone No. 6, which comes directly over the base, is an "outbond." On the top of No. 6 there is placed an "inbond" similar to No. 8, which has a joint on each edge of the pilaster. The stone adjacent to No. 7 on the left is an "inbond," one side of which forms part of the surface of the body of the niche, the stone directly over this being an "outbond," one end forming part of the hood of the niche.

The three stones forming the architrave should be not less than 18 in. broad on the bed as the stones of the frieze course are about 10 in. only on the bed. Al the stones of the horizontal cornice and pediment should extend as far as possible into the body of the wall, but the tym-panum stones may be about 10 in. on the bed. Alternative arrangements for the jointing of the pediment springers are shown. That on the right is the most satisfactory if large deep stones are pro-curable, the depth of the stone required being about 2 ft. On the left side the springer is formed with a rebated joint to receive the adjacent stone of the seg-mental cornice. One part of the joint extends from the upper surface of the segmental cornice to the underside of the mutule, and the other part of the joint from the surface of the mutule to the top bed of the horizontal cornice. The depth of stone required for this springer is about 1 ft. 3 in. The keystone of the pediment has its lower bed segmental and the upper bed horizontal, the joints of the cornice being normal to the curve The cornice stones on either side of the keystone have "circled" top and bottom beds, with side joints cut normal to the curve.

Photo by J. S. Boyd.

NICHE IN VESTIBULE DARU, THE LOUVRE, PARIS.

# Enquiries Answered

## Architects' Fees for Abandoned Work

ubscriber writes : "Please give me a ·t statement of the law with regard to ıitects' remuneration for abandoned k, with references to the leading cases eon. I know that if the architect has n notice that he will charge according the R.I.B.A. scale and has sent his e of charges the percentages therein forth will be recoverable. But as it ldom possible to take this strong line e must be innumerable cases in which are abandoned through uncertainty o what the result of an action would

f necessity each case must depend on own circumstances, hardly two being e in respect of the work done and the enses incurred. Naturally, all out-of-ket expenses should be paid by the nt, and fees (as scale) for such part he work as has been completed, e.g., ches only—completed drawings—ten-asked, etc., etc. F. S. I.

## Work on a Bungalow

Architect" writes : "I have been ructed to report upon and to value works executed on a bungalow for a nt, who entrusted the job to a end,' who has badly abused his idence. £600 to £700 was named as eneral statement of the cost of the galow by the 'friend,' who prepared e quaint plans and who undertook superintendence of the various trades. total cost of the job, however, unts to over £1,300. I have measured he work, and find that my client has grossly overcharged. Faulty work-ship has also caused considerable ense. In the absence of any specifica- or contract, can my client claim ages for defective work and resist excessive claim on account of wages ? issue of a writ is threatened against client."

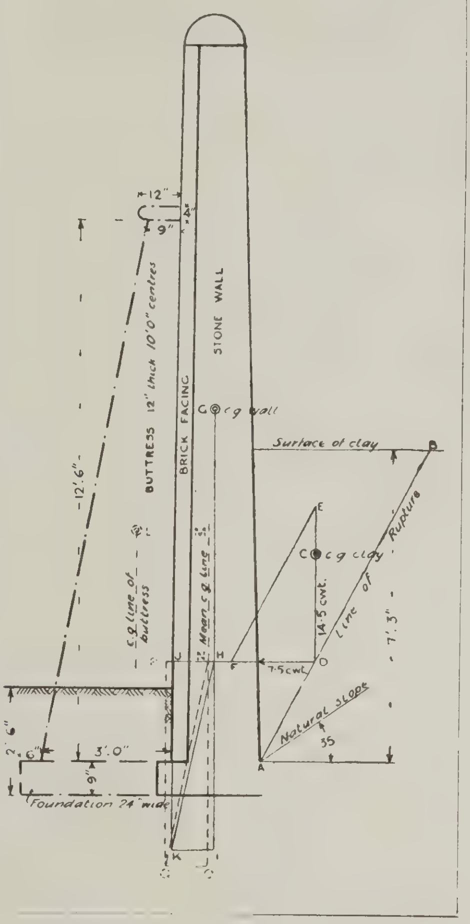
the "friend" is practising as an itect it is useless to claim on the nds of "incompetence": he was en by your client as his architect, one must abide by one's decision. , however, quite within your client's s to resist any charge made for ctive work on the builder's part, and ay also resist a claim for wages, or ges, which are excessive. The onus roof of over-charge and of defective rests on your client. He should in the evidence of witnesses who are ified to speak on these points, and, he receives the writ, he should uct his solicitor at once. F. S. I.

## bility of Retaining Wall

correspondent writes : "The accom-ing drawing shows a stone wall which bulged out through the pressure of on one side. How should I go t the buttressing of such a wall ?"

ere are several faults disclosed in lesign of this wall. The brick face should have been bonded at intervals into the stone backing; the foundation should have been deeper or more earth piled in front; weep holes should have been put at intervals through the wall to avoid the possibility of water at the back. The earth at the back is shown only 7 ft. 3 in. high, while the wall appears to have been intended for a greater height; the thrust, however, with the earth only 7 ft. 3 in. high, is evidently more than the wall could stand. One would have expected that the wall would have been pushed out at the foot, whereas the bulge, if correctly shown on drawing, rather indicates a local force near the surface of the clay backing, possibly due to water collecting there and expanding the clay. The stresses due to the existing conditions with clay at back as shown are 2½ tons sq. ft. compression on face of wall and ¾ ton sq. ft. tension at back, as shown by the graphic construction on the drawing. The wall is liable, therefore, to overturn as well as to be pushed out. If stone buttresses 12 in. thick and 12 ft. 6 in. high, projecting 3 ft. at base, be bonded into the wall at say 10 ft. intervals, the stresses will be 2½ tons sq. ft. compression at face and ⅓ ton sq. ft. compression at back. The graphic construction is as follows: At base of wall draw natural slope of soil, say 35 deg., bisect the angle between this line and the vertical to give the line of rupture AB. Find the centre of gravity of the wedge of earth between line of rupture and back of wall and draw through it the vertical line DE, of a length equal to the weight of 1 ft. run at, say, 1 cwt. to the cubic foot. Draw EF parallel to DB and DF horizontal, then DF will be the thrust at one-third the height to the same scale. Find the centre of gravity of the wall and drop a vertical GHI. Produce DF through H to J, making HJ=DF, but to half the scale. Find the weight of the wall making HI equal to it, to the same scale as HJ; complete the parallelogram and draw the resultant HK. The method is similar for the addition of buttresses, only that a length of 10 ft. of the wall must be taken with it, and the scale of the force lines reduced because of their greater value. The underside of base of wall and buttress should not be less than 2 ft. 6 in. below lower ground level, and the surface should extend level for 3 ft. from outer point of buttress. "The Mechanics of Building Construction" (Longmans, 7s. 6d. net) has near the end four useful chapters on the stability of walls and buttresses, and "Structural Design in Theory and Practice" (Constable, 10s. 6d. net) has, at page 232, a design for a brick retaining wall 16 ft. high with drainage complete.

HENRY ADAMS.



THE STABILITY OF A RETAINING WALL.

## Leaky Swimming Bath

"C. H." writes : "How can a leaky school swimming bath be economically treated ? It measures about 40 ft. by 20 ft. and the average depth is 5 ft. The walls are lined with white glazed bricks and the floor with white glazed tiles, and to all appearances everything is in perfect order. The bath, however, leaks rapidly—I am told, about 400 gallons per hour, and apparently at much the same speed when nearly empty, and the water is low and pressure reduced. It has been getting steadily worse for the last two years, and it seems an expensive matter to strip the whole of the inside and line with asphalt."

—It appears almost certain that the drought of 1921 has accentuated matters. I recollect a similar case about fifteen years ago, where, after the expenditure of a good deal of time and some money, the bottom of the bath had to be stripped, asphalted, and painted with a white enamel which would stand on a bituminous backing, after which the bath was perfectly watertight. Trial was previously made by introducing a small quantity of brightly stained fluid at numerous places in the bath when partly filled, in the hope that any considerable local leakage would thus be revealed by the coloured streaks flowing towards the leaks. In the case I have in mind no success attended this effort, as the leakage appeared to be due to general porosity or numerous small leaks; but in the event of the cause being one or more serious defects, due to settlement or shrinkage, I think it should localize the outlet and enable it to be dealt with in detail. G.

# Correspondence:

## The R.I.B.A. Council Elections

*To the Editors of* THE ARCHITECTS' JOURNAL.

SIRS,—I have received a circular signed by the majority on the present Council, very properly addressed to all members of the Royal Institute of British Architects.

By one of those extraordinary occurrences which no Fellow can understand, into the same envelope has intruded a formidable reprint, headed "Submerging the Associates," which is a flagrant bid for the vote of what is styled in the reprint "the Associates as a class."

How it comes that the members of the majority on the Council, who talk so affably in their circular to us, *all* Fellows even though we be, come to lend themselves to this peculiar and passionate propaganda, this setting of "class against class," we shall perhaps never know. Well, where ignorance is bliss, 'tis folly to be wise. I wonder if it will work twice? Will the Associates be persuaded to set up a rival outside the Institute in order to save their position inside it?

I do not think the persons responsible for this kind of propaganda are altogether confident about the result. Phrases, such as "it is open to that electorate to show itself as unstable as the wind," do not carry with them the assurance of victory. I can well understand the nervousness. If I might paraphrase Lincoln at Gettysburg, you may fool all the Associates some of the time, and some of the Associates all the time; but you can't fool all the Associates all the time. And isn't it fooling them to pretend you are saving their position in the Institute, when all the time you are working to set up a Board which must weaken, if not destroy, the very Institute itself?

A year ago the Associates may have thought the present majority had some wonderful plan by which the Institute was to remain paramount, while at the same time Registration was to be secured. Well, now we have seen the plan. There is to be a Board and a Tribunal on both of which are to come the men so despised. There is no plan for them in the Institute. This Board and this Tribunal are to be the judges and the Institute is to be the registrar. Well, a registrar's position is a very comfortable and not unimportant one, but it can hardly be said to be paramount while the judges are sitting. Ah, but, says the majority, we have provided for all that: after the judges have been sitting four years they are to come meekly down from their plan and the registrar is to step up on the bench!

Yes, that is like life, is not it; that is the way things happen? Is there any Associate in the Institute who believes that anything of the kind would or could take place? If they value the Institute, if they value their place in it, the last thing they will do will be to consent to such a rival being established.

No, the majority are not treating the Associates seriously; indeed, I do not know if they are treating the Institute itself seriously. Much curiosity was felt as to what it was the Parliamentary Agents did tell the majority, and we get some inkling in their circular. They were told, it appears, and told most emphatically, "that in face of public opinion, agreement or disagreement among themselves cannot have the slightest effect." Agreement, in the view of the majority, is a perfectly useless proceeding, and, with this opinion in their pocket, they are solemnly inditing letters to all and sundry to confer with them, so that they may have an agreed Bill! Was ever such cynicism? With their tongue in their cheek, they approach the profession; with their tongue in their cheek they approach the electorate.

Will it work? I think not, this time. I think that the men who are engaged in the great profession of architecture, and who enjoy the distinction of membership in its great Institute, will feel that the question of organizing the profession to take its rightful place amongst its fellows is one that cannot be handled in this spirit.

It demands that breadth of vision and that catholicity of judgment which alone can make the Institute in fact what it is in theory—the national home of architecture in this country.

HARRY BARNES.

*To the Editors of* THE ARCHITECTS' JOURNAL.

SIRS,—I have read with much interest the letter from our President in your issue for May 9. In my humble opinion it is full of very sound advice given at a very important period in the life of our Institute.

As a member of the present Council, I would like personally to acknowledge our indebtedness to a President who has at all times shown every consideration and fairness to all members. I would like to warn those who have a vote for the new Council, that the methods adopted by a large section of the present Council are likely to cause a very serious weakening of the prestige of the R.I.B.A. inside and outside our Institute.

The adoption of what one might fairly describe as political methods at the last election, created, for the first time to my knowledge, undesirable feeling within the Council chamber.

I feel it my duty to state plainly, that in my opinion, if this is allowed to continue, all interest in our affairs by those who work unselfishly in the interests of architecture will cease.

If every motion which comes up for discussion is to be adopted or turned down at the dictates of two or three leaders of a faction, in fact if there is to be no freedom for all members to vote as they choose after hearing both sides, then no self-respecting person will desire to serve on the Council.

It has been deplorable during the present session, that so much of the valuable work carried out by the standing committees should have been subjected to such methods and thereby so often referred back without receiving the d consideration necessary before such acti is taken.

I should urge every member of o Institute to vote without fail, but befo doing so, consider very carefully t merits of each candidate, but not to vo solely upon any political issue.

Let us remember that our Institu exists for the good of architecture and t profession as a whole, and that o Council should contain the names those in the profession that are held the highest repute by its members a also by the great general public, who we all desire shall have the highe respect for what we all know to be t most influential society in the professio

STANLEY HAMP.

*To the Editors of* THE ARCHITECTS' JOURNAL.

SIRS,—I am directed by the Coun of the Liverpool Architectural Society state that, after careful deliberation, has resolved to circularize its memb with a recommendation to vote for t election to the R.I.B.A. Council of th candidates put forward by the 19 Emergency Committee and to vote no others.

The Council of the Liverpool Socie would under normal conditions not ha intervened in a matter primarily t concern of the individual voter. But t conditions of the present election are from being normal.

To restore the prestige and to sa guard the future of the Institute Council is of the opinion that it is essent that the nominees of the Emergen Committee be returned, and it belie that it would be failing in its duty b to those whom it immediately represe and to the general body of the Instit if it neglected to exert its influence behalf of the Committee's candidates refrained from making public its decisi to do so.

ERNEST GEE,
Hon. Secretar
Liverpool Architecture Societ

*To the Editors of* THE ARCHITECTS' JOURNAL.

SIRS,—The Emergency Commit were responsible for the policy of Institute for many years, and in t anxious search for more members swell the coffers they stepped bey the bounds of a professional institutio

The election of Licentiates to Fellowship was an injustice to the As ciate class, inasmuch as the latter wo naturally hope in the usual course events to go forward to the Fellows but by this step it was possible to beco a Fellow by a far easier route than Associateship.

By the War Exemption Regulati of 1918 the Institute conceded to t students far more than other professi bodies. This clause made it possible be exempted from the final examinati after exemption from the preliminary intermediate, thus securing election to ssociateship without passing even one xamination. To add insult to injury ll members so exempted under those egulations are marked in the Kalendar s having passed an examination qualifying for candidature as Associate. An rganized protest was made by members rom the provinces in 1919 against the lection of Associates without examination, but the slight concession obtained vas nullified in administration.

The policy of the Emergency Committee vith regard to Registration is seemingly o grasp at the shadow by means of Jnification, and to drop the substance, amely, the upholding of the prestige nd standing of the Institute. It might e argued that as the latter has dropped o far, a little farther would be of no noment.

To the Emergency Committee it may eem a good policy to swell the ranks of he Institute in this way, but to the ssociates this lowering of their hardly arned status is a vital matter.

WALTER P. RYLATT.

# Law Reports

## Acquisition of Slum Areas

*Arbitration, Lord Colebrook and others v. London County Council.*

April 27. King's Bench Division.
Before the Lord Chief Justice and Justices Shearman and Branson.

This case raised an important question nder the Acquisition of Land (Assessment of Compensation) Act, 1919, and he Housing Acts 1890 to 1919, and came efore the Court upon an award by an rbitrator under section 2 of the former Act.

Mr. Macmorran explained to the Court hat the Council, under a scheme to lemolish certain slum areas compulsorily, cquired certain property, including leven houses in Stepney. It was not ontended that compensation should not e paid, nor was the amount in dispute, ut the houses belonged to various people, iz., the copyholder, the leaseholder, and he tenants, and the question for the Court was about the disposition of the noney between those persons. Was hat disposition to be made according o the interests of the parties at the date f the notice to treat or at the time the valuation was made of the property as a ite clear of buildings? At the time of the otice to treat all the houses were standing, but later five were demolished, so hat at the date the valuation was made nly six were standing, and the property vas valued as a site clear of buildings. The interest of the parties naturally vould be altered according to the decision f their lordships.

The Lord Chief Justice, at the conclusion of the legal arguments, said the rbitrator had stated the case on the uestion before him. Section 9 (1) of the Act said: "Where the land included in ny scheme made or to be made under Part 1 or Part 2 of the principal Act other than land included in such a scheme fficient and not on account of the saniary condition of the premises thereon or f those premises being dangerous and rejudicial to health) is acquired compulsorily, the compensation to be paid or the land, including any buildings thereon, shall be the value at the time the valuation is made of the land as a site cleared of buildings and available for development in accordance with the requirements of the building by-laws for the time being in force in the district. Provided that, if in the opinion of the Local Government Board, it is necessary that provision should be made by the scheme for the rehousing of persons of the working classes or the land or part thereof when cleared should be laid out as an open space, the compensation payable to all persons interested in any land included in the scheme (other than aforesaid) for their respective interest therein shall be reduced by an amount ascertained in accordance with the rules set forth in the first schedule to this Act." Continuing, his lordship said in this particular case there were three claimants—the lord, the copyholder, and the holder of a building lease. At the time of the notice to treat the land was covered. It was entered on December 11, 1922, and the buildings partially demolished. The answer to the question raised seemed to be already given in section 9 (1) as he had read it. The sum should be apportioned as at the date when the valuation was made. To hold the contrary would be to contradict the provisions of the Act. As regarded question 2, it did not matter when or to what extent the buildings had been demolished. The valuer saw the land as if there were no buildings upon it.

Justices Shearman and Branson agreed.

# Parliamentary Notes

[BY OUR SPECIAL REPRESENTATIVE.]

### *The Housing Bill.*

During its passage through committee the Government's Housing Bill has been considerably amended. The most important alteration is one made, at the instance of the Minister of Health, to extend the maximum measurement of subsidized two-storied houses to 950 superficial feet, and of flats or one-storied houses to 880 superficial feet. A further proviso has also been agreed to, enabling minimum measurements to be reduced to 570 superficial feet in the case of two-storied houses, and 500 superficial feet in the case of flats or one-storied houses.

### *Ex-Service Men as Building Operatives.*

At question time, Sir M. Barlow, Minister of Labour, informed Sir W. Davison that there was no present intention of restarting the scheme for training ex-Service men as bricklayers and plasterers, and in other skilled branches of the building trade. But the scheme for the training of disabled ex-Service men in the building trade was still in operation, and under it 4,417 men had been trained, and 1,197 were still in training. About 1,000 men had finished their training at the Government instructional factories and centres and were awaiting improverships.

### *Housing Progress.*

Mr. N. Chamberlain, the Minister of Health, informed Mr. Warne that 4,519 houses had been completed on May 1 by eighty-two public utility societies and housing trusts, under the State-aided scheme. Of these societies and trusts some thirty-five, which provided altogether 2,889 houses, were connected with industrial firms.

In answer to Mr. C. Buxton, Mr. N. Chamberlain said that during 1904–1914 loans were sanctioned under the Housing Acts to local authorities in England and Wales for the erection of 8,381 houses. During this period there was a net increase of 628,589 houses of under £20 annual value.

### *The Purchase of Houses.*

Replying to Capt. Terrell, Mr. N. Chamberlain said he was all in favour of the policy of encouraging the purchase of houses by working-class tenants. Under the provisions of the new Housing Bill it would be open to a local authority to submit proposals to enable working-class tenants to purchase on the weekly instalment system houses built either by the local authority or by private enterprise. It was contemplated that the whole of the subsidy given by the local authority and the Exchequer would reach the purchaser in the reduction of price of the house.

# Reading Society of Architects

At the third annual meeting of the Reading Society of Architects, which is the Berkshire Branch of the Berks, Bucks, and Oxon Architectural Association, held at Reading, the following members were elected to form the Executive Committee for 1923: Chairman, Mr. W. Galt Millar, F.S.I.; Vice-Chairman, Mr. W. Roland Howell, F.R.I.B.A.; Hon. Librarian, Mr. H. Whiteman Rising, F.R.I.B.A.; Hon. Treasurer, Mr. J. Hugh Goodman, Lic.R.I.B.A.; Hon. Secretary, Mr. C. B. Willcocks, F.R.I.B.A.; Members, Messrs. C. Steward Smith, F.R.I.B.A., W. R. Morris, Lic.R.I.B.A., J. R. Greenaway, F.S.I., and W. J. Freeman, A.R.I.B.A. The following representatives of the Society were elected to serve on the Council of the Berks, Bucks, and Oxon Architectural Association: Messrs. Chas. Steward Smith, F.R.I.B.A.; W. Roland Howell, F.R.I.B.A.; F. H. Floyd, F.R.I.B.A.; H. Whiteman Rising, F.R.I.B.A.; C. B. Willcocks, F.R.I.B.A.; F. Woods, A.R.I.B.A.; and W. R. Morris, Lic.R.I.B.A. Mr. W. Galt Millar was nominated for election as Vice-President of the Berks, Bucks, and Oxon Architectural Association.

Mr. Herbert Maryon, Associate of University College, Reading, delivered an interesting lecture, illustrated by many excellent lantern slides, on "The place of Sculpture in relation to Architecture."

# Gloucestershire Architectural Association

A combined meeting of the Bristol Society of Architects and the Gloucestershire Architectural Association took place at the Royal West of England Academy, Bristol, when an address was given by Mr. H. Bulkeley Creswell, F.R.I.B.A., on "The Architect and the Commercial Man." Mr. G. C. Lawrence, A.R.I.B.A., President of the Bristol Society, welcomed the members of the Gloucestershire Association, and referred briefly to the federation of the Society and the Association, under the title of "The Wessex Society of Architects," which would shortly be an accomplished fact.

## York Minster: A Railway Poster

One of the finest coloured posters ever issued in connection with railway publicity lately made its appearance on the walls of various stations and was immediately acclaimed. Apart from its artistic merits, the poster has an added interest in that it happens to be the first publication of the kind issued by the company in question, and if it may be regarded as a criterion of the posters yet to come from the same quarter it may confidently be set down as a very happy augury. The poster shows an interior view of the world-famed minster at York, with its glorious windows and massive masonry, and it is entitled "England's Treasure House of Stained Glass." The artist, Mr. Fred Taylor, R.I., has most happily caught, and the printer has no less finely reproduced, the "dim, religious light" of York's magnificent fane, and both may be warmly congratulated on the excellence of their work. In commissioning the poster the aim of the railway company's publicity department was to raise the standard of advertising as much as possible and put out as fine a picture as could be obtained, and one which was as strong as an advertisement as it was as a picture. The result has most certainly been attained. The original of the picture is, we understand, on view at the Royal Institute (Prince's Gallery). Probably this is the first occasion on which the original of a railway poster has been exhibited, and it is a foregone conclusion that it will attract great attention. In connection with this fine picture there has also been issued an illustrated brochure on "York Minster and Its Windows," the frontispiece of which is a reproduction in miniature of the poster aforesaid. Copies of the coloured poster printed on special paper may be obtained for 10s. 6d. on application to the Advertising Manager, London and North-Eastern Railway, York.

## The Building Award

Sir Hugh Fraser, the arbitrator, has made the following awards in the building trades dispute :—

I have carefully considered all the evidence and arguments placed before me in the above matter.

I find that the agreement referred to in the reference to arbitration as the National Wages and Conditions Council document requires revision by mutual consent in the interests of the entire industry, and in order that the purposes and intentions of the parties thereto should be more clearly indicated.

I award and direct that such revision shall be made at or before the statutory meeting in January 1924.

In the meantime, with the object of securing peace in the industry and stability in regard to wages and conditions of employment, I award and direct that the following alterations shall be made in the document forthwith :—

1. In Clause 14 (a) of Section 2 (i.e., rules of the council) after the figures and words "170 per cent." the following words shall be inserted : "In all regions except London, and 164½ per cent. for London."

2. That Clause 14 (b) of Section 2 (i.e., rules of the council) be altered by substituting the figures 5½ for the figures 6½ throughout such Clause 14 (b), these figures therefore determining the rise or fall in wages in accordance with the index figures of the cost of living.

3. That Clause 14 (c) of Section 2 (i.e., rules of the council) be deleted.

4. That both parties shall strictly adhere to the sliding scale in wage adjustments.

5. That on and from Saturday, May 26 1923, the rates of wages shall be reduced as hereinafter indicated, and shall not be varied prior to the date of the statutory meeting in January, 1924 : (1) Grades A craftsmen (with the exception of London) and Grades B craftsmen shall be reduced 1d. per hour; (2) London area craftsmen shall be reduced ½d. per hour (3) Grades C craftsmen shall be reduced ½d. per hour; (4) labourers' wages shall be maintained at 75 per cent. of the craftsmen wages as nearly as possible All the reductions mentioned in 1, 2, 3 and 4 shall be on account of future adjustments rendered necessary by the operation of the sliding scale.

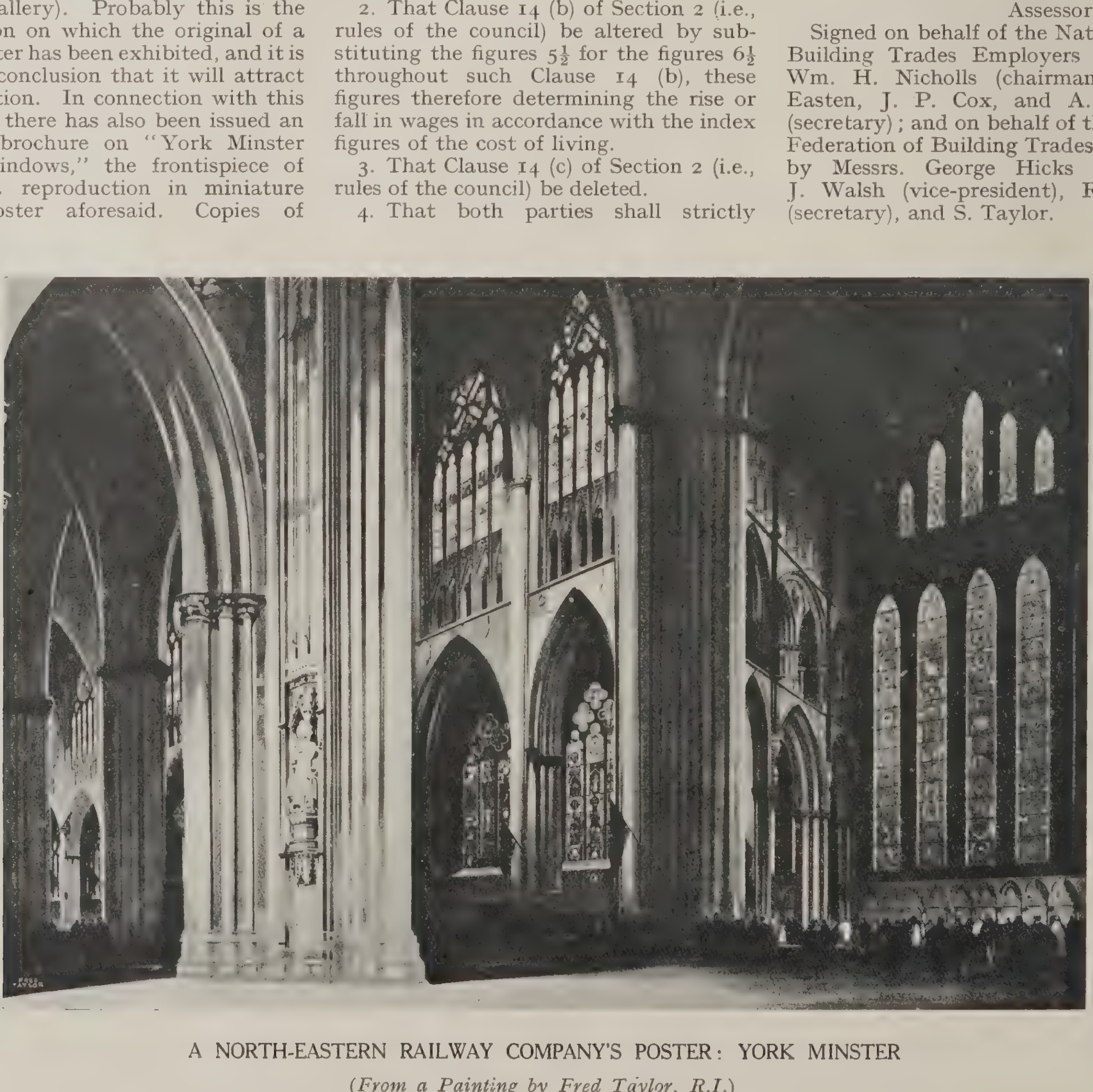
I desire to add that the representatives of both parties exhausted all possible arguments in favour of the claims of those they represented in a manner which left no doubt in my mind as to the profound sincerity in the interpretation placed by each side on the national agreement.

HUGH FRASER.

We, the undersigned assessors in the arbitration and the undersigned representatives of the respective parties in the arbitration, call for the loyal observance of the above award and directions contained therein by all parties interested throughout the country.

BENJAMIN I. GREENWOOD.
ALEXANDER GORDON CAMERON.
Assessors.

Signed on behalf of the National Allied Building Trades Employers by Messrs. Wm. H. Nicholls (chairman), Stephen Easten, J. P. Cox, and A. G. White (secretary) ; and on behalf of the National Federation of Building Trades Operatives by Messrs. George Hicks (president), J. Walsh (vice-president), R. Coppock (secretary), and S. Taylor.



A NORTH-EASTERN RAILWAY COMPANY'S POSTER: YORK MINSTER

*(From a Painting by Fred Taylor, R.I.)*

# me Recent Banks by
# ssrs. Gotch and Saunders

is week we illustrate four banks
h have been erected for the London
t City and Midland Bank from the
gns of Messrs. Gotch and Saunders,
R.I.B.A., of Kettering. They are
ted respectively at the corner of
Street and Halesowen Street,
kheath, Rowley Regis, Staffs; in
Street, Fordingbridge, Hampshire;
ridge Street, Lewes, Sussex; and in
Market Place, Dursley.

wo of the banks—at Blackheath and
sley—are of brick with Darley Dale
e fronts, that at Lewes is of brick
a Portland stone front, and that at
lingbridge is of brick with a rough-
front. In the bank at Fordingbridge
cornice and doorway are of wood, and
tiles have been re-used for the roof.
floor and the roof of the Blackheath
are of reinforced concrete.

e general and sub-contractors were
llows :—

*Blackheath.*

eneral contractors : Messrs. Nicholson
Sons, Leeds ; sub-contractors : Val de
ers Co. (asphalt) ; Bridgeman and
Lichfield (stone—carved) ; Excel-
Reinforced Concrete Co. (fireproof
s); Excellence Flooring Co. (wood block
ing) ; H. Tanner, Hanwell (marble
ing) ; Baxter, Impey & Co., Birming-
(electric wiring) ; Shuffrey & Co.
ous plaster work) ; Nicholson and
(special woodwork and fittings) ;
ey Bros., Birmingham (electric light
res, door furniture, etc.) ; Jones and
ood, Stourbridge (heating appara-
Chatwood Safe Co., Ltd. (strong-
door).

*Fordingbridge.*

neral contractors : Musselwhite and
Basingstoke ; sub-contractors : Pil-
on Asphalt Co. (asphalt) ; H. Tanner,
well (marble flooring) ; Arbuckle and
Manchester (special woodwork,
lling, and fittings) ; Best and Lloyd,
ingham (gas fixtures) ; Chas. Smith
Sons, Birmingham (door furniture,
; Thames Bank Iron Co., Ltd. (heat-
Chatwood Safe Co., Ltd. (strong-
door).

*Dursley.*

neral contractors : T. H. Kingerlee
Sons, Oxford ; sub-contractors : Val
ravers Co. (asphalt) ; John Bowen
ons, Birmingham (stone—generally);
geman and Son, Lichfield (carved
work) ; Excellence Flooring Co.,
s (wood block flooring) ; H. Tanner,
vell (marble flooring) ; Holborow and
Tetbury (gasfitting) ; Arbuckle and
Manchester (special woodwork, panel-
and fittings) ; Best and Lloyd, Bir-
ham (gas fixtures) ; Chas. Smith and
Birmingham (door furniture—locks,
ic bell plates, etc.) ; H. Geo. John-
Battersea (lifts) ; Holborow and Sons,
ry (heating apparatus) ; Chatwood
Co., Ltd., Bolton (strong-room door).

*Lewes.*

eral contractors : Gaze and Sons,
Kingston - on - Thames ; sub-con-
ors : Bridgeman and Son, Lichfield
ed stonework) ; Geo. Jennings, Ltd.
ary ware and fittings) ; Acme Paving
wood block flooring) ; H. Tanner,
Hanwell (marble flooring) ; Shuffrey & Co., London, (plaster work) ; Cook, Ltd. (special woodwork—panelling and fittings) ; Chas. Smith and Sons, Birmingham (electric light fixtures, door furniture—locks, electric bell plates, etc.) ; Express Lift Co. (lifts) ; John Tann, Ltd. (strong-room doors).

# The Edinburgh Conference

In view of the great success of the conferences held at Liverpool and Cardiff it is expected that there will be a large and representative gathering of architects from all parts of the country at the British Architects' Conference, which takes place at Edinburgh from June 13 to 16. Invitations have been issued to all members and Licentiates of the R.I.B.A., and to all members of the A.A. and the allied societies. The headquarters of the conference will be at 15 Rutland Square, Edinburgh, the new home of the Incorporation of Architects in Scotland. Architects who wish to attend should notify the secretary of the R.I.B.A., 9 Conduit Street, W.1, as early as possible.

Appended is the programme :—

*Day of Arrival, Wednesday, June* 13.

Members will assemble in Edinburgh. At 8 p.m. they will be entertained by the Incorporation of Architects in Scotland at a smoking concert at 15 Rutland Square.

*Thursday, June* 14.

At 10.15 a.m. the conference will be accorded an official welcome by the Lord Provost and magistrates of Edinburgh in the Council Chamber, and thereafter the meeting of the conference will be continued there, when several papers will be read and discussed.

At 1 p.m. there will be luncheon which will be served in the Castle, if permission is obtained (ticket 4s.), following which a photograph will be taken of members attending the conference.

At 2.15 p.m. there will be a motor-drive to Holyrood Palace and other places of interest in Edinburgh (ticket 2s. 6d.).

From 4.30 to 6 p.m. an "At Home" will be held in the National Gallery, where tea will be provided and members will have an opportunity of inspecting the exceptionally interesting collection of paintings there.

At 8 p.m. the Lord Provost will hold a reception at the City Chambers.

*Friday, June* 15.

The day will be devoted to a motor char-à-banc tour to Dryburgh, Melrose, and Peebles, starting at 9.15 a.m. from 15 Rutland Square, and returning to Edinburgh at 6 p.m. The cost of the tour, including luncheon at Melrose and tea at Peebles, will be 17s. 6d.

At 7.30 p.m. the conference banquet will take place at the Freemasons' Hall. (Tickets, exclusive of wine and cigars, 15s.; inclusive of wine and cigars, £2.)

*Saturday, June* 16.

The day will be devoted to visits and excursions arranged individually by members, who will receive information and advice on the subject at the conference headquarters.

# The Late Mr. Harry Inigo Triggs

It is with deep regret that we record the death of Mr. Harry Inigo Triggs, F.R.I.B.A., the architect and author. He died last month while on a visit to Taormina and was buried there in the little mortuary chapel of his own design. Writing in the Journal of the R.I.B.A. Mrs. W. de l'Hôpital says : By the untimely death, at the age of forty-seven, of Harry Inigo Triggs the art of rural domestic architecture in its peculiarly intimate and simple English expression has lost one of our most able modern exponents, one who, moreover, out of a specialized knowledge of the science and craft of garden design was enabled to enhance the quality of his architectural productions by means of harmonious and beautiful settings and accessories. While his collateral descent from Inigo Jones, of which he was justly proud, undoubtedly served as a stimulus, success for Harry Inigo Triggs, as for many another member of his exacting profession, had to be wrested perforce from fate. Born in Chiswick in 1876, and losing his father at an early age, he left his school—the Godolphin—on his own initiative when sixteen years old and articled himself to an architect in the City, Mr. Peter Dollar. First studies in Art had been made at the Chiswick School of Art. Next he entered the classes of the Carpenters' Company, under Professor Banister Fletcher, and there carried off both bronze and silver medals. During the term of his articles he managed to attend the Royal Academy Schools for five years, again achieving distinction several times as a prizewinner and eventually securing the second place for the Travelling Studentship, with £200, at the end of his term. The R.I.B.A. early awarded him the prize for design and admitted him as Associate, while he became successively Godwin Bursar in 1906 and member of the Council in 1910–11.

Emerged from the *status pupillaris*, experience was gained and ripened in a series of assistantships ; he worked in turn under Mr. Leonard Stokes, Mr. Henry T. Hare, Sir Henry Tanner at the Office of Works, Messrs. Eccles and Woolfall of Liverpool, and the late Mr. Unsworth.

His career was then seriously threatened—and in a man of less courage and resistance might have been altogether marred—by an illness, with hæmorrhage, which unhappily resulted in chronic and lifelong ill-health. Ordered to St. Moritz, as a life-saving measure, he rapidly made several good friends, and by starting a practice in Switzerland was able to turn misfortune to good account. Among his other buildings at this period should be noted "Villa Suvretta," in the Engadine.

In due course health was sufficiently restored for his return to England, and in 1908 he entered into partnership with the firm of his former chief, Messrs. Unsworth and Son. Thereafter much domestic and garden work filled his time, and he produced, mainly in the South of England, a number of charming country houses of greater and less degree. His skill in the adaptation of old buildings was remarkable. At the time of his death he was engaged on designs for a house at Sparsholt and for a very charming villa at Taormina, Sicily. Among his public works may be recalled the laying out of the gardens at the Whiteley Village and fourteen war memorials; the designing of the latter gave him the keenest pleasure.

His books on gardens, some of which are already regarded as classics in their subject, will, we are assured, prove his best and most enduring memorial. His first publication, in collaboration with Mr. Henry Tanner, Jun., was, however, devoted to "Some Works of Inigo Jones." Together the two collaborators cycled gaily through England collecting their material. The idea of his first garden book was conceived as the result of these wanderings. Unfortunately, "Formal Gardens in England and Scotland," whose dedication was to H.M. Queen Alexandra, is now out of print, and second-hand copies fetch high prices, especially in America. "Garden Design in Italy" is a monumental work of large format, superbly illustrated and produced under the special approval of H.M. Queen Margherita, who accepted its dedication. The author spared no pains to make a complete and beautiful record of subject, visiting over eighty villas a palaces in Italy. He also had spec access to and made a plan of the Vatic gardens. This volume was followed few years later by one covering a y wider field, under the title of "Gard Craft in Europe."

A lifelong interest in the subject urban expansion and knowledge of t problems of town planning and adequa housing was crystallized in "Town Pla ning, Past, Present, and Possible," whi appeared in 1909.

# The Standardization of Drainage Methods.

A PAPER on the Standardization of Drainage Methods, Principles and Details was read by Mr. A. Palmer, P.A.S.I., of the Greenwich Borough Surveyor's Department before a meeting of the Institution of Municipal and County Associate Members of the Metropolitan Branch of Engineers. Mr. Palmer dealt with his subject under two headings: (*a*) details affecting the sewer side, or that of the municipal authority, and (*b*) details affecting the drainage side, or that of the private owner.

For convenience he dealt with the intercepting chamber under (*a*), and stated that the actual connexion to the sewer from the intercepting chamber invariably ran direct from private properties at right angles to the sewer, while in contrast to that, in every minor drain of the private owner connecting with his major or main trunk drain, "leads," or very easy bends, were enforced, and in many districts 6 in. of Portland cement concrete had to be provided, which was omitted by the local authorities in their section of the work. Some sanitary inspectors insisted on 4 in. interceptors, being placed on 6-in. sewer connexions. This meant that a reverse reducer had to be introduced immediately at the outgo of the interceptor, which was in many cases unsuitable in such a position.

The writer agreed to the use of the interceptor in most cases, and had written a paper entitled "The Defence of the Intercepting Trap," and he had made the following claims for his "regulation trap":—

1. A very easy bend direct from a sharp fall in the channel pipes, giving all soil and matter greater impetus on entry to the trap to reach the sewer side direct.

2. No stoppage of trap possible, since its shape increased in diameter and area from house drain side to sewer side; therefore, whatever had cleared the house drain must clear the trap.

3. Easy access from mouth of trap to at least three parts through for cleansing and cleaning purposes. Owing to either a deep seal or drop in many traps (or even both in some) a half-way access only was possible.

4. Cast-glass stopper, chained so that if it be blown out by any sewer-gas pressure, it could not fall into the mouth of the trap, and even if stoppage should exist and the chamber become filled, the stopper could be easily smashed from above the manhole. The stopper was also small enough to pass through the trap.

5. A patent adjustable joint at the outgo where, in the ordinary way, joints were most imperfectly made owing to their inaccessibility, and become hence a frequent source of stoppage.

6. The overthrow of the contentions of the Local Government Board's Committee against the interceptor, viz., "that of blockage, with other minor accompanying defects."

Mr. Palmer warned drainage experts of the serious danger of throwing motor spirit into drains. He stated that it had been calculated that one gallon of petrol, if vaporized into air, would produce something like 50 cub. yd. of explosive mixture. A medium-sized sewer, running half-full, would only require one gallon of petrol to produce sufficient vapour to blow up some 50 yd. of sewer. Serious loss of life has occurred owing to this objectionable practice, and private householders were warned against it.

The specific gravity of motor spirit was at one time much lighter than that of water, but now it was the same or almost the same as that of water, with the result that the theory advanced by the London County Council in 1907 for deep-sealed gullies was wrong, hence their special gully system, deep-seal or not, was useless.

The questions for the municipal engineer were:—

1. Should garages be drained at all? If not, what was to become of the washings when cleaning cars, considering (so they were told) that one man took nearly three hours to hose and clean a fairly large car down, leaving out of the question 'buses, motor-vans, lorries, and other large commercial vehicles?

2. The standardization of a system between that of a single car to the needs for much larger works.

3. The acknowledgment of a separate system in growth for the metropolis since the "dual" system of Sir J. W. Bazalgette's time.

4. The accurate recording and constant inspection of such systems that they do not become connected by future soil drains.

Under the heading of house drainage detail the writer illustrated a few of many instances from actual practice where considerable advantage could have been gained by remodelling an existing drainage scheme, instead of just re-laying the drains on the lines of the old system, no matter how irregular or serpentine. He maintained that the modern sanitary inspector should be one who could combine efficiency with practical economy, and one who regarded expenditure p portionally to the things that matt and could take a true perspective of a case and its local circumstances.

A vote of thanks to Mr. Palmer w proposed by Mr. C. A. Austin a seconded by Mr. C. Chambers Smith.

Mr. L. E. Wheble asked of what u was the 6 in. of concrete which had to placed round drains, also why had t drains laid by the private owner to tested so carefully, while that betwe the intercepting trap and the sewer la by the local authority was never teste It would be a difficult job sometimes break the cast-glass stopper of the int cepting trap; a much better plan wou be to carry the cleaning arm branch the trap up the manhole in pipes to ju under the manhole cover, there to seal off with a piece of slate. Should t drain get blocked and the manhole fil with sewage, the cover could be taken the seal of the cleaning arm removed, a the drain rodded from the surface. prevent sewer rats passing into the hou drain, a flap could be placed at the out of the trap. Generally speaking, fresh inlets were always defective and w often placed in most unsuitable plac A cleaning arm should be brought to the surface at the head of each dra so that in case of blockage, all roddi could be done in the direction of the fl in which case manholes could be pensed with. He strongly condem the practice of local authorities in mak sewer connections and filling in the tre all in the same day while the cem joint was still green, some of these joi must be defective and they could ne be tested afterwards.

Mr. Harvey R. Sayer, A.M.I.C. A.R.I.B.A., F.S.I., said he had had c siderable experience in carrying out n sewerage schemes in various parts of country. He had always inser "capped on 'Y' junction" pipes in new sewers well in advance of the front line, so that when the connection made there was always a good "lead" the direction of the "flow" from private manhole to the sewer. Moreo the junction pipes usually were for 4 pipes and not 6 in. as stated by Palmer. Seeing that the private ow had to pay for all the work done by local authority in connecting the priv drain to the sewer he failed to see w the local authority should omit the c crete under the length of drain they from the sewer to the intercepting cha ber and insist on all the other dra being laid on concrete.

dnesday, May 30, 1923. Vol. LVII. No. 1482

# THE ARCHITECTS' JOURNAL & Architectural Engineer

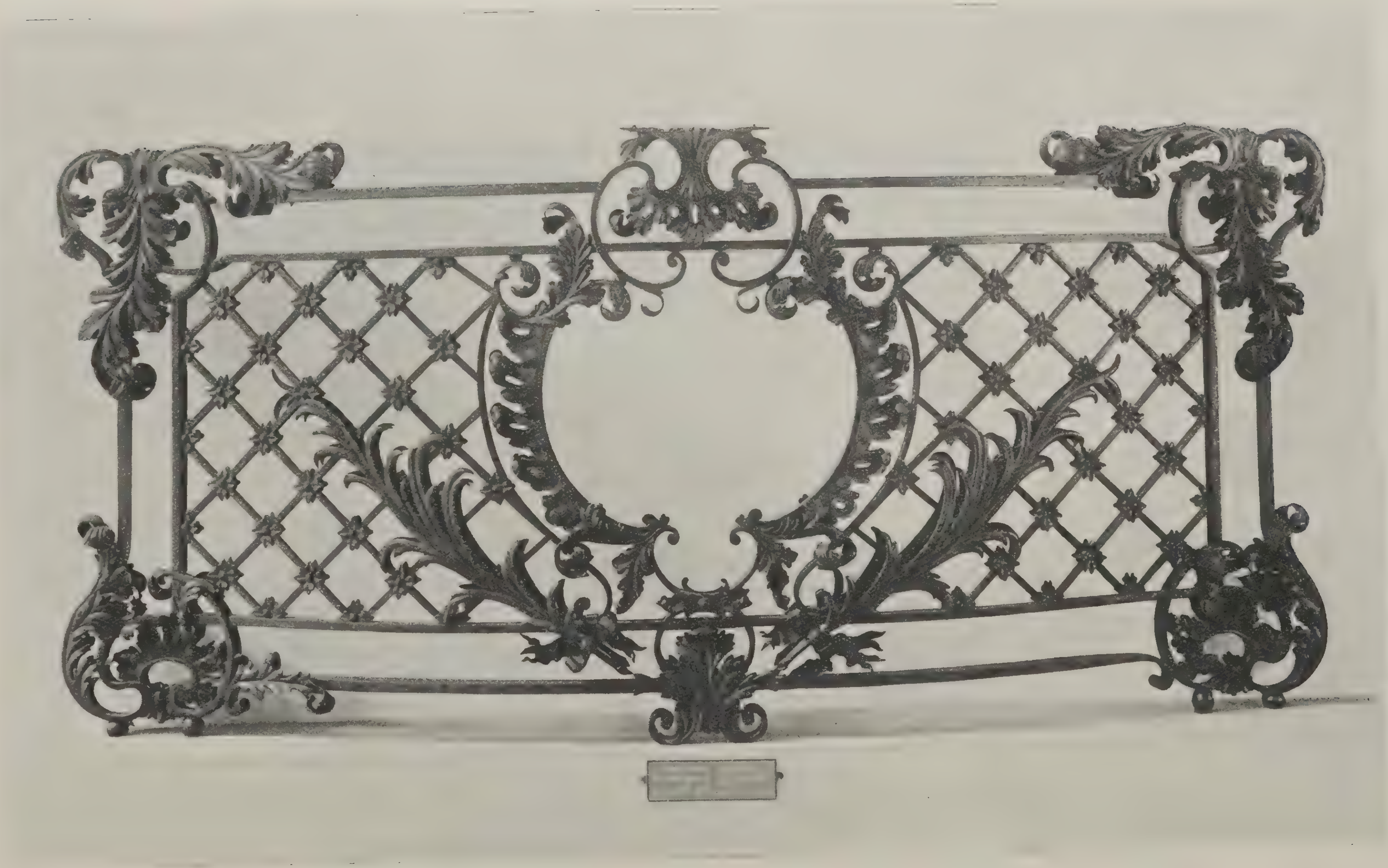
*With which is incorporated "The Builders' Journal."*

'THE NEW AGE.'

*(From a Sculpture Group in the Royal Academy Exhibition by Allan Howes.)*

27-29 Tothill Street, Westminster, S.W.1.

## Details of Craftsmanship. 20.—Iron Balcony-Railing



This iron balcony-railing is of French workmanship, in the style of about 1700. It is now in the Victoria and Albert Museum.

THE
ARCHITECTS' JOURNAL
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# Ready-made Houses

T was to be expected that a nation returning from the wars and suddenly confronted with an unprecedented housing shortage should welcome any attempt, from whatsoever quarter, to make good the deficiency, and dit must be given to those who honestly tried to satisfy great demand. The war had shown men that they ld live in comparative comfort in buildings that were not ises. They had learnt to make homes in burrows eath the ground, in huts of wood, of iron, and of con- te, in barns and in stables, in granaries and in cellars. army hut, therefore, especially with the improvements t it underwent during the process of conversion from itary to civilian purposes, presented no difficulties and , indeed, welcomed. Even better than the army hut e many of the standardized and sectional bungalows houses which enterprising firms manufactured ready delivery to the nearest railway station. Accepting, ever, the appropriate aspect of truth in the adage eds must when the devil drives," we must not altogether our sense of fitness and accept as permanent the out- e of exceptional conditions.

t could, doubtless, be shown that every conquest which make over the material limitations of our existence has compensating drawbacks. Indeed, some would go so as to say that all man's endeavours have not increased sum of total happiness for the human race. But to rn from speculative generalizations to more certain ticulars. We know that industrialism, with its massed hine production, killed craftsmanship, except among few who can ignore the pressure of economic laws. know, too, that our conquest of space by rapid inter- munication is fast killing local architectural conditions, has been one of the chief factors making possible this le in ready-made houses.

ll of us must accept the conditions of our time, however h we may, in our hearts, deplore them. Archaisms are privilege of the few, and architects certainly cannot deal hem. Their task is to make the best of the present by kly accepting its conditions and turning them to the account. This, however, does not mean that they must protest against current abuses or that they must stand nd see the art of architecture reduced to the level of ver-the-counter transaction. For if houses are to be ght ready-made, why not churches and town-halls; not hotels and courts of justice? A distinction must nade, although it may be one only of design and not of l, and sometimes even one of personal opinion, between litions which although sentimentally we may deplore n are, nevertheless, harmless and those which are kly abuses. For example, where owing to our modern sport conditions it is cheaper to import a good brick to use the local stone, the former course must be oted, however much we may regret the passing away of al tradition.

he procedure is parallel to that adopted by the farmer's , who avails herself of the local 'bus service to go to the est town and visit the sales instead of patronizing the ge draper's shop. This is not harmful, because just as a house, having every bit as much architectural charm character, can be built in good brick as in good stone. The house, too, will be individual, it will express the architect, satisfy the exact and personal requirements of the owner, and harmonize with its natural surroundings, for there is no real discord in the propinquity of stone and brickwork. We do not condemn Hampton Court on that account. But if, instead of having a house built by a man competent to do so, the would-be house-owner orders his house from a catalogue, the same catalogue, perhaps, from which he at the same time orders his garden roller, it is no exaggeration to say that he is acting to the detriment of his country, moreover, the house will not be individual, will not, unless by a fortuitous coincidence, satisfy his exact personal requirements, neither will it, unless again by a fortuitous coincidence, harmonize with its natural surroundings, and the general adoption of such a practice would be the death of architecture.

There is another aspect of the matter. The hut is frankly a temporary building. The loan period under the late Government's regulations in connection with the conversion of army huts was twenty years. Whereas the period for a house is sixty years. Many of the ready-made bungalows are little better than huts, and those who buy them probably realize that their investment is subject to rapid depreciation. The chief value of house property as a security in the past has lain in its permanence. Traffic in ready-made houses is altering this. More insidious, however, than the cheap ready-made bungalow, which makes no pretence at permanence, is the larger type of house, which often has about it an air of solidity which it must, from its very nature, lack. To some extent the test of a well-built house occurs during periods of emptiness. If a house, after prolonged inoccupation shows little signs of decay, it may safely be presumed that it is well built. The kind of houses to which we refer have not been put to that test, but those owners who have not yet realized it will, in many cases, soon discover that to maintain such houses will entail a steady expenditure for small repairs. Many expedients were necessary to cope with the exceptional war and immediate post-war conditions, temporary housing accommodation being one of them, but the need having now passed the practice must cease.

Like every other reform or alteration, its acceptance rests ultimately upon public desire or consent. But the public can be influenced and guided; the most potent agency for moulding public opinion is the Press. This, however, is of little avail here. Architects know the danger that lurks in the ready-made house, they, therefore, should do all in their power to enlighten the public. On all sides we see a growing interest on the part of the public in matters architectural. Lectures, public meetings, exhibitions, dinners, are all leading to a closer understanding on the part of the public of the architect's point of view, his difficulties, and to a greater respect for the part which he plays in the scheme of organized society. He should, therefore, be able to point out the dangers of which he is so fully conscious.

England stood ever pre-eminent for its domestic architecture. The ready-made house will reduce the whole country to the level of a third-rate holiday resort. The time for war expedients is now happily passed.

# Notes and Comments

## The R.I.B.A. Elections: A Final Survey

THE last day for sending in voting papers for the R.I.B.A. Council election is Saturday next (June 2). The present moment is therefore appropriate for a final review of the electoral situation. One of the most striking features of the campaign has been the persistent misrepresentation of the policy of the 1922 Emergency Committee. Judging by the criticisms that have been advanced by or on behalf of the present Council, the uninformed onlooker might easily imagine that the Emergency Committee contemplate all manner of desperate and revolutionary changes in the constitution and policy of the Institute. They have been charged with the intention of "shattering the examination system" and of "bringing all the architects of the United Kingdom into membership of the R.I.B.A." It should be unnecessary to point out that they have no intention of doing any such things. Mr. Maurice Webb, honorary secretary of the Emergency Committee, has already quashed these two particular fabrications, but as some doubt upon these points still seems to exist in the minds of some members, especially of some Associates, we should like to repeat and to emphasize what Mr. Webb has already said, namely, that *"the Emergency Committee have no intention of 'shattering the examination system,' and regard the position of the Associate who has qualified by examination as inviolable"*; also that *the term "architect,"* as used in the sentence quoted by critics, is *definitely restricted to mean properly qualified men.* One would imagine, from statements that have been made on behalf of the present Council, that the Emergency Committee is pledged to the scheme of the old Unification Committee. Nothing is farther from the truth. To quote Mr. Webb again: "The Emergency Committee's candidates are *not* standing for any particular method of obtaining Registration . . . but they *are* pledged to consult the different interests concerned before committing the R.I.B.A. to definite proposals." Their election address put the same point just as clearly, in slightly different words: "It cannot be too strongly impressed upon all members of the R.I.B.A. that general agreement on principles is essential before any measure of Registration can stand a chance of success, and if we are elected we shall make every effort to secure such agreement as rapidly as possible." Nothing could be clearer; indeed, it is extremely difficult to understand how such an unequivocal statement of policy could possibly be twisted to mean "red ruin and the breaking up of laws," as our friends of the Council would have us believe. These charges are so obviously made with tongue in cheek that they should deceive nobody. The issue has been so confused by the propagandist introduction of totally irrelevant matters that it is not to be wondered at if some members of the electorate have lost sight of the essential facts of the situation. The position in its broad outline is simply this: That the Institute as a whole is favourable to the policy of Registration, but is not united as to the method of ensuing it; that the policy of one side (the present Council) has been tried, found wanting, and condemned by the general body; that the other side (represented by the Emergency Committee) now seeks the suffrages of the electorate on the policy of "Registration by Agreement." "Here," they say in effect, "is a state of deadlock which cannot continue: it is disorganizing the normal business of the Institute, and the eternal disputation is lowering our society in the estimation of the public. Let us get together and see how the whole matter can be settled once and for all. Let us have done with politics and get back as speedily as possible to the normal business of the Institute, which is the guardianship and the promotion of the art of architecture." A policy such as this should commend itself to all disinterested members of the Institute, for it is entirely democratic. It is our sincere hope that the Emergency Committee will be returned by a clear majorit If they are not, we have nothing to look forward to but renewal of that political dissension which too long has bee allowed to handicap the progress and development of th Institute.

## The Plaquette Competition

As we record in our competition news, substantial priz are being offered by the Royal Mint for designs for pl quettes illustrative of London as the capital city of th Empire, these to be exhibited and sold at the Britis Empire Exhibition next year. The idea is an excelle one, for it promises to revive, in this country at any rat an art that flourished greatly during the period of th Italian Renaissance and has already been restored something of its former glory in modern France. Furthe it suggests the possibility of a new outlet for the energi of the race of young sculptors, who, now that the wa memorial fever is spent, are threatened with rather a thi time. Beyond this, it will most certainly help to intere the public in architecture, for the plaquettes may illustra one or more of London's architectural features. No oth competition of recent times has provided so many attracti possibilities.

## Preserving Building Stones

Mr. A. P. Laurie, who for some years past has bee employed in Scotland, on behalf of H.M. Office of Work in carrying out researches in connection with the deca of building stones, writes to "The Scotsman" to point o the unlikelihood of a preservative that may be generall applied to any stone under any conditions being discovere "The whole question is so complicated," he writes, "tha after some ten years' experience, I am satisfied that it is impo sible to lay down any general rule, and that in each case n only the nature of the stone, but the climatic condition and the conditions of exposure of the stone itself, have be carefully considered." Specifics that preserve und certain defined conditions are useless under others, or ma even reverse their object and actually assist deterioratio Thus it is possible for an enthusiastic but not-too-wel informed preserver of ancient buildings to help inadve tently in hastening their end. Obviously these preservativ must be handled cautiously.

## Street Names

Westminster City Council's suggestion that Old an New Bond Streets should be merged into plain Bond Stree and the name Waterloo Place be made to include the who south part of Regent Street, is not likely to be adopte We English have a peculiar fondness for plurality in stre naming; and old names, like old customs, die hard. Wh the council should seek only to deal with Bond Street an Regent Street we do not know; there are many oth equally misleading instances to which they might (if the must) turn their attention. There is the case of that roa way which, extending from Parliament Square to Trafalg Square, boasts the triple designation of Parliament Stree Whitehall, and Charing Cross—which is extremely di concerting. Very few people can know exactly whe one part ends and another begins. Then there is th embankment roadway that, during a not very considerab length, changes from Abingdon Street to Millbank, an finally to Grosvenor Road. Then, in more or less of straight line, we find New Bridge Street, Great Georg Street, and Birdcage Walk. The last is certainly entitl to its individuality, but one or other of the two former redundant. Outside the Westminster area the exampl of plural naming are legion; the task of enumerating the shall not be attempted. Confusion there certainly is ever where, but to "straighten things out" must create furth confusion, besides robbing the Metropolis of much pictu esque topographical nomenclature.

# The Present Position of Symbolism and Allegory

## By J. PAUL COOPER

MEMBERS of the Art Workers' Guild were told some time ago that they ought to define the meaning of the terms they used. This seemed to be excellent advice, especially when such rms as art, ceremonial, symbolism, allegories, etc., are ed : so I looked up the definition of the word " symbol." he first I came across was in a recently published book on ychology. The book contained just over six hundred ges, one hundred of which were devoted to definitions, d of these ten were given to defining the word " symbol." then turned to the Century Dictionary, and found that a symbol was a sign by which one knows something "; t this, if short, seemed a little vague, so I went next to e Encyclopædia Britannica, feeling sure that there, at l events, I should get the official, modern, up-to-date ew of the subject. There it is stated that a symbol is the term given to a visible object representing to the ind the semblance of something which is not shown, but alized by association with it." The writer goes on to say at " one of the earliest symbols of the Saviour, the fish, s derived from the acrostic of the Greek word. ιχθυς . . . e ship, another early symbol, represented the Church. . . . her symbols are those which were represented by animals, al or fabulous. . . . The four evangelical symbols were ken from the Book of Ezekiel," etc. This view of symbolm is quite sufficient to account for people's dislike of it. dron, who, I think, gives the best definition, says that by e words " symbol " and " figure " we understand any senle or tangible design employed to convey an idea; for stance, the circular nimbus surrounding the heads of ints is the material sign of their holiness.

I am going to use the term symbolism in its widest sense. mbolism is universal; it is found in tribal marks, in ess to denote social grades or status, in ornaments, in emonial uses of all sorts; in dominant religions—where finds all the world over its highest expression, in revolt ainst the established religion when it is corrupt or dying t; in all new movements; in connection with art, in Pre-Raphaelite, the Impressionist and the Futurist vements, etc., of modern times : where, in fact, any new a is to be expressed we find symbolism. As a rule, the rter-lived the movement the less it has to express, as noticeably the case in fashions—the bugbear of the ist, who desires to make his work as permanent as ssible.

Symbolism is based on expression. Wherever there is there is expression, and the more perfect anything is more perfectly it tends to express itself. Animals and nts express themselves, and are therefore in themselves nbolic. There is, in fact, a natural symbolism as well as artificial symbolism. All human passions and types of racter are symbolized by plants and animals, and more ticeably by animals : those higher up in the scale of lution being used universally as symbols, especially in ly art and among primitive races. All less typical mples of the same kind may be said to represent the e. The lower symbolizes the higher, and the outer the er. Directly one looks upon the universe as a whole nnected in all its parts everything becomes symbolical superordination, subordination, and correspondence. e only means of expressing abstract ideas is by means symbols.

The more universal the symbol the higher it is, and the rer it approaches the idea of unity. Suppose one wants express the idea of spring in a picture. One can do it many ways. One can paint a landscape of spring in ne particular quarter of the world, or one can consider s spring-time in human life, and so depict it; but in these ways we get a less universal symbol of spring than Botticelli did when he painted the blossoming period. Any symbol, indeed, may have an ascending scale of significance, each higher, more interior, and more universal than the preceding.

Conscious or deliberate symbolism—and this is what is generally understood by the term—seems to have had its origin in sign language, when man first began to learn the lessons of nature and the characteristics of different species of plants and animals. The knowledge acquired found expression in Totemism, a totem being a species of animal, plant, or other object, assumed as the totem or emblem of a class or family and the representation of which served as a cognizant for each member of it. The totemic plant or animal symbolized the particular trait of character which the tribe wished as a whole to attain. Totemism is at the base of so-called animal worship in Egypt, of heraldry, family crests, banners, and other insignia. I say " so-called animal worship," because the talk of animal worship has largely originated through the lack of knowledge of the meaning of symbols.

Much of the early symbolism is still with us, living an obscured life. In parts of England to-day it is still thought necessary to tell the bees when a death has occurred in a house. The bees, as another symbol of the soul in a different aspect, became, in Egypt, messengers of the dead and a mode of communication with the ancestral spirits. Talking to the bees in this language was like speaking with the souls of the dead, as it were, commending the souls of the departed one to the guidance of the bees, who, as honey-gatherers, naturally knew the way to the Elysian fields and meads of amaranth (the Egyptian Paradise), where, as Gerald Massy says :

> " They suck no honeycomb of drowsy peace,
> Because ennobling natural cares all cease;
> They live no life, as many dream, caressed
> By some vast tideless sea of endless rest.
> For there, as here, unbusy is unblest."

And we have with us to-day the remnant of the symbolism connected with sun and phallic worship, both symbols of the creative principle, for all life depends on the sun, all life depends on sex or polarity. The twin towers at the west end of cathedrals are symbols of the male and female principle : the north (the man's side) was called Jachim, the left tower (the woman's) Boaz, and they were generally distinct in character. In China and Japan the male and female principle, positive and negative, darkness and light, formed the basis of all art. Even the petals of flowers used to be drawn in two strokes, one thick and one thin, to represent this principle. The maypole, too, is said to symbolize the sun and the May Queen the earth (the Goddess Maia), about which people danced in representation of the planets. The old symbolism was the result of an underlying expression of men's general world view at the time, or existing world philosophy, as Jung calls it. In former times people, at all events, thought they saw some definite aim in life, some creative design, and followed it.

It probably does not seem to the average artist, or even engine-driver, a very satisfactory plan to follow Bergson's advice, who asserts that it is worse than useless to labour for any definite object, the only wise course being to do something, whatever it is, to act feverishly and at random, in the hope that something will come of it. His pupil, Sorel, advocated violence as the best way out of difficulties. The modern world is, indeed, pre-occupied with the idea of force and violence.

It is this idea of force that the Futurists aim to express in their work: they speak of the use of "force lines": "They apply to art a general philosophy of life, which has its origin in modern scientific theories which express all matters in terms of energy." But force with them is seen more in its destructive than in its constructive aspect. Force with them is expressed in violent lines, shapes, and colours, and in music in loud noises—nature in disruption. But if there is a universal idea that artists, and not the Futurists only, strive to express to-day in their work it is that of force symbolized by strong, vigorous line, strength in form and colour, these taking precedence of beauty and harmony though not necessarily opposed to them. But force is constructive in this case, not destructive. It is a form of beauty and does not deny it. Ludovici says, "The purpose of modern art is tacitly assumed to be to obtain as faithful a transcript as possible of nature and of reality, pure and simple—not nature linked up with a higher idea, but simply nature and reality as they are felt by anybody and everybody."

The symbolist who uses symbols consciously to express ideas is synonymous with the idealist in as far as he is concerned with what he thinks should be, rather than what is. But the artist who is a professed realist uses at least shape, colour, etc., as symbols. To explain better what I mean, take for example two artists with a totally different outlook—Watts and Degas.

Watts is an idealist who used symbols consciously. In his "Mammon" and other of his works, though he depicts the non-ideal in one sense, in the higher sense he depicts the ideal. The ideal is the basis of his picture.

Degas is, on the contrary, an unconscious symbolist, and a realist. Take his pictures or statuettes of dancers. He does not as Watts would have done, had he taken the same subject and had the same power, make one feel that these dancers are but a degradation of the ideal dancer, whose dancing is for the mere love of it, the overflowing of a rich and full life. But Degas's dancers are symbolic, symbols of a certain type of modern dancers. They are symbolic in all their actions and in all their parts—the over-development of the legs, the under-development of the arms, the lack of intellect in their expression. They are not linked up with any higher idea; they have nothing of that deeper symbolism depicted, for instance, in the Hindu statues of Krishna dancing that symbolizes the delight that overflows from the creator in his work. Degas might protest against his work being considered symbolic, but all the same he is occupied with the type, not the individual, and he allows nothing outside that to come in and interfere with his symbolic expression. It makes no difference whether he is aiming at expressing the idea of motion or vibration (more abstract ideas still), for it is still the motion he expresses. Rodin's "Penseur" might be said to express motion also, the motion of thought—a much higher idea.

All modern movements in art represent the old fight between the idealists and the realists, the symbolist being as a rule classed with the idealist and often identified with him. According to William James, the idealist and realist correspond to two types of character, the one devoted to abstract and eternal principles, the other to facts. The one idealistic, optimistic, religious, dogmatic; the other materialistic, pessimistic, irreligious, and sceptical. These two types, he says, "have a low opinion of each other." The realist naturally dislikes the symbol because it is used to express abstract ideas, but it is a sort of traitor that creeps into his camp and which he, nevertheless, makes use of whenever he depicts the type in the individual. Really "No man can dispense either with facts or with principles, yet corresponding to the stress laid on either side entirely distinct points of view develop."

Most of the leaders of modern movements in art have been more or less professed symbolists. The Rose Croix group of Impressionists urged that painting should be "idealistic and monumental in character, with myth and allegory as its subjects." Cézanne held "that Nature was only a starting-point; that contemplation of her, reinforced by reflexion and study of underlying causes, creates in th artist's mind a vision of the structure underlying th external visible world." Ganguin held "that study o nature awakes emotion in the artist, which he has t express by bringing into organized relation symbols, consisting of form and colour supplied by nature." Primitiv art alone, he considered, proceeds from the spirit, and use rather than mimics nature. Originating from Picass arose cubism, which rejected the reproduction of natura appearance. Kandinsky, of the Munich school, held tha colour and form have the power of producing spiritua vibrations quite apart from their ordinary meaning an associations, and a picture consists of an arrangement o form and colour whose spiritual values are in harmony and unite to express the artist's spiritual conceptions The decorative painters have always been, and, one migh say, are compelled to be symbolists.

Rodin, who I have left to the last because his remar introduces the subject of allegory which in painting an sculpture is a figurative representation in which th meaning is conveyed symbolically, says that "art, instea of illustrating poems or legends, should use symbols complete in themselves, and clear without written text.' Allegory does, as a rule, require a written text, and i requires on the part of the public a knowledge of the writte text. Allegory, unless it comes from a thinker or poet, suc as Puvis de Chavannes or Watts, is generally, to say th least, a little distressing. I saw the other day a reproduction of the "Education of Cupid" by Corregio, underneat was written "this lovely allegory shows us Mercury teaching Cupid to spell, while Venus, the incarnation of feminin charm, looks on approvingly."

Modern allegory is handicapped by the lack of th traditional knowledge of the meaning of symbolism. I lacks the key that opens out its possibilities. Take, fo instance, the tale of Cinderella, which was an allegor before it faded into a fairy tale. Of this tale 345 variant from all parts of the world have been published. It i evidently an allegory connected with the soul in its pilgrimage through the world of matter. Cinderella' dresses, all symbolical, are variously described as bein woven of the stars of heaven, of moonbeams, of sunbeams; or like the sea with fishes swimming in it, or c all the flowers of the world, etc. These dresses were hidde under others made of asses' skins, cat skins, or mice skins Once you know the meaning of the allegory the details ca be varied in apparently endless succession. The idea a the back of the allegory is as a mould into which onl corresponding ideas flow. For the early people an allegor led to poetic expression; without that it wears too much th appearance of a sermon.

If the symbol has, as it were, for its base some root ide then all the branches, leaves, and fruit proceed from i are nourished by it, and it has a corresponding valu according to the insight of the beholder. "To the mea person," says Ruskin, "the myth always means little; t the noble person much." "For all there was an unde current of consciousness in all minds, that the figur meant more than they at first showed, and according t each man's own faculties of sentiment he judged and rea them." But symbolism appeals to the masses who a mostly indifferent to it chiefly when incorporated in cer monial (which is the means of expressing spiritual ideas i action). Because ceremonial appeals to a number of, or a the senses, it has, generally speaking, a greater emotion effect than any of the other arts, for it often includ them all, and exercises such a strong effect on the min and character because it tends to communicate the sam ideas, of which it is the expression, to the beholder.

One of the great advantages of wall painting for publ buildings seems to me to lie in the fact that in whatev building it is put it takes a part in the ceremonial uses that building, forms an integral part, not only of the buil ing itself, but joins, as it were, in all the ceremonial obse vances that take place within its walls. It forms part the architecture, it joins in with the processions, it tak rt in the music, and it even seems to get incorporated th the scents of incense or flowers, and helps the general ect which no single object by itself creates.

Everything gives increased values to everything else, ether crosses, croziers, maces, banners, lights, robes, or stments, and everything, if the effect is to reach its hest point, must be symbolical, and help the dominant a that is to be expressed, whether religious, political, ial, or judicial, etc. The greatest art speaks only to the , but when joined to the lesser arts in this way it gives e to the whole, acts, as it were, the part of the leader of orchestra, and becomes in a new way comprehensible all.

With the builders in the past, having a definite idea of at they wanted to express and one in keeping with the eral world view, the various artists and craftsmen ld work individually very much as they pleased with dominant idea to restrain them and keep them to the t lines. The architect of to-day has to work with ds, as it were, that are either not guided by any idea, which are subconsciously trying to express some con- ry idea. For instance, in building a church some of the workmen employed may be atheists or agnostics. Symbolists of modern times are handicapped by being almost forced to look at their work, not as connected with a wider symbolism, but as unattached units—suitable for a museum, or exhibitions, or rooms of samples (of different artists' work). So the idea expressed in our picture or piece of decoration clashes with the one next to it.

The present-day symbolism and allegory seem to me to be experimental, paying particular attention to certain aspects and ignoring the whole, and it is the whole view of life that the higher form of symbolism, that which some consider alone worthy of the term, strive to express.

"Science, philosophy, religion, and art," says Ouspensky, "are forms of knowledge. The method of science is experiment; the method of philosophy is speculation; the method of religion and art is moral and æsthetic emotional inspiration. But science and philosophy, religion and art begin to serve true knowledge only when in them commences to manifest the sensing and finding of some inner property in things." And having discovered the inner property in things—the ideas underlying them—it is only by symbolism that these ideas can by the artist be expressed.

# The Business of an Architect

## 6.—Correspondence and its Filing

### By C. MURRAY HENNELL, F.S.I.

N the last chapter stress was laid on the importance of the letters sent from an architect's office, and on the fact that these should be neat, clear, and concise. Their importance is not at an end as soon as they are ed and posted. Copies of the letters sent, as well as the correspondence received, should be filed as soon as sible for future reference, and filed in such a way that particular letter can be found readily by any one in office. The filing system should, therefore, be free from plications and cross references, which are confusing to xcept those who are constantly attending to the system. he card index and folder method is excellent for many nesses, especially for those in which one kind of article, lem, or transaction is the subject of practically all the espondence. In such cases all the letters and other uments can be filed under the respective names of the le with whom one is corresponding, or under the ence numbers given in the indices to such people. architect, however, has to communicate with the same on about various subjects and with many people about same matter. Consequently, if the correspondence is under personal names, one may have to wade through y letters from Mr. John Smith about his house in pshire before finding the one required relating to ations to his flat in Dover Street, and any correspon- e concerning those alterations with people other than Smith, such as with the contractors, Messrs. Robinson, have to be looked for in Messrs. Robinson's file, where will also be letters relating to their contract for a e at Richmond. A great deal of cross references would be necessary, and the system appears to be too com- ted for an architect's office.

me business firms and professional men still adhere e press-copy letter book for keeping a record of their ard correspondence, and file their inward letters rately. This method is cumbersome, and well typed rs are sometimes smeared and smudged beyond nition in the process of press-copying. The practice king carbon copies of letters on the typewriter has now rseded the old letter book in most offices. Not only the letters cleaner and clearer in consequence, but time is saved, and copies of replies can be filed with riginal letters received.

ving shown the objections to filing letters under the personal names of correspondents, it seems right that the files should be arranged under subjects, and the following suggest themselves as the titles of some of them :—

(1) Files relating to the office itself :—
Finance.
Office.
Professional Institutions.
Staff.
Stationery and printing.
Etc.

(2) Files relating to works :—
Abercorn House—Extensions.
Brixton Lane—Pickle Warehouse for Messrs. Salt & Co.
Compton Road, Bow, E., Nos. 1 to 15—Dilapidations.
Cox, James, Esq.—House at Barnet,
and so on, arranged alphabetically.

For subjects on which there is likely to be but little correspondence and with only a few persons, also for the preliminaries of a job until it gets really under way, simple folders are sufficient, with all the letters arranged in order of date.

Some people prefer to file their letters the "right" way, that is with the first letter at the top and the most recent one at the bottom, but personally I have a preference for the "wrong" way, with the last letter at the top, as this saves turning over all the old papers before arriving at the questions of to-day.

As soon as the folder becomes bulky and many correspondents are involved, some sub-division is necessary. For that purpose the book file, of which there are many makes, seems to meet the case very well. These files have alphabetical divisions, so that all the correspondence on the subject with Mr. Adams can go under "A," with Mrs. Brown under "B" and so on. However, there may be many sub-divisions under one letter in the alphabet, there being perhaps under "B", in addition to Mrs. Brown, also bricks, bells, beetle-killer, and other "B's." In any case it is advisable to "flag" the first letter of each sub-division either with a slip of paper, or preferably of tracing linen, pasted to the letter, with the name of the sub-division inscribed, and standing out at the side. The files should be self-indexed, on the back of each being the title of the file, and beneath this an alphabetically arranged list of its sub-divisions. Thus, if the files are themselves arranged alphabetically, it is a very simple matter to find any letter without reference to a separate index book or box of cards.

Following are suggestions for the composition, and consequently the back labels, of some of the files mentioned above :—

*Finance.*

Auditors
Bank (London County and Westminster).
Income Tax.
Investments.

*Office.*

Electric light.
Furniture.
Landlords.
Repairs.
Sub-tenants.
Telephones (internal).
,, (Post Office).

*Staff.*

Applicants (Architectural Assistants).
,, (Clerks).
,, (Surveying Assistants).
Black, A. J.
Clark, E. F.
Clarke, L.
Dixon, J.
Hamilton, Miss A.
These being present or past members of the staff.
Holiday Charts.

*Abercorn House—Extensions* (for Sir T. Knox).
Appointment as Architects (and fees).
Clerk of Works.
,, ,, (weekly reports).
Contractors (unaccepted tenders).
,, (J. Jones & Co.).
,, (certificates for payment).
Electric Light Company.
Gardens.
Gas Company.
Ironmongery.
Knox, Sir T.
Local Authority.
London County Council (including District Surveyor).
Neighbours.
Paths.
Sanitary fittings.
Water supply (Metro. Water Board).

It is obvious that in the case of large works, about which there is likely to be a vast amount of correspondence, one file will only hold one, or part of one, sub-division, but with this system there is no reason why there should not be any number of files relating to one job or why further files should not be inserted from time to time as necessity arises.

Only "live" files should be kept in the cabinet or cupboard, and as soon as a subject is finished—*and all fees have been paid*—its file may be regarded as "dead," and should no longer be left to crowd out its active brothers. The whole of the correspondence can then be removed from the book file, but kept in its proper order, wrapped up into a parcel, which should also be fully labelled, dated, and put away in the store room, where all dead correspondence is kept. It should be still alphabetically arranged, so that it is as easy to unearth any letter on a subject which is now ancient history as to find one in the "live" files.

Contract documents of works in hand should be kept in a safe and not with the correspondence. As soon as the contract is at an end and the subject regarded as "dead," those documents can then very well go away in the store room, and be included in the parcel of papers relating to the same works.

Once an architect's name and address has found its way into the directory, he will receive more than sufficient communications from people who want him to spec
their wares, and if he has time to study all the pamphl
and booklets that are sent him, he will acquire a consid
able knowledge of patent hinges, hatches, hoppers, hencoo
and goodness knows what else. While the majority
these literary and artistic efforts will inevitably find th
way into the waste-paper basket, there are quite a num
of them that may prove very useful and should be k
for reference. Those that are decided worthy of su
attention must not be left about or bundled into an
drawer or box. They should be filed, like the rest of
correspondence, in an orderly way so that they can
readily turned up when wanted. Asphalts, bricks, copp
dust-bins, electrical engineers, etc., can form the subje
of sub-divisional folders in which the catalogues, etc.,
left loose, and all put into a series of box files, indexed
the back. These files will soon start bursting their si
and should be gone through from time to time, and
out-of-date or otherwise useless matter thrown away.

A date-of-receipt stamp and a register of letters o
appear in some offices, and may, perhaps, be regarded
useless red tape in others. However, they frequently pr
of considerable service, not merely as secondary evide
in disputes or legal actions that may arise, but also
saving the principal's time, even if they add to the labo
of the clerk. The stamp should contain the name of
office and the date, which is altered by the clerk the f
thing every morning, and all letters should be stamped w
it directly they are opened. If a register of inward let
is kept, it is useful to use a date stamp which also has w
may be described as a cyclometer of numbers, automatic
increasing by one every time the stamp is pressed down
that each letter is given a new reference number.

The following is a suggestion for the arrangement
Register of Inward Letters :—

| Date. | Number. | Date of Letter. | From Whom. | Subject. | Purport. | Date of Reply. | Rem |
|---|---|---|---|---|---|---|---|

"Subject" happens also to be the name of the rela
file, and "purport" is a short précis of the letter. "D
of reply" should be filled in as the outward letters are
into their envelopes.

For office purposes outward letters should always
the initials of the member of the firm who dictated th
and, where more than one typist is employed, his or
initials should also appear. An architect will find it a
venience to have yet another set of initials on his lett
these last representing the subject or file. Thus, a le
dictated by Mr. Archibald Brown, typed by Miss Consta
Tate, and relating to Abercorn House Extensions will
marked (preferably in the bottom left-hand corner)
CT/AHE. This is not only a help for reference and fil
but the clerk or office boy who stamps the letters can
enter the last initials "AHE" in the stamp book aga
the amount of the postage, these being abstracted peri
cally and charged as expenses in the relative accounts.

Many letters are received which require a formal ackn
ledgment and nothing more, and for this purpose prin
cards save a considerable amount of time. The card me
says : "Messrs. A. & B. beg to acknowledge receipt of
letter of . . . . . . . . . . . relating to . . . . . . . . . . . . . . . . .
which they are obliged." No carbon copy of such
acknowledgment is necessary, the letter to which it re
having "Ackd." and the date written or stamped on it

"Enclosures" to letters frequently stop at home,
various forms of enclosure stamps are made to overc
this. One kind that seems to be a favourite is a gum
stamp in duplicate, both parts bearing the same num
One part is affixed to the letter and the other to the
closure. However, there is no method of dealing with
matter which is quite fool-proof, especially when ther
more than one enclosure to the same letter, but enclo
stamps are good signals of warning, and prevent som
not always all, of the luggage being left behind.

[*The previous articles in this series appeared in our is*
*for April* 4, 11, *and* 25, *and May* 9.]

# The Homes of Well-known Architects

## 4.—Mr. Barry Parker's House, "Crabby Corner," Letchworth

CRABBY CORNER," Letchworth, the home of Mr. Barry Parker, F.R.I.B.A., was designed by himself for himself. At a later date a "sleeping balcony," which is now a prominent feature, was led. He had experienced the benefit of sleeping in the n air, and so he built such a room on to his own house. realized that the usual "sleeping balcony" and the ical American "sleeping porch" was closed in on one, or three sides, as the case might be, and these were ays the same sides. When the closed-in side or sides were windward all was well enough; when the wind blew into open side or sides the use of the balcony was at least icult if not impossible.

t struck him that a "sleeping balcony," all sides of which ght be open in still, warm weather (when the occupants uld sleep merely with a roof over them), or could be sed on the windward side or sides and left open on the ward side or sides, would have many advantages over typical "sleeping balcony."

o use the ordinary "sleeping balcony" necessitates that bed should be pushed out on to that balcony from the room which it adjoins. To facilitate this he used metal s on which the bed ran. But it occurred to him that this ning in and out of the bed was troublesome and inconient. Then again (except to those to whom expense is consideration), the amount of floor space which can be en to the bedroom and balcony is limited. It seemed a that this space should be divided and used, half of it alcony and half of it as bedroom. When the balcony was being used the bedroom was not being used. When the bedroom was being used the balcony could not be used.

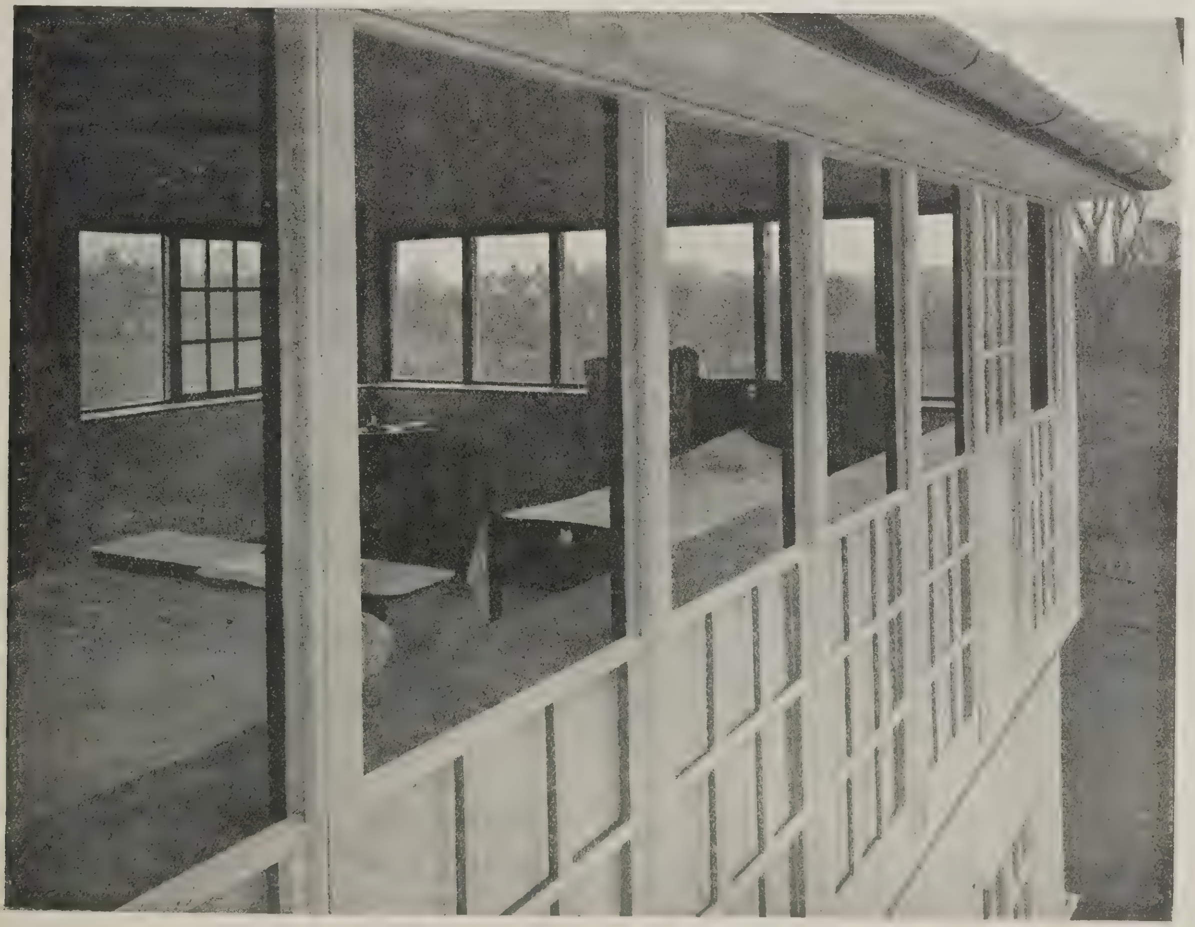
The right thing, it seemed to him, was to make the bedroom as large as funds would admit or as circumstances suggested, and have that bedroom convertible at will into a "sleeping balcony." This would obviate any moving of the bed or any other piece of furniture.

The photographs show how he planned the room with windows on all four sides, and all windows sliding. Each "light" has an automatic "catch," which prevents that "light" from sliding down. The whole of the "lights" on any side of the room can be slid up or down in a few seconds; and that side is then open or is closed in.

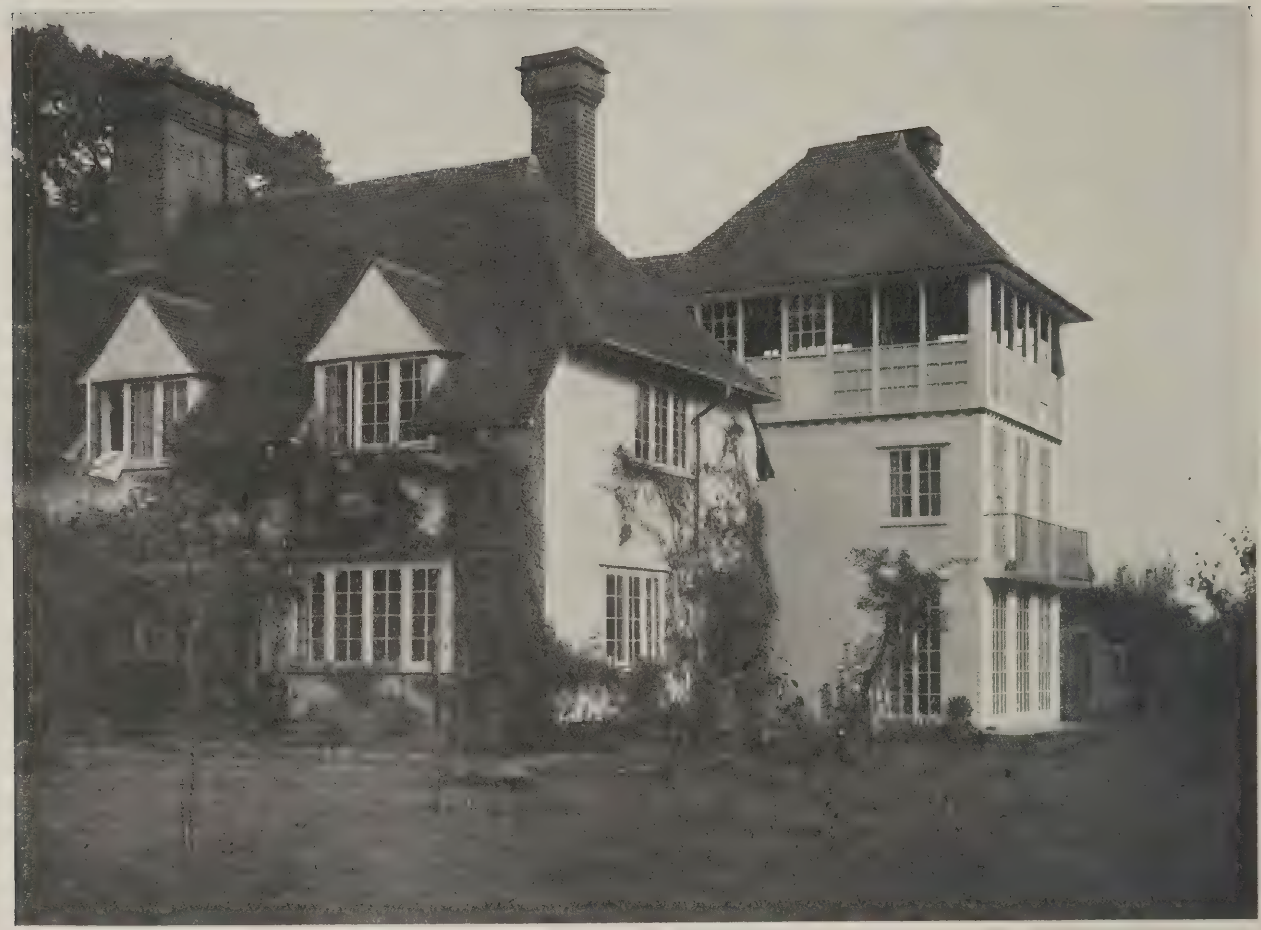
The one disadvantage of having such a room is that, whenever the owner of it has to sleep away from home, every other bedroom seems by contrast with it stuffy and dismal. It is always pleasant to sleep in such a room, but in cold weather it is not pleasant to dress and undress in such a room. So at "Crabby Corner" there is a dressing-room provided, opening out from it, with a gas stove in it.

Letchworth, like Hampstead, was one of the first Garden Cities, and both Mr. Barry Barker and his partner Mr. Raymond Unwin were pioneers of the Garden City movement. It will be remembered that Mr. Raymond Unwin's historical old house at Hampstead formed the subject of No. 3 of this series.

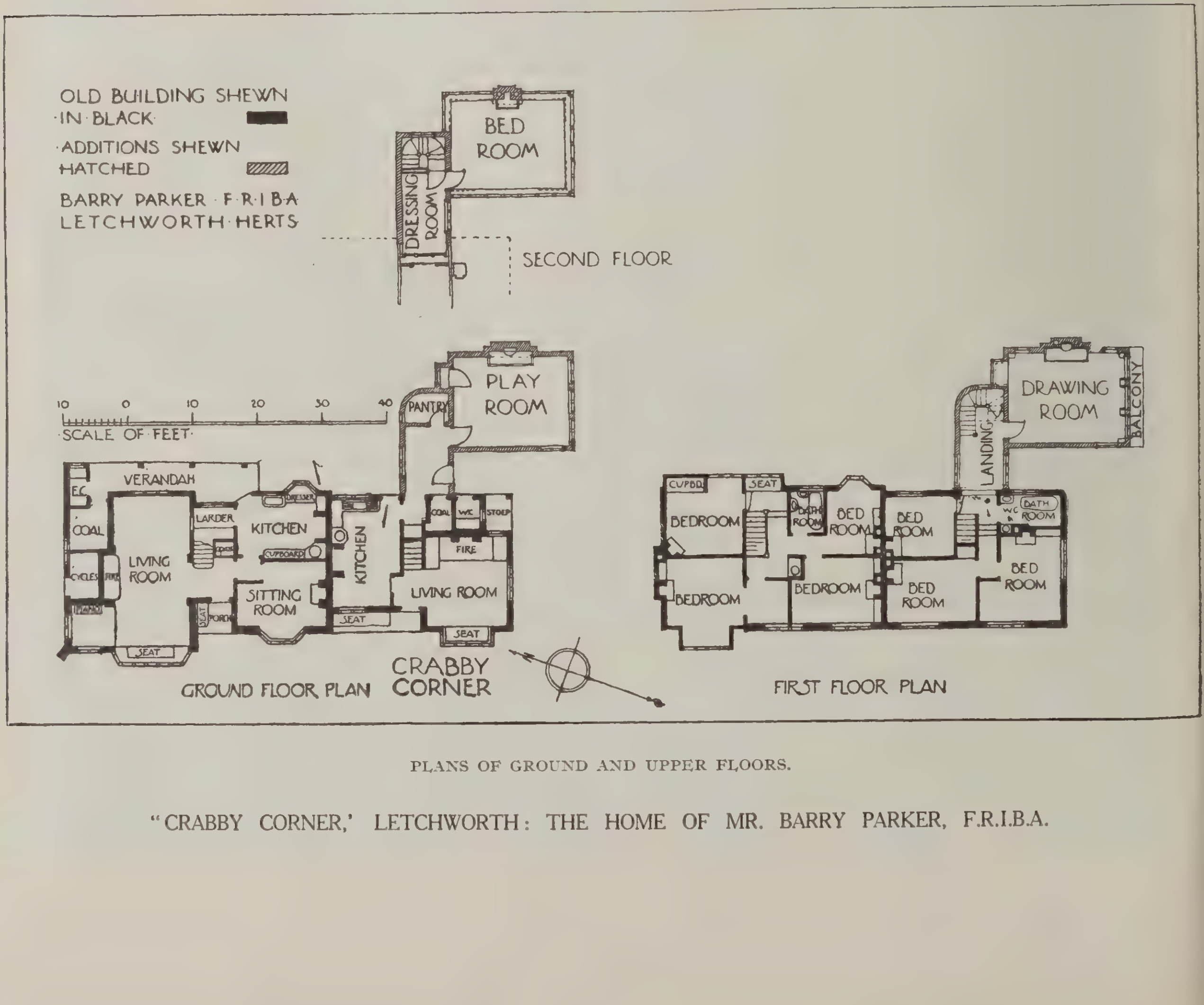
[*The previous articles in this series appeared in our issues for November* 22, 1922, *and January* 17 *and April* 18, 1923.]



THE OPEN-AIR SLEEPING ROOM



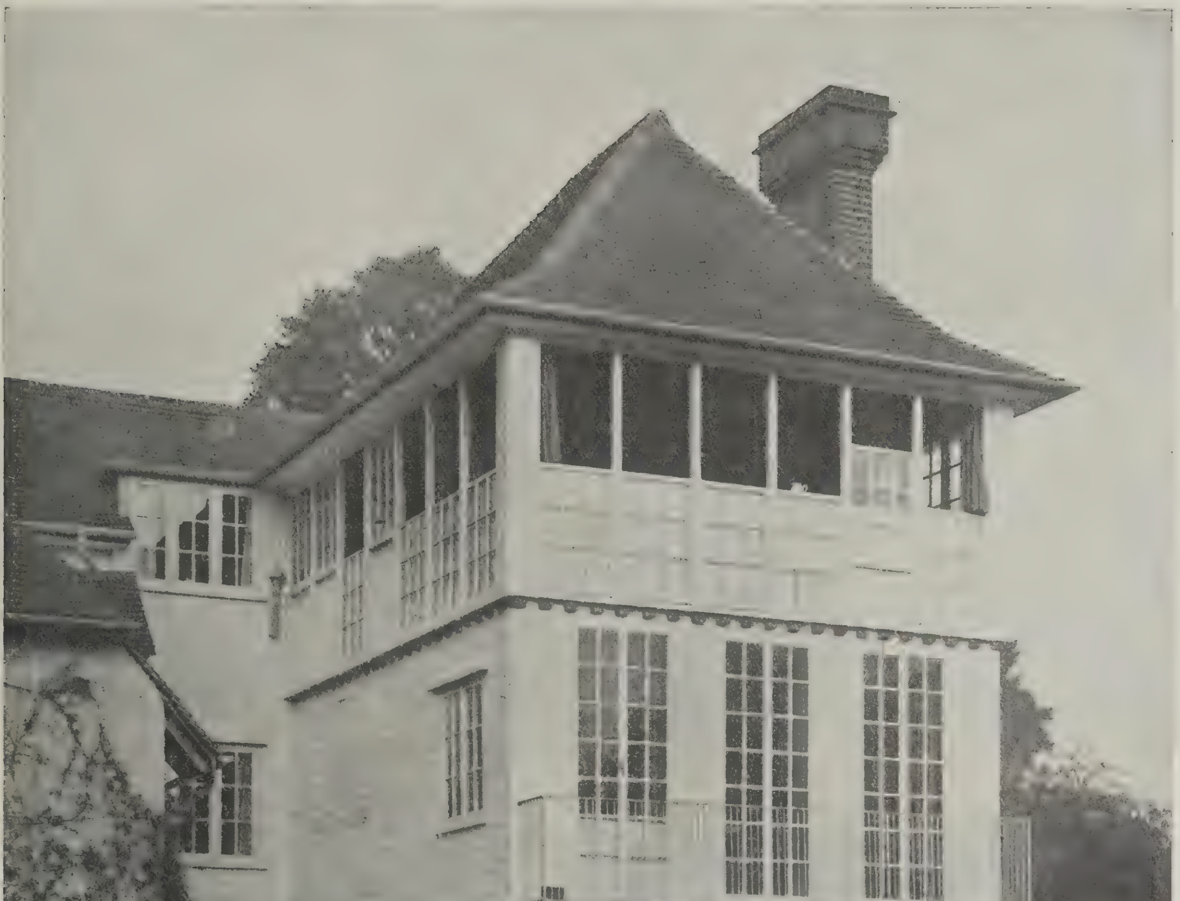
A GENERAL VIEW.



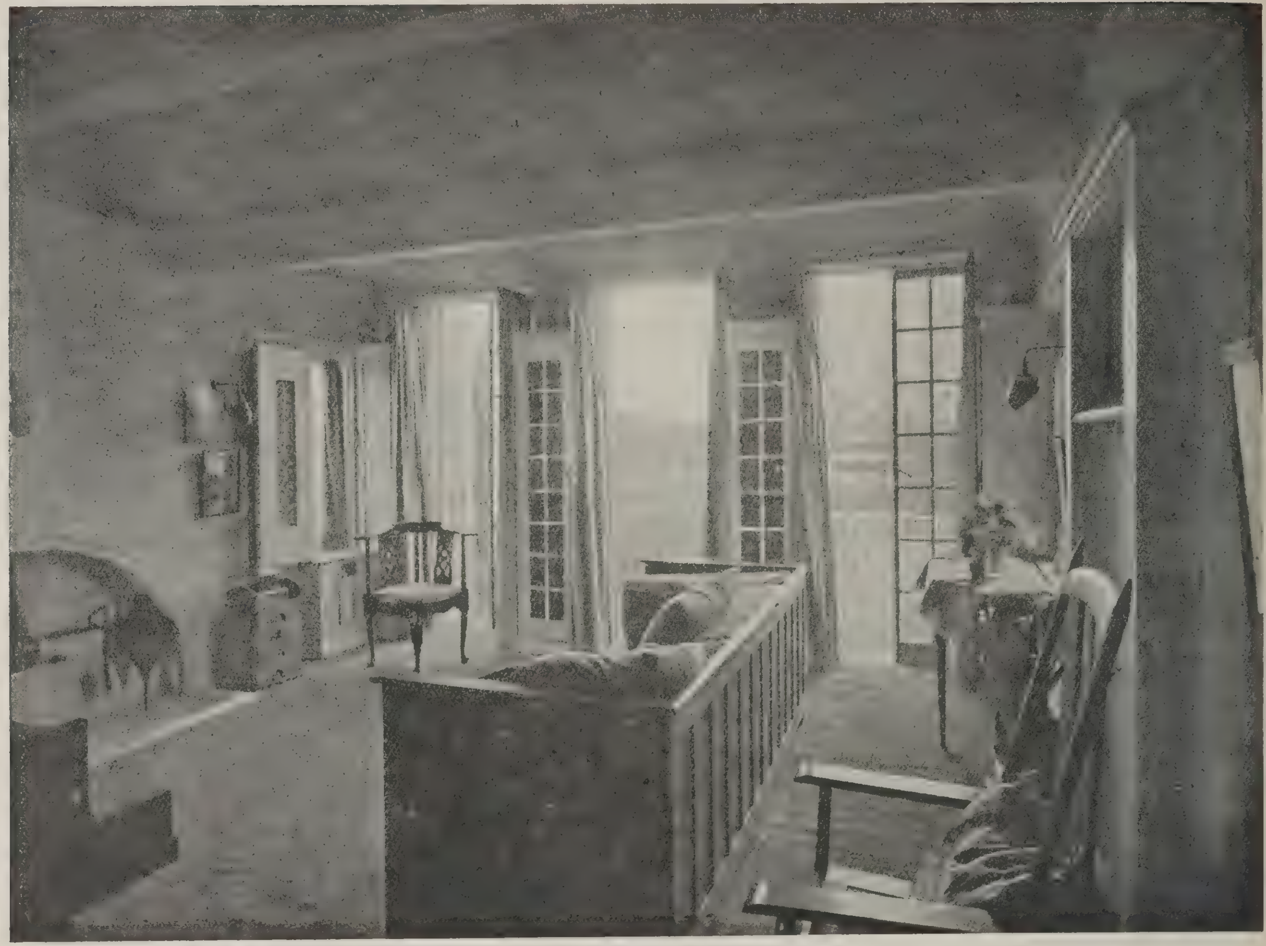
PLANS OF GROUND AND UPPER FLOORS.

"CRABBY CORNER,' LETCHWORTH: THE HOME OF MR. BARRY PARKER, F.R.I.B.A.

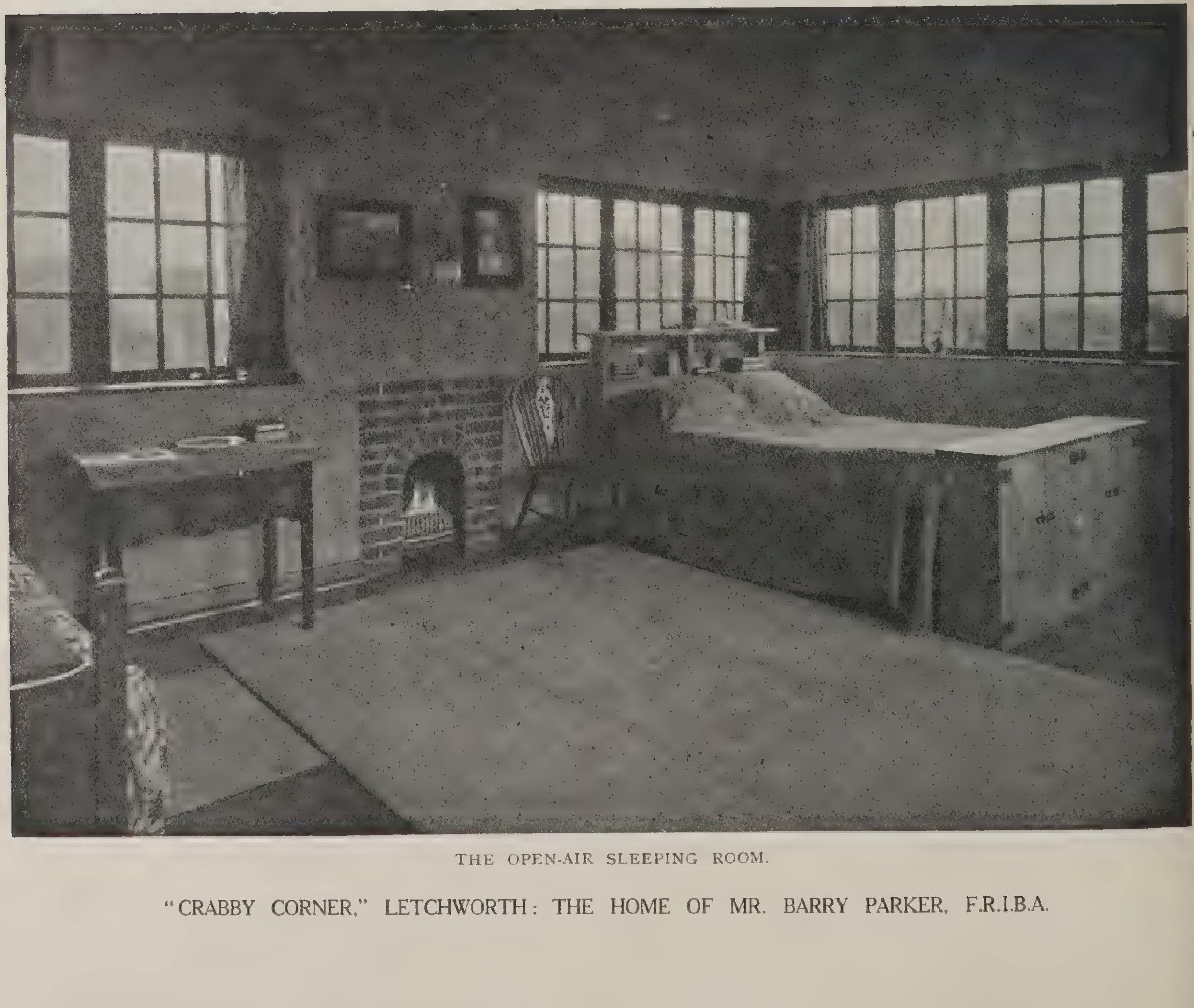
# “Crabby Corner,” Letchworth : The Home of Mr. Barry Parker, F.R.I.B.A.



This illustration shows an interesting detail of Mr. Barry Parker's house. On the ground floor is the playroom, on the floor above the drawing-room, and on the top floor is the open-air sleeping-room.



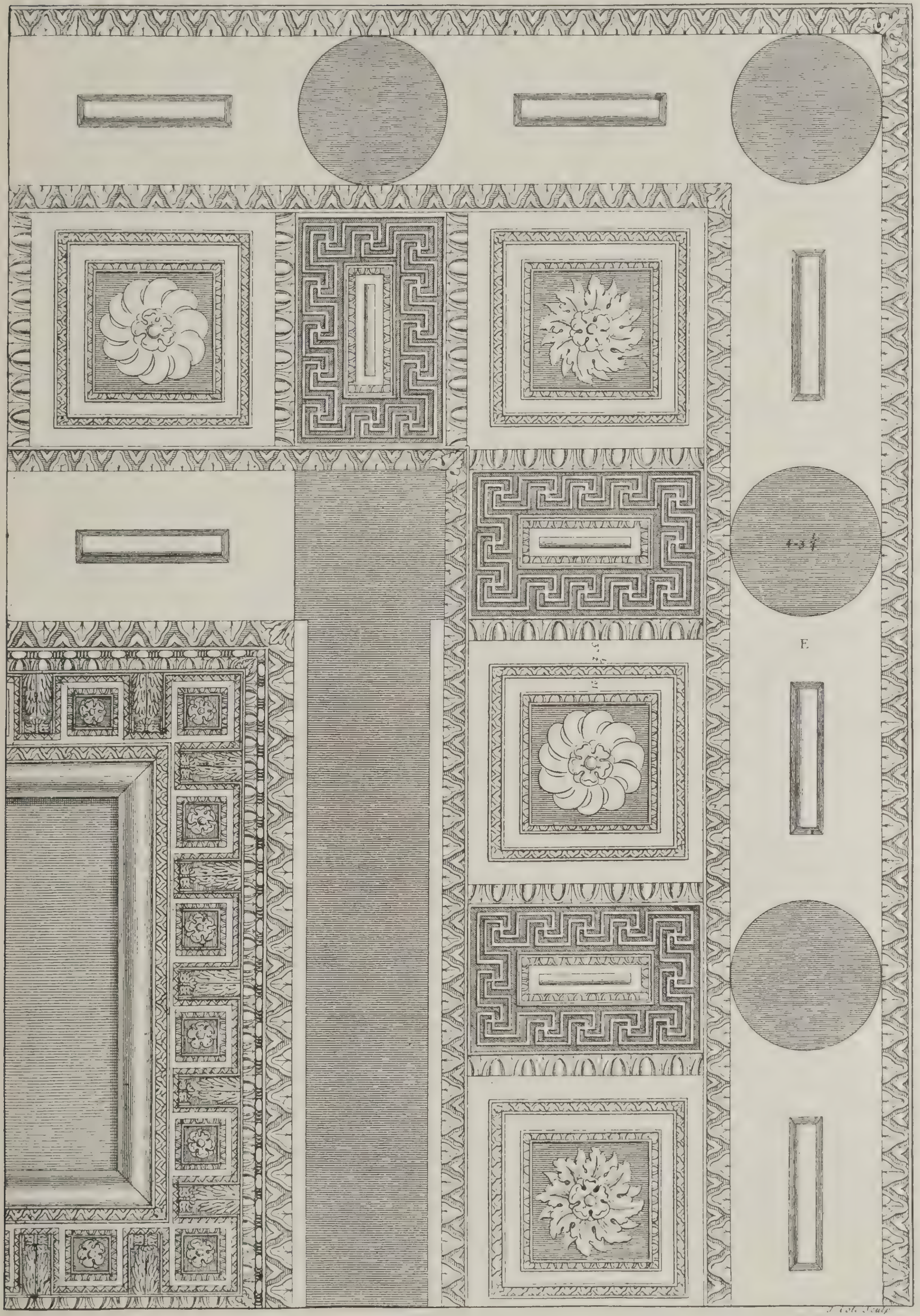
THE DRAWING ROOM



THE OPEN-AIR SLEEPING ROOM.

"CRABBY CORNER," LETCHWORTH: THE HOME OF MR. BARRY PARKER, F.R.I.B.A.

# Architectural Details. 45.—The Temple of Mars the Avenger



The Temple of Mars the Avenger appears in Palladio's Fourth Book. The plate here reproduced shows the soffit of the portico, and how it turns in the anti or pilasters of the Anti-Temple.

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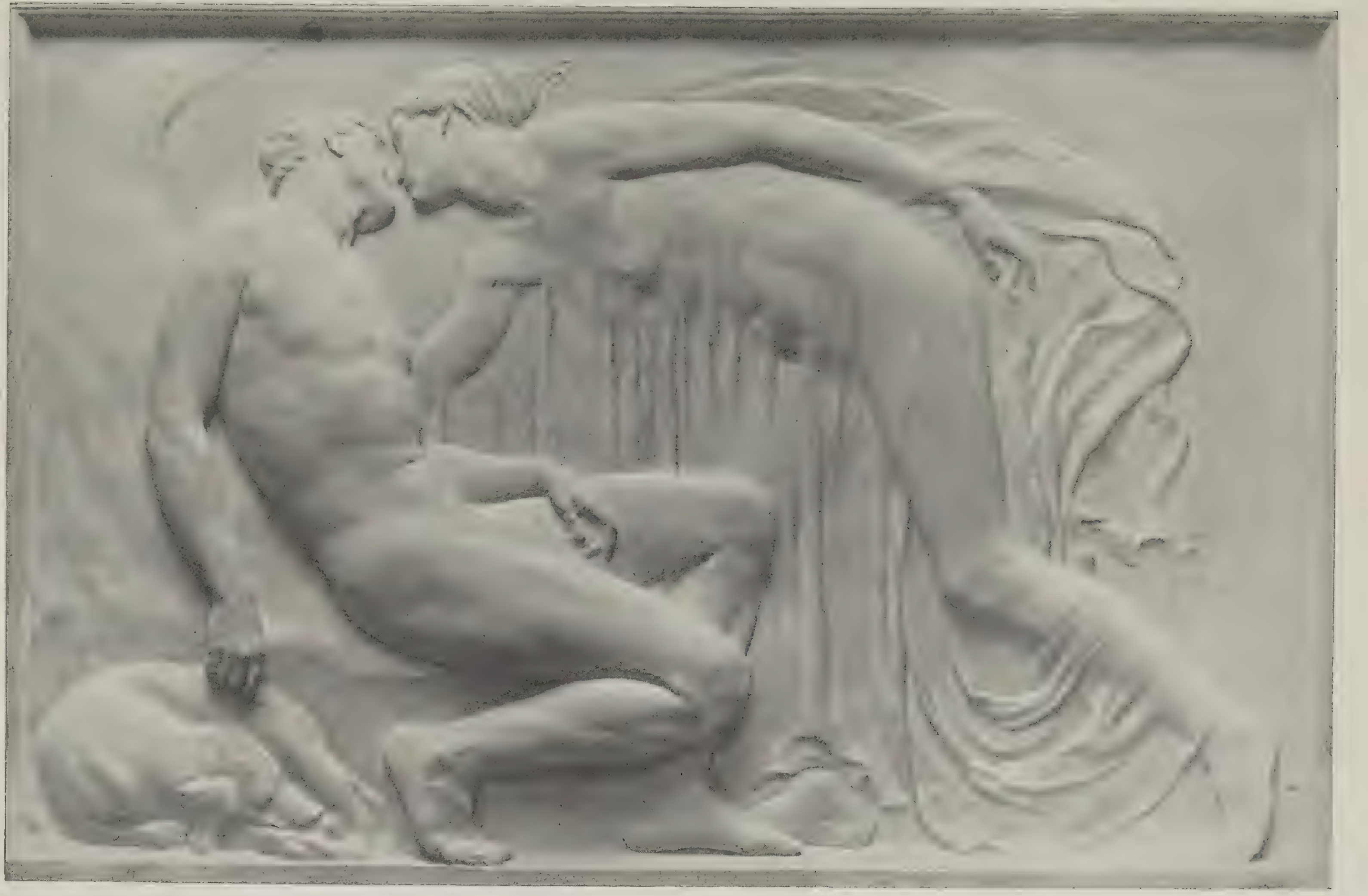
## Sculpture. 9.—" Diana and Endymion," By John Rattenbury Skeaping



The above composition gained in December 1921 the Royal Academy's Gold Medal and Edward Stott Travelling Studentship of £200. The panel is an illustration of the well-known Greek myth of Endymion, the Shepherd of Mount Latmus, who attracted the amorous attentions of Diana, the Moon Goddess, as she watched him asleep on the mountain. She besought Jupiter to grant him eternal youth. Jupiter said that it was impossible for even the Gods to do this except by giving him eternal sleep.

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# The Architectural Societies

## 2—The South Wales Institute of Architects

THE South Wales Institute of Architects had its beginning in a meeting of local members of the profession, held at the Park Hotel, Cardiff, on March 12, 1890. At this meeting, which was ld under the presidency of Mr. E. W. M. Corbett, it was cided that an association of local architects be formed, at only practising architects should be eligible for mbership, and that the title of the association should "The Cardiff Architects' Society." The Committee apinted to draft the rules consisted of Messrs. Vaughan, rbett, Seward, Bruton, Carter, Thomas, Snell and lliday. Mr. F. Baldwin was appointed first Honorary cretary. The new Society was not long in getting to rk, for, on October 8, 1890, it took its first official action. is was in the form of a ter to the Town Clerk on question of employing al architects for the prosed extension to the Town ll.

On January 29, 1891, the ciety held its first annual ner, when Mr. H. D. Searles ood presided over a gather- of forty-three members d guests; and on the following evening Mr. Searles ood read the first paper, the le being "An Architectural ur in Italy." The first zes were offered for comtition by the Society on rch 25, 1891, the subject ng Measured Drawings of West Door of Llandaff thedral. The first winners re Messrs. J. H. James and W. Chapman, while "honrable mention" was made the work of Messrs. H. ather and C. Wilson. Both latter were elected Preents of the Society in later rs, and Mr. Teather is the sent Honorary Treasurer. September, 1891, the Soty received its first deputan of workmen, the reason ng a complaint that oreign builders were pay- a lower rate of wage than that authorized by the al code."

MR. EDWIN SEWARD, F.R.I.B.A.
FIRST PRESIDENT OF THE SOUTH WALES INSTITUTE OF ARCHITECTS, 1894-5.

A proposal was made, in March, 1892, to form a South les and Monmouthshire Society of Architects, with nches in different towns—a meeting of a "Council Deputies" to take place once a year—and, in vember, 1892, the title was altered to "The Cardiff, ith Wales and Monmouthshire Architectural Society." e rules of this body were amended and re-drawn in tember, 1893, and it was then decided to apply to the .B.A. for alliance with that body—a privilege which s granted before the end of the year. Of this developed ociation, with its extended sphere of influence, Mr. E. vard was the first President, with Mr. Coates Carter one time partner with Seddon) as Honorary Secretary. ring October, 1894, a proposal by the Society of Archits (London) that a local meeting be held to discuss gistration was negatived! But since that date that stion, not to mention Unification, has been considered re than once by the local Society.

Early in 1895 the Society obtained premises at No. 18 Church Street, Cardiff, and on May 8 held a meeting for the first time in its own room. Subsequently, the Society moved to the Art Society's rooms in Queen Street, and in 1905 the present premises, at No. 6 High Street, were taken. The formation of a library was begun in 1896; this has since grown to considerable dimensions and has been handed over on permanent loan to the Department of Architecture in the Technical College.

During 1898 Mr. H. V. Lanchester, who, with his late partner, made architectural history in Cardiff, was elected a member, and in the following year the R.I.B.A. examinations were held in Cardiff for the first time.

The title, "Cardiff, South Wales and Monmouthshire Architects' Society" was not considered a very satisfactory one, and, in 1912, the President (Mr. G. E. Halliday, F.S.A., F.R.I.B.A.), supported by the Council, approached the R.I.B.A., with the gratifying result that the title was changed to "The South Wales Institute of Architects," and the geographical province was defined as including the counties of Glamorgan, Brecknock, Radnor, Cardigan, Pembroke, Carmarthen and Monmouth.

One of the difficulties of the South Wales Institute is that the membership is spread over a large area. This difficulty was realized in 1892, when it was proposed to arrange branches which would send delegates to a yearly council meeting. Again, at a meeting held (in a train!) in July, 1898, it was proposed to appoint honorary district secretaries at Newport, Swansea and Pontypridd. Mr. Ivor Jones, A.R.I.B.A., the present Honorary Secretary (who was President for the two years, 1919–1921), grasped this fact clearly, and set to work to reconstitute the South Wales Institute on a new basis, with the idea of enlarging the scope of its work and getting in closer touch with the numerous members of the profession scattered about South Wales, many in places difficult of access to Cardiff as a centre. During Mr. Ivor Jones's presidency new rules were therefore drafted under which the area covered by the South Wales Institute of Architects was divided into four districts, each district forming a distinct branch of the Institute.

The branches, known as the "Central," "Western," "Eastern" and "Northern" have centres at Cardiff, Swansea, Newport and Pontypridd respectively, while the headquarters of the Institute as a whole are situated in Cardiff. Each branch has its own Chairman, Secretary and Executive Committee. The Council of the Institute consists of the President, Vice-President, Honorary Secretary, Honorary Treasurer and Honorary Auditor, together with representatives elected by the four branches. The number of representatives which a branch may elect depends on the extent of its membership.

This new scheme has worked very well. The activities of the Institute have increased remarkably in the branches and the membership has grown in proportion. In 1912 there were 14 honorary members, 48 members, 13 associates and 2 students; whereas in 1922 there were 15 honorary members, 129, fellows, 50 associates and 59 students. Two of the branches, the Central and Western, are each as large as some allied societies.

The new constitution and rules were drafted with great care, and they have been found of great service not only by the body for which they were directly intended, but also by the R.I.B.A. and other allied societies. For these beneficial changes the South Wales Institute is largely indebted to the untiring activities of Mr. Ivor Jones.

One of the possessions of which the Institute is justly proud is its presidential badge, on the back of which is the following inscription: "Presented to the Cardiff, South Wales and Monmouthshire Architects' Society by the Right Honourable Lord Windsor (the late Earl of Plymouth), the Right Honourable Lord Tredegar and Sir William Thomas Lewis, Bart." The presentation of this badge was made on behalf of the donors, on March 14, 1905, by Mr. John Belcher, A.R.A., President of the R.I.B.A., the President of the South Wales Society at the time being Mr. Cholton James, F.R.I.B.A.

MR. PERCY THOMAS, O.B.E., F.R.I.B.A.
PRESIDENT OF THE SOUTH WALES INSTITUTE OF ARCHITECTS.

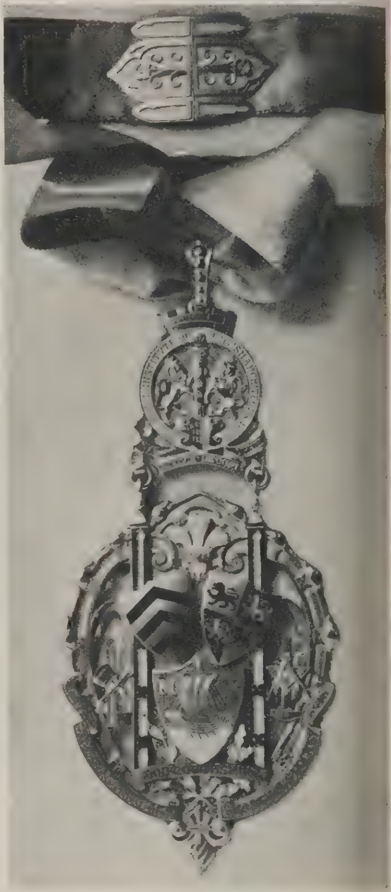
The work of the South Wales Institute has developed steadily on the lines laid down in formulating the objects of the Society some thirty-three years ago. These were then stated to be:

(1) To advance the art and profession of architecture;
(2) To consider questions of professional practice;
(3) To provide and afford facilities for the study of architecture;
(4) To serve as a medium of friendly communication between the members and others interested in the progress of architecture.

The activities of the South Wales Institute may be realized best, perhaps, by considering what has been done recently under each of these heads.

(1) The first event which rises to the mind of a Welsh architect in this connection is the R.I.B.A. Conference, which was held in Cardiff last June. South Wales was justly proud of being selected for the second Conference, and it determined to give of its best. Of the success of that Conference—one of the most important events in the history of the South Wales Institute—so much has already been written that it is only necessary to say that the good results achieved are now being felt, and doubtless will be for many years to come. During the last twelve months there has clearly been an awakening of public interest in architectural matters all over the country, and Wales is no exception. The great public interest taken in the Conference, the excellent attendances at the public lectures and the prominence given in the local Press to articles dealing with architecture, all indicate a healthy realization on the part of the public of the importance to the community of the work of the profession. In this connection the thanks of Welsh architects are due especially to Mr. W. S. Purchon, M.A., A.R.I.B.A., for his public lectures and his articles contributed to the Press, and to the editors of the "Western Mail" and the "South Wales Daily News."

(2) The advancement of the profession in the eyes of the public is in many ways closely related to questions of professional practice. Without doubt success in the former direction has been invaluable in assisting the South Wales Institute in their efforts, which are increasingly successful, to uphold the R.I.B.A. scale of charges, to regulate local architectural competitions, and to ensure, not only in the interest of the profession, but in that of the public, that architectural work is carried out by those who are trained for the purpose. The South Wales Institute maintains particularly friendly relations with the builders—the two bodies meeting frequently at lectures, dinners and conferences. One important result of these meetings has been the fixing, for building work, of a sum above which quantities must be supplied. This condition applies to the whole of South Wales, instead of varying in the different districts, as in the past. The Institute and the builders' organization are now jointly considering the local by-laws.



THE PRESIDENTIAL BADGE.

(3) The South Wales Institute has taken a keen interest in the training of the younger members of the profession. Mr. Percy Thomas, F.R.I.B.A., the present President, has worked hard in the interests of the students. He has encouraged their efforts in numerous ways and acted as assessor in the various competitions held. The School of Architecture at the Technical College, Cardiff, owes its existence largely to the South Wales Institute, represen-

tatives of which are members of the advisory committee. Since the opening of the school, some three years ago (with Mr. W. S. Purchon, M.A., A.R.I.B.A., as the first head), considerable developments have been made, including the appointment of Mr. R. H. Winder, M.A., A.R.I.B.A., as a full-time assistant. The school has been "recognized" by the R.I.B.A., and the President (Mr. Paul Waterhouse) has agreed to act as external examiner. Two of the students have obtained R.I.B.A. Henry Jarvis Travelling Scholarships and have done good work in Italy, France and England. The Central Branch measured drawing prizes and the design prizes for the full-time day school and the evening atelier are well competed for, and the presentation of prizes forms a very enjoyable function each year. The experiment of holding public lectures on architecture has proved a great success. No fewer than 300 people attended the Wren Lecture at Cardiff, an attendance few in South Wales would have thought possible a few years ago. In this direction and in others of equal importance, the South Wales Institute and the School of Architecture are co-operating successfully. A welcome sign of the activity of the younger men is the formation of students' clubs at both Cardiff and Swansea. This example will doubtless be followed shortly by the other branches.

(4) The social activities of the Institute are extremely popular. In addition to the social meetings held by the branches, the Institute holds an annual summer meeting and an annual dinner, which are both well attended. The dinner is a particularly attractive function, as it frequently brings to Cardiff the President of the Royal Institute and representatives of the Society of Architects and of the other allied societies.

MR. IVOR P. JONES, A.R.I.B.A.
HON. SEC. SOUTH WALES INSTITUTE OF ARCHITECTS.

The present officers of the South Wales Institute and its branches are as follows: President, Percy Thomas, O.B.E., F.R.I.B.A.; Vice-Presidents, H. C. Portsmouth, F.S.A., and C. F. Ward, F.R.I.B.A.; Hon. Secretary, Ivor P. Jones, A.R.I.B.A.; Hon. Treasurer, H. Teather, F.R.I.B.A.; Hon. Auditor, J. Cook Rees, O.B.E., F.S.A.; Hon. Librarian, C. H. Kempthorne, Licentiate R.I.B.A. Central Branch. — Chairman, W. S. Purchon, M.A., A.R.I.B.A.; Secretary, C. F. Jones, A.R.I.B.A. Western Branch. — Chairman, C. S. Thomas, F.S.A.; Secretary, J. H. Jones, F.S.A. Eastern Branch.—Chairman, Frank Swash, F.R.I.B.A.; Secretary, C. E. Tebbs, A.R.I.B.A. Northern Branch. — Chairman, G. Vincent Evans, Licentiate R.I.B.A.; Secretary, J. Llewellin Smith, M.B.E., Licentiate R.I.B.A.

Mr. Percy Thomas, the President, is a partner in the firm of Ivor Jones and Percy Thomas, of Cardiff. Although only a young man (he is only thirty-nine) he has already had a distinguished career. During the period of his pupilage with Mr. E. H. Bruton, F.R.I.B.A., of Cardiff, he won the first prize for architecture in the National Eisteddfod. On the completion of his articles Mr. Thomas spent several years in well-known Lancashire offices. While in Manchester he prepared the design for the Cardiff Technical College, which he submitted in conjunction with Mr. Ivor Jones, of Cardiff, in the competition held for that building. The design was placed first by the assessor, and Messrs. Ivor Jones and Percy Thomas were appointed architects for the building. Mr. Percy Thomas also secured first places in the Cardiff Technical College and Merthyr Y.M.C.A. competitions, and second places in the Pontypridd Y.M.C.A. and Cardiff Fire Station. In the open competition for the new Board of Trade offices, Messrs. Percy Thomas, E. Prestwich and Ivor Jones were successful in being amongst the ten architects selected for the final competition, an honour shared with only one other provincial firm.

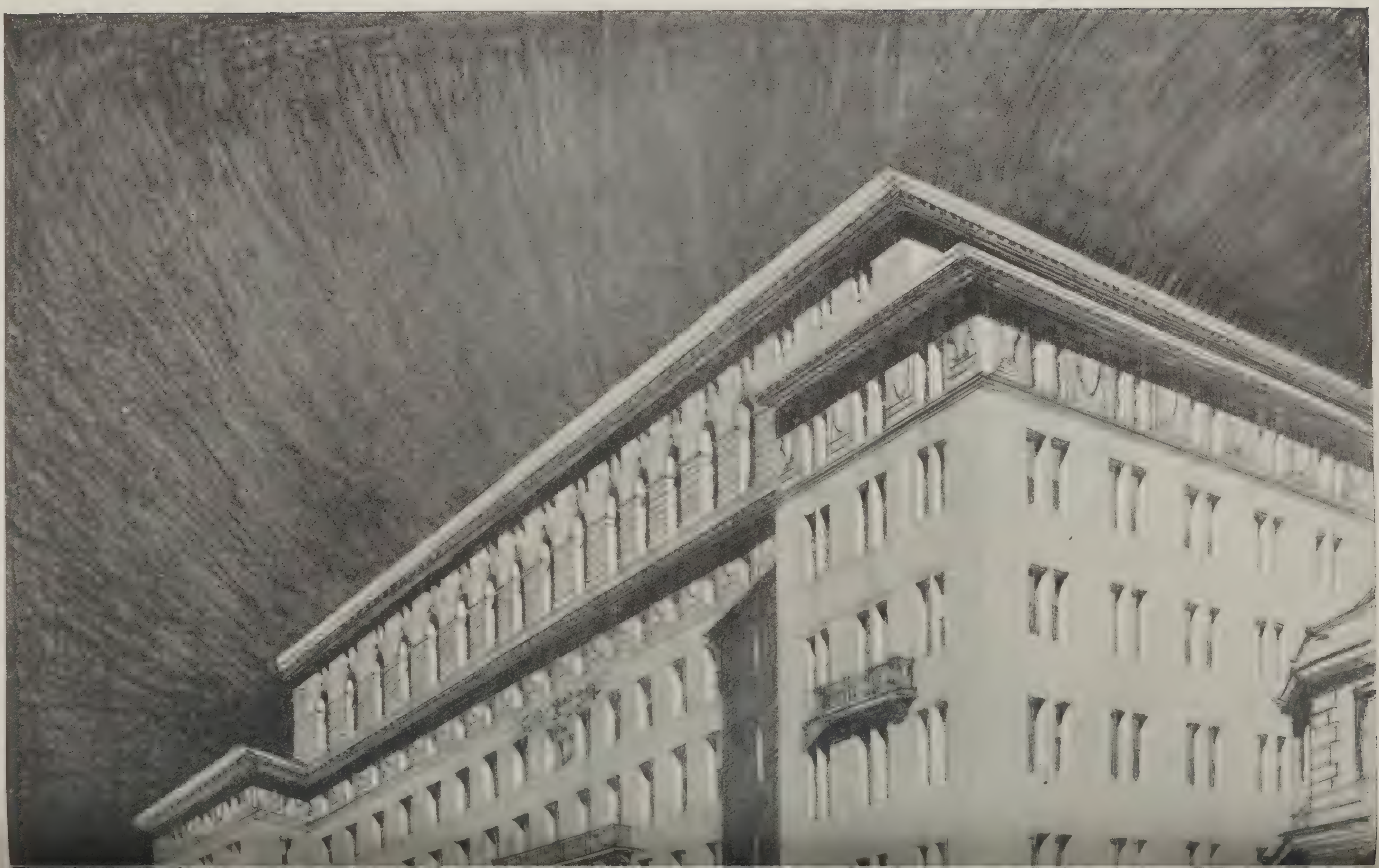
In conjunction with his partner, Mr. Percy Thomas has carried out many well-known local buildings, amongst them being the Technical College, Cathays Park; Louis Café and Hallinan's Restaurant, Duke Street; business premises in the city for Messrs. Marments, Ltd., and Messrs. James Howell & Co.; alterations to Dowlais Chambers; Perch Buildings; Guest, Keen & Nettlefold's offices, Docks, Cardiff; alterations to Brain's Brewery, Cardiff; numerous hotels in Cardiff and district; "The Quarry," Fairwater, and several private houses in Penarth and Radyr; and the Sir Edward Nicholl Homes, recently completed at Penylaw. Mr. Thomas is a brilliant draughtsman and his pen-and-ink sketches have been exhibited at the Royal Academy. His ability as a designer is in some measure due to special studies he has made of Greek architecture. He is a great force in architectural education in Wales, a valuable worker in connection with the Design Club of the Institute, and, now that the educational activities of the Cardiff Branch are merged into those of the School of Architecture, his advice and assistance are highly appreciated by the staff and students. Mr. Percy Thomas is a member of the Council of the R.I.B.A.

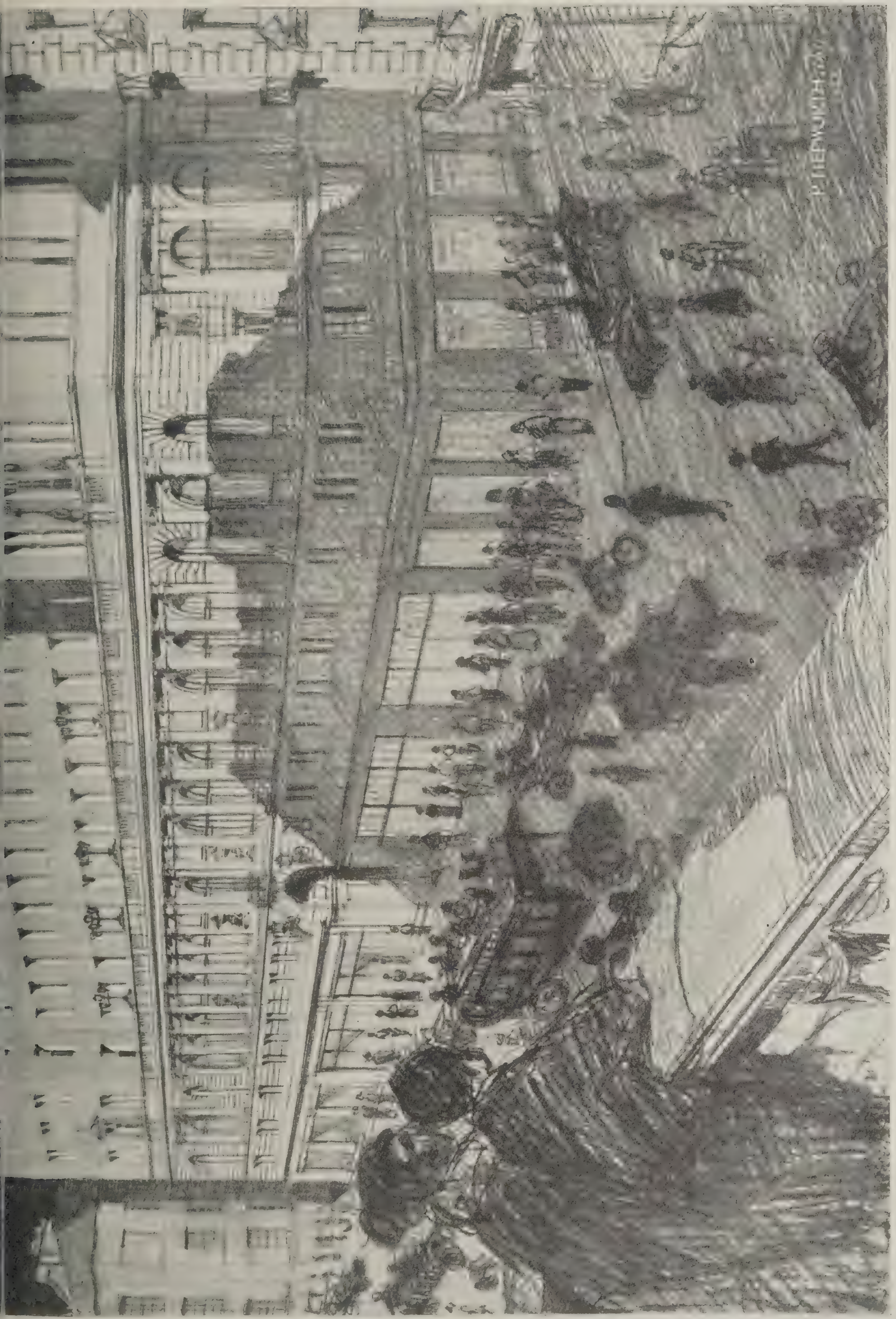
Mr. Ivor P. Jones, A.R.I.B.A., the Secretary of the South Wales Institute of Architects, was President for the two years 1919–21. He comes of an old Cardiff family which has rendered considerable public service. He is the eldest son of the late Mr. J. P. Jones, architect; a grandson of the late Alderman Daniel Jones, who was a Mayor of Cardiff, and the grand-nephew of the late Alderman David Jones, also a Mayor of Cardiff. Mr. Ivor Jones was educated at Mill Hill, was a popular Rugby player some twenty-five years ago and is a playing member of the Cardiff Cricket and Hockey Club. He is the senior member of the firm of Messrs. Ivor Jones and Percy Thomas, and has been in practice about twenty-four years. The principal buildings erected by his firm are mentioned in the notes on the career of Mr. Percy Thomas. Mr. Ivor Jones is a strenuous worker in the interests of his profession, and it is largely due to his efforts that the South Wales Institute is in its present strong position.

[*The first article of this series appeared in our issue for May* 2.]

## New Buildings in Piccadilly

H. Austen Hall, F.R.I.B.A., Architect





A charcoal drawing by Mr. P. Hepworth of this important building, which is to be erected in Piccadilly, is a striking exhibit at this year's Royal Academy.

# Correspondence:

## The R.I.B.A. Council Elections

*To the Editors of* THE ARCHITECTS' JOURNAL.

SIRS,—With reference to Major Barnes's letter, published in your last issue, it is quite clear that he wants a Registration Bill which would provide for all architects becoming members of the Institute. He and his Unification friends mean to do all they can to try and get them in somehow, but I hope and think we shall be able to prevent it. Our Bill is drafted on the lines of the Bills promoted by other learned societies. The Board and the Tribunal would be principally composed of members of the Institute, consequently they would be "under" and not "over" the Institute.

If Major Barnes could give us an example of a recent Registration Act which provided for all the members of the profession concerned becoming members of the principal Society of that profession, it would have far more weight than his somewhat vague and guarded arguments for admitting all men to the R.I.B.A. I wrote our parliamentary agents on this point in January last and they replied: "You may safely state that no Registration Act has been passed whereby all the members of a profession become members of the principal Society of that profession. It certainly is not so as regards the legal, medical, or dental professions."

Major Barnes makes great fun of our approaching other bodies. He writes: "They are solemnly inditing letters to all and sundry to confer with them, so that they may have an agreed Bill! Was ever such cynicism?" etc., etc., but he evidently has not referred to the reports of the meeting on January 29. What we are doing is to carry out the resolution which was warmly supported by Major Barnes. No one opposed it more than I did.

By the way, I have the Landed Property Practitioners (Registration) Bill, 1923, before me. Is there any provision to make all surveyors members of the Surveyors' Institution? Of course not, the Unification dodge would not be tolerated for one moment with such a business-like body of men.

There was no new information to our members in the recent circular signed by myself and others. I should think men were tired of hearing that our chances of getting Registration in any case are very small, and will depend on public opinion, that is why we ought to have acted as the Surveyors' Institution did, and not as decided by Major Barnes and his Unification friends at the meeting referred to above.

SYDNEY PERKS.

In view of the fact that voting papers will have been sent in before the publication of our next issue, in which Major Barnes's reply to Mr. Perks would normally have appeared, and that so far as the elections are concerned, Mr. Perks's statements would, therefore, have remained uncontradicted, we have taken the unusual course, which we think the special occasion fully justifies, of submitting his letters, before publication, to Major Barnes, who replies as follows:—

SIRS,—I still think it cynical to ask men to come and confer with you when all the time you don't want them to come. That is Mr. Perks's position, and he announces it boldly. He can't shelter himself from the charge by saying that it is a course warmly supported by me. Of course it is, that is the difference between Mr. Perks and myself. I want men to come to confer, he doesn't, *but he asks them to*. He is engaged on his own admission in carrying out a course to which he is strongly opposed. If that isn't cynical, what is? And then to ask to be given a majority to enable you to continue to carry out a course to which you are strongly opposed!!! Could cynicism further go.

I know the danger of controversy, and I don't demand perfection, but I think Mr. Perks is just a little careless in the thing he says about the Surveyors' Institution. He says about it: "The Unification dodge would not be tolerated for one moment with such a business-like body of men." Who would imagine Mr. Perks was a Fellow of that same Institution and yet in ignorance that the whole policy of the Surveyors' Institution for years past has been to unify. It has absorbed the Rating Surveyors' Association, the Quantity Surveyors' Association, and is now negotiating with the Central Land Agents' Society. With the exception of the latter body there is not a single incorporated body of surveyors outside the Surveyors' Institution. Unification has been their policy for years, and only after it has been almost completely successful have they produced their Bill. I am sure Mr. Perks would not wilfully mislead anyone, least of all his colleagues in the Institute, but if he is going to make comparisons they should be a little more carefully drawn. Nothing would content me more in this respect that for the Institute to follow his exemplar the Surveyors' Institution.

It is said we want to shatter the examination system and submerge the Associates. Both statements are equally inaccurate. We propose to maintain the examinations and the right of the Associate Class. What we don't propose to do, or if we can prevent it allow Mr. Perks and his friends to do, is to set up a rival examination outside the Institute, and a rival body able to confer a distinction which will make men indifferent as to whether they are Associates or not.

But a truce to all this, I shan't convince Mr. Perks, he won't convince me. I am content to be found on the same side as the many distinguished men whose signatures support the Emergency Committee Action, and the many men equally distinguished whose votes will give, I am sure, the Institute the chance of placing the conduct of that cordial and conciliatory policy it adopted in January in the hands, not of men who strongly opposed it, but of those who gave it their warm support.

HARRY BARNES.

*To the Editors of* THE ARCHITECTS' JOURNAL.

SIRS,—The correspondence which has appeared during the recent elections makes one seriously ask the question: "Where is our Institute drifting to?" For it is certain that unless this question is considered carefully by all those who have the interest of the R.I.B.A. at heart, disaster will overtake it, and the position of the leading architectural society will be undermined by those whose one object seems to be not the interests of architecture, but mainly the benefit of a small section of architects.

It is necessary to go back a little to fully realize the cause of the present state of affairs, and it will then be apparent that the vexed question of Registration is really the primary cause, a domestic question which has no relation to the production of good architecture.

It was felt, mainly by the younger members, that the previous Councils did not advance this cause fast enough, in fact, it was often said that the old Institute was lifeless, and honestly said, without knowing what was quietly taking place towards this end. I must admit that such a criticism was excusable except by those members who were in a position to know better. Unfortunately, a few saw in this feeling the chance of promotion, and took full advantage of it.

When most of those inside and outside the Institute realized that a real step was being taken by the Council in trying to advance a scheme of Unification, these individuals saw their opportunity and created what they were pleased to call "The Defence League." By persuasive and carefully worded letters in the Press they very soon obtained members, for it was only necessary to write or say you were a sympathizer and you were enrolled—delightfully easy, and so inexpensive! But there was much more in it than was at first apparent.

This self-constituted league became a political organization, making capital of those who were and also those who were not in favour of Registration, in other words, those who thought Unification went too far and those who thought it did not go far enough.

The result is known to all: that at the last year's elections this league, or rather the few who constitute it, carried the poll, and we were given a Council which represented a minority who were apparently sufficiently interested in the one issue to vote *en bloc* for its representatives. Now the question which must be faced is, Are we to allow the R.I.B.A. to be run by such methods? You will be told that this particular Council really represented the feelings of the majority. The present elections should surely demonstrate it. Should this really be the case it will be quite apparent that our Institute has indeed changed, and that it has no longer the interests of architecture as its chief function, but has become a form of trade union and will, in time, suffer the inevitable consequences.

t is astonishing to me that there uld be so much confused thinking over question of Registration, for has it : been so long a matter of conflict in profession? One would have thought .t those who were so keen upon getting Act of Parliament would have seen the Unification scheme the first sound p towards that end, but, alas! those do know better have killed that for time being, and in so doing put back chances of a Registration Act for many rs. They will tell you to look at what dentists and the nurses have done by ing the course they suggest, but they posely do not tell you to carefully sider the essential difference between se professions and that of architece. To do so would at once destroy ir arguments.

'hese men know it, but at present it s not answer their purpose to tell you So much can happen between now l when they will be forced to admit y were wrong, that they will then no ıbt say that "Although we have failed ody else could have done better."

Tow let us for a moment consider that ition, for certainly if they are allowed steer the ship it will find the rocks at early stage of its voyage, as has already n instanced in the Registration Act y have recently prepared, which neither y nor any one else thought would get y far. Their excuse, of course, will now and every time they fail, that y were not given a fair trial. The pity it is that our Institute is to be made battle-field for this useless warfare, h the result that the things that really tter can have no adequate attention.

f we could only hand the Institute r to the so-called advocates of Registion for several years to satisfy them l prove that it will need more than the titute's power alone to secure what y want, it would be a useful lesson, the price would be too great. They ıld assuredly find that any scheme for gistration is doomed to failure unless has the unqualified support of all sting architectural societies and a lic opinion that believes there is a essity for it.

ask those who think otherwise to sider and make out a case which is purely one for the so-called qualified hitects, and to carefully weigh up its nces without such co-operation.

Tow let us consider for a moment what this discord is meaning to the prestige our Institute. For the past twelve nths we have had a Council mainly ıposed of men selected by the Defence gue, men who have brought in to the ıncil chamber for the first time the tical atmosphere, which will destroy dom of thought and which means t any measure introduced by a few lers must be accepted without question.

ven with such power what has the sent Council accomplished? It can broadly stated as follows :—

. Abolished Unification Committee.
. Prepared an abortive Registration Bill.
. Repealed the former Council's proposals to give all Associates equal voting powers with Fellows.
. Produced an Academic Dress for members.
. Nominated one of themselves as a candidate for the Presidential Chair.

This may or may not seem to be a sufficient reward for the support given to them, but it does mean this, in my humble opinion—

By act No. 1, they have destroyed the chances of ever getting a Registration Act until by other means the same result will be obtainable.

By act No. 2, they have wasted valuable time and money by not realizing the result of their first act.

By act No. 3, they are appealing to the Associates as a body for their support by being able to state that this measure was one for which they were primarily responsible.

By act No. 4, they have tried to enhance the importance of Institute Qualifications, not realizing that it is what one does, not what one wears that matters, with the result that the suggestion of Academic Dress has been received with ridicule.

By act No. 5, they have proved the justification for the before-mentioned criticism.

One almost looks in vain for any sign that our Institute in the immediate future will be engaged upon those matters for which a learned society should exist.

Unless it be that the necessity felt for the New Emergency Committee shows that at last our members are realizing the need for some united effort to prevent the continuance of the present régime, and unless what has taken place is the means of stimulating into action those members who, unfortunately, are so apathetic as not to record their vote at elections, no useful purpose will have been served.

It is of the utmost importance that these contentious matters are quickly solved, or at least kept within reasonable dimensions. Unless they are there will be little or no time to attend to the matters of real public interest and professional importance for which our Institute primarily exists.

If an apology is needed for taking up so much valuable space in your paper, it is that I feel the time has arrived when each and all should consider where we are drifting, and the full consequence of such a change of policy. I feel we should all take whatever step seems most necessary to safeguard the prestige of the society in which we are all sincerely interested.

STANLEY HAMP.

*To the Editors of* THE ARCHITECTS' JOURNAL.

SIRS,—Three items for consideration in relation to the R.I.B.A. election :—

(1) In a recent letter to the Press, comment was made by Mr. Wilfred Travers as to the adverse remarks appearing in the public Press in connection with a letter forwarded by the R.I.B.A. to the City Corporation in relation to a fancy-dress ball to celebrate the Sir Christopher Wren Bi-centenary Commemoration.

It is to be regretted that some members of the R.I.B.A., perhaps from lack of thought, do not show sufficient respect to our Royal Charter.

Doubtless it will interest many readers to learn that the letter under review was circulated, without the knowledge of the present Council, to the Corporation of the City of London.

At the earliest opportunity I moved the following resolution in Council :—

"That the Council of the R.I.B.A. disown the letter, and declare that it was written without their knowledge or consent.

"Also that the City Corporation and the public Press be informed accordingly."

Owing to the wish expressed by the President, the resolution was not proceeded with.

(2) Every consideration and respect has been shown to the President by every member of the Council, and I was exceedingly sorry to read a letter from him advancing the views of the Emergency Committee.

This so-called "Emergency Committee" has attempted to create confusion by the objectionable methods of late Governments.

(3) I think most Associates will not be misled at this juncture. One thing is quite clear, i.e. if the back entrance of the R.I.B.A. is to be opened for all and sundry to enter, then self-respecting members will walk out by the front door.

H. G. FISHER.

*To the Editors of* THE ARCHITECTS' JOURNAL.

SIRS,—We hear, on excellent authority, that our sportsmanlike Unification friends are making various statements to the effect that the Council election of a year ago was won by underhand and reprehensible methods of procedure. We can assure all members of the Institute who are interested in the matter that any such statements are utterly untrue. Irrefutable proof that the R.I.B.A. Defence League gave the then Council of the Institute due notice of the League's aspirations and activities is proved by the letter of the joint hon. secretaries, Mr. Sydney Perks and Mr. George Hubbard, that appeared on August 27, 1921, in the Journal of the Royal Institute of British Architects.

ALFRED W. S. CROSS (*Chairman*).
GEORGE HUBBARD.
H. D. SEARLES WOOD.
SYDNEY PERKS.

On behalf of the R.I.B.A. Defence League.

*To the Editors of* THE ARCHITECTS' JOURNAL.

SIRS,—No one can deny that the present Institute election campaign is being productive of much illuminating literature, and it is certain that the minds of electors who, like myself, are not in the "middle of things" will be influenced by it.

Even this morning, a folder, printed on splendid shiny paper, has come to hand, in which the merits of Mr. Cross for the august position of president are set forth.

Not, perhaps, on quite the same high plane were the pamphlets received a day or so ago, in which another of the candidates displayed alongside one another his election address and an advertisement of the undertaking in which he is interested. But, of course, we must not criticize such small points in these commercial days. In fact, if any others of the Defence League nominees happen to be interested in any commercial venture or ingenious patent, I hope that they too will not neglect to send us particulars. Such evidence must influence us when we vote.

"VERI PRODITOR."

The two following letters from Mr. Perks were received last week, but too late for publication in our last issue:—

*To the Editors of* THE ARCHITECTS' JOURNAL.

Sirs,—Mr. Ashley is quite correct. The present Practice Committee was in favour of *a* Code; by a majority, according to my notes, of three!

The president of the Law Society advised us strongly, from a legal point of view, that in the interests of architects it would be a very dangerous thing for us to publish *any* Code, and in so doing agreed with the decisions of the Practice Standing Committee between the years 1916 and 1922.

SYDNEY PERKS.

*To the Editors of* THE ARCHITECTS' JOURNAL.

Sirs,—May I suggest to Mr. Maurice E. Webb that before he attempts to correct other people he should be sure of his facts.

He states that I know perfectly well that the words the "bringing of all the architects of the United Kingdom into membership of the R.I.B.A." are taken from a report. But I don't know it; unfortunately the quotation is much more serious, for it is taken from a resolution passed by the Council of the R.I.B.A. on May 23, 1921. I am well acquainted with what I believe is the only report on the subject; it was made by the sub-committee of the Unification Committee and submitted various suggestions for the consideration of the Grand Committee. I have it before me, it is headed "Private and Confidential (for the information of the Members of the Committee only)." This report was considered by the Grand Committee, and as a result the four well-known resolutions were passed. Whatever views we may have it is clear that resolutions that give rise to so many arguments must be, and are, very badly worded, but what could you expect from a committee that advocated Unification before Registration? Mr. Webb was a member of the sub-committee. The resolutions I refer to were submitted to the Council of the R.I.B.A., and exactly similar resolutions were passed, practically without discussion, and in spite of my vigorous protest.

But Mr. Webb and his Unification friends must be logical; if Unification is to be defined as admitting only "selected" or "approved" or "properly qualified" men, that would obviously mean the exclusion of certain men, and the result could not be Unification. Again, why make any change? At the present time we admit all those men—the test for being "properly qualified" is compulsory examination.

I ask our Associates to form their own opinion with regard to the result of admitting architects wholesale to the Institute, and I submit to them that it would shatter our examination system; apparently Mr. Webb and his Unification friends think they can throw dust in the eyes of Associates by not calling the new members Associates, but it is *membership* that counts, the name Fellow, Associate, or Member does not matter, in the eyes of the public.

Mr. Webb complains that the Council did not provide a House List in accordance with our by-laws; here again he is wrong, the Council did so, but after the full list had been voted and subsequent to the Council meeting, one Fellow withdrew his name.

Mr. Webb states his friends "are pledged to consult" various societies; that is exactly what the present Council is doing.

SYDNEY PERKS.

## An Academic Dress

*To the Editors of* THE ARCHITECTS' JOURNAL.

Sirs,—There are two types of 'varsity men—those who can and those who cannot withstand the disadvantages of the education they receive. The greatest Englishmen are those who go through it and emerge triumphant and unscathed. But these have to be made of the finest stuff. I often think that we should be a nation of super-men if we could only give our sons the education they deserve. Alas, those who cannot withstand the disadvantages they meet with at Oxford and Cambridge emerge, not triumphant as those fine-tempered individuals, but with a veneer and all that the word implies.

"Most people," wrote Robert Louis Stevenson, "swallow the universe as if it were a pill and walk on like smiling images pushed from behind." This exactly describes the veneered type. Because the universities for a thousand years have called a man who has passed their examinations in mathematics a "Master of Arts," then, of course, the universities must be right. The veneered one swallows the pill and walks on smiling and chattering about fine old traditions. It would seem to be a significant fact that the rise of the "Master of Arts" and the universities marches with the fall of mediæval architecture, which we all admit to be the finest architectural expression ever achieved in this country, and if some of our 'varsity types would talk less about literature and read more, it would do them no harm. For instance, Victor Hugo wrote that books would kill art. This is the truth and we must not blink at it. The greatest periods of art and architecture have been those in closest touch with the realities. To expose unrealities or an untruth is, therefore, to take a step towards the real advancement of art and therefore of architecture. My letter in "The Times" was intended to be a direct challenge to the universities. It was no case of "rushing into print," but coolly and deliberately done as part of my battle against shams. Some of your readers will have observed the stony silence with which the challenge was greeted. The university authorities are wiser in their generation than some of their pupils, who appear to have been taught neither worldly nor unworldly wisdom, for the university authorities have held their peace.

The veneer indeed is often a thin one—a very thin one. In reply to a signed letter addressed in general terms they made personal and unsigned attacks. But my fly was a tempting one and was cast skilfully upon the waters. The fish, as was expected, has jumped, and we now catch a glimpse of him. In my letter I asked whence all this mass of political opposition, and we are most obligingly answered. Your readers will ponder the following little pleasantry and read, mark, learn, and inwardly digest:

My first is what Oliver askèd for,
My second melts with every thaw;
My third is what the spiders spin,
And many flies are trappèd in;
What Destiny will always weave,
To catch those trying to deceive.
My whole deserves less blame than pity
A young soul he from the "'varsity."

W. W. SCOTT-MONCRIEFF.

## Contemporary Art

*The Leicester Galleries.*

The 87 Hugh Thomson drawings awake memories and regrets. The biggest of the latter is concerned with our lack of a decent illustrated magazine. "Harper's" and "Scribner's" still exist, but where is the "English Illustrated Magazine" of the 'eighties which represented in England what "Harper's" and "Scribner's" represent in the United States. One welcomed the passing of the months in the later 'eighties because they brought a new drawing by Hugh Thomson in the "English Illustrated," or a new wood-cut even, for process had not squeezed the last life-breath from craftsmanship then. However, process produced very good facsimiles of Hugh Thomson's charming illustrations. He made charming pictures as well, for he was not wholly and irrevocably an illustrator of other men's ideas; he was an original artist on his own account and was a member of the Royal Institute in 1897. He will always be accounted an illustrator, however, and one of the best, with talent and style, if without genius. He was hardly creative, but he was most pleasantly entertaining, and in the 'eighties entertainment counted for as much as genius, so long as it was nice. The 'nineties changed all that and the *fin de siècle* prayed for an exhibition of genius, and preyed upon it. Throughout these years, however, Hugh Thomson prevailed, and carried on his beautifully talented work to the end of the old and the beginning of the new century to die, too early, in 1920. To the illustrations he made, many a dead author owes a new life. Goldsmith, Miss Mitford, Jane Austen, are some of them, while the best counties of England were made better by his Highways and Byways drawings, more valuable because more individualistic than the picture-book work. It is very interesting to look over all these small works gathered together at the Leicester Galleries and to realize in them a period that has passed.

*The Independent Gallery.*

Bonnard, as presented in seventeen canvases here, is not prepossessing. He is supposed to illustrate Impressionism, but as Impressionism is concerned with problems of light, the supposition is mistaken. The Bonnard canvases (the canvas sometimes showing) are impressions perhaps, often foggy ones, never pleasing ones, seldom exhibiting research, often presenting arid passages without interest of any kind, but they are nothing more. There are better Bonnards, of course, and better representatives of the modern school of painters than Bonnard, and it is always advantageous to see the work of the modernists, whether it be good, bad, or only indifferent.

KINETON PARKES.

# Magazines of the Month*

## A Literary and Pictorial Digest

HE ARCHITECTURAL REVIEW for May tains an illustrated article upon the k of the remarkable young German itect— Erich Mendelsohn.

During the orgies of destruction in world-war there arose before Erich delsohn," says the writer, Herman rge Scheffauer, "a new vision of archi- ural harmony. This strange æsthetic- itual experience came whilst the ng architect squatted in the trenches he front. . . . Housing and bricks for great industries of the day occupied fancy. . . . Mendelsohn saw the ration of modern architecture in a ity of three materials—steel, concrete, s."

HE ARCHITECTURAL FORUM for May tains an interesting example of a ary building at Kennebunk, Me. In selection of an architectural type, the itects, Hutchins and French, have le use of a form which is historically tified with all New England, and ch lends itself well for use in a building ch by its very nature seems to demand eatment which is somewhat formal balanced as to design and plan, and ch, moreover, can be well worked out naterials which are not of prohibitive

he foundations, up to the ground level, of concrete, while the walls are of erstruck brick laid in Flemish bond. horizontal courses in the walls, the els at the windows, and the blocks l at certain places to complete the ssary balance of design are of stone, the columns which support the en- ce portico, the trim about the main rway and the Palladian windows, and cornice which extends around the ding are of wood painted white. The s are covered with slate. Walls of the ing-room are panelled in oak; the trim of the delivery room is painted, and the floors throughout are of oak. The stackroom is fitted with wooden shelves, and heat is provided by hot water equipment. The contract was let in 1906, and the cost per cubic foot was 30 cents.

Mott. B. Schmidt, A.I.A., contributes an article upon "The Curved Stairway," in which he says: "If the fireplace is the heart of a room, the staircase is the heart of a house, and in the development of the Anglo-Saxon dwelling the design and construction of the staircase has faithfully mirrored the changing customs, styles, and habits of the people." Some beautiful examples of curved stairways by American architects are shown.

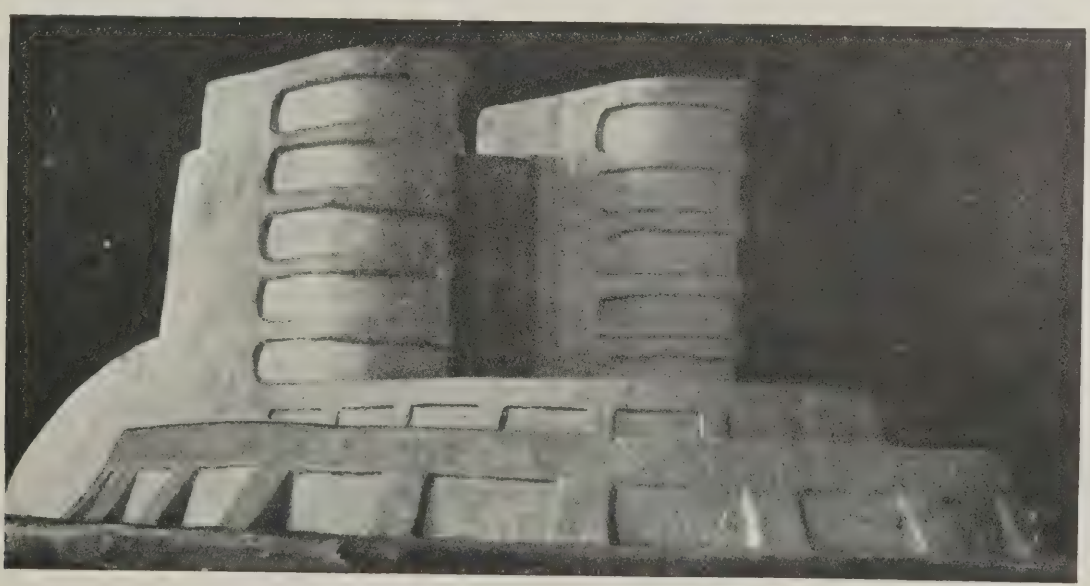
THE LONDON MERCURY devotes its section on architecture to a criticism of buildings in Kingsway, in which Mr. Powys Evans says that Kingsway would have been a finer thoroughfare had it been made ten years later than it was. "The earlier buildings are for the most part poor," though "notable exceptions to this statement are No. 42 by Sir Edwin Lutyens, and the church of Holy Trinity by Messrs. Belcher and Joass. . . . A gradual improvement may be noticed in the later buildings which has in the end given us Africa House and the Bush Terminal block of offices." "Seen from the north, the Kingsway is like a straight ravine cut out of stone. The sides of the ravine seem here and there to indicate an ordered arrangement of light and shade; at the end is seen a fine archway suggestive of an entrance to princely halls. It is a pity that all the architects employed in the street could not have met in consultation to discuss its main lines and masses as a whole."

The May issue of ARCHITECTURE, besides containing contributions by Sir Edwin Lutyens (quoted in a previous issue of the JOURNAL), Mr. Trystan Edwards, and others, has in it a contribution by Mr. Christian Barman upon the curse of beauty—"La Belle Dame Sans Merci." "As we examine the care with which the most beautiful of our architectural treasures are, or appear to be, to-day singled out for destruction," says the writer, "our first impressions must be of an unusually keen-witted malevolence."

"What subtle plotter against the amenities of London could, we are almost tempted to ask, have found more vitally significant spots against which to direct his attack than some of those that are at this moment threatened? What is it that works such discriminate havoc? What, indeed, but the lethal gift of beauty?"

In a recent issue of THE ARCHITECTURAL FORUM there are profusely illustrated articles on "Modern American Country Houses," by Aymar Embury II, A.I.A., "Interior Architecture of the House of Medium Cost," by Howard Major, "Planting as a Practical Factor in Domestic Architecture," by C. Stanley Taylor, and "Landscape Design for the Modern Country House," by Alfred Geiffert, Jr., F.A.S.L.A. In addition there are many illustrations of houses erected from the designs of prominent American architects.

Mr. Aymar Embury says: "The main difference between the architect of current work and the architect of twenty years ago is that books are no longer regarded as the last word. Many of our men are so thoroughly acquainted with the essentials of historic styles that they are able to work without documents, and although perhaps not with the literal accuracy in detail displayed by the older men, with an infinitely greater fidelity in spirit. Even in so difficult and so little understood a field as the Gothic, Charles Klauder and Bertram Goodhue have executed a number of buildings which, were they antiquities, would have drawn the tourist and the architect alike to study them. Yet it will be found upon



A MODEL FOR AN OPTICAL FACTORY.
From a design by Erich Mendelsohn.
(*From "The Architectural Review.*")

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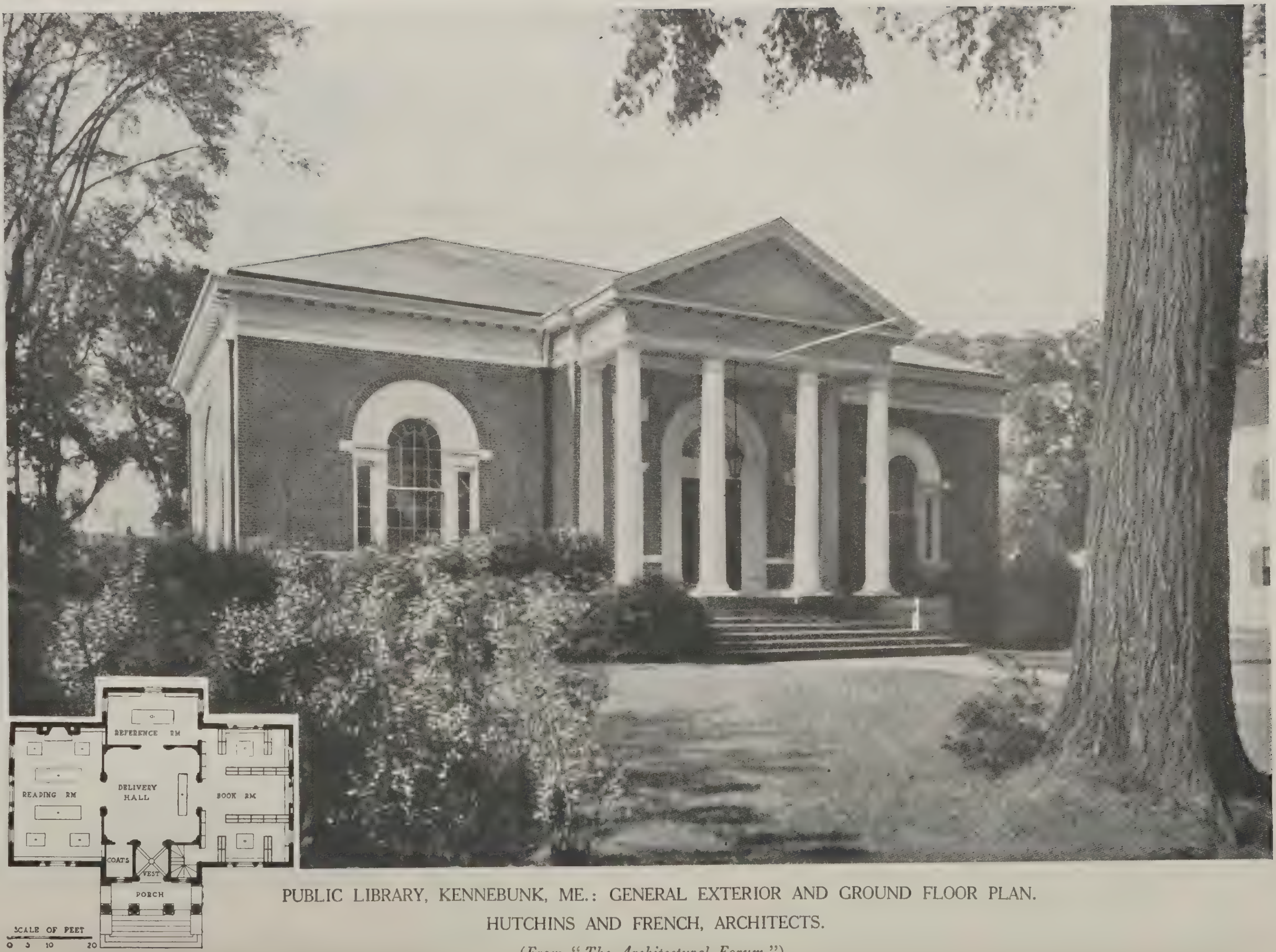
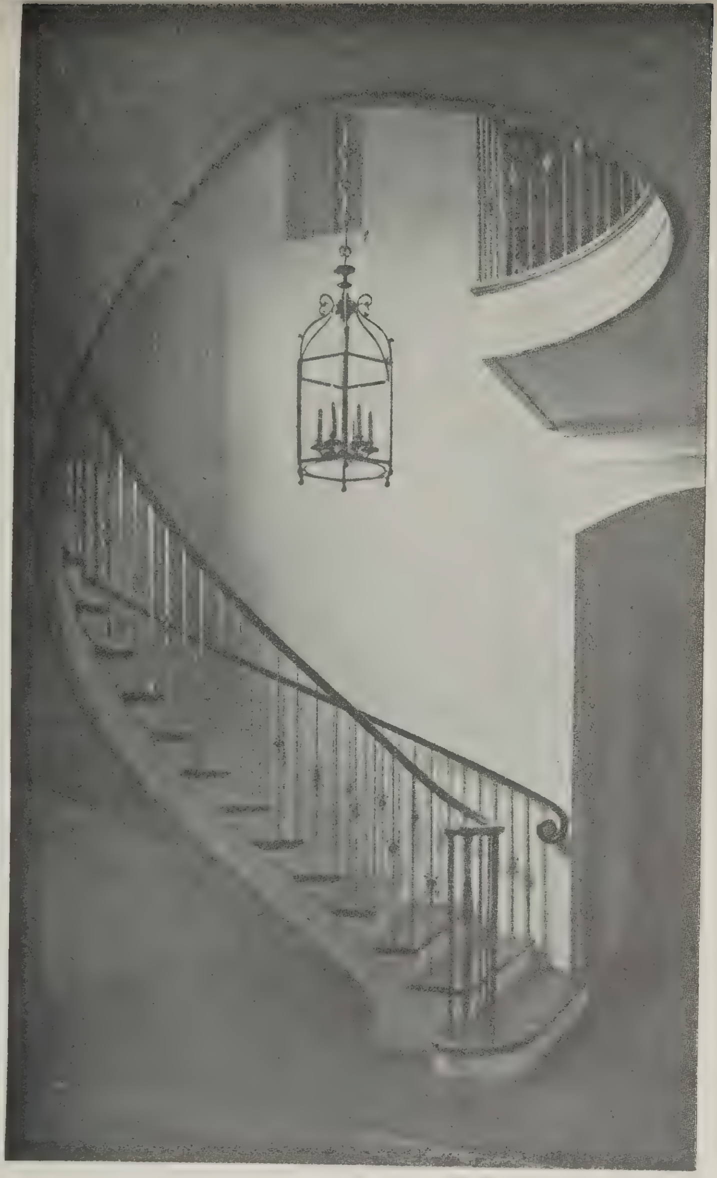
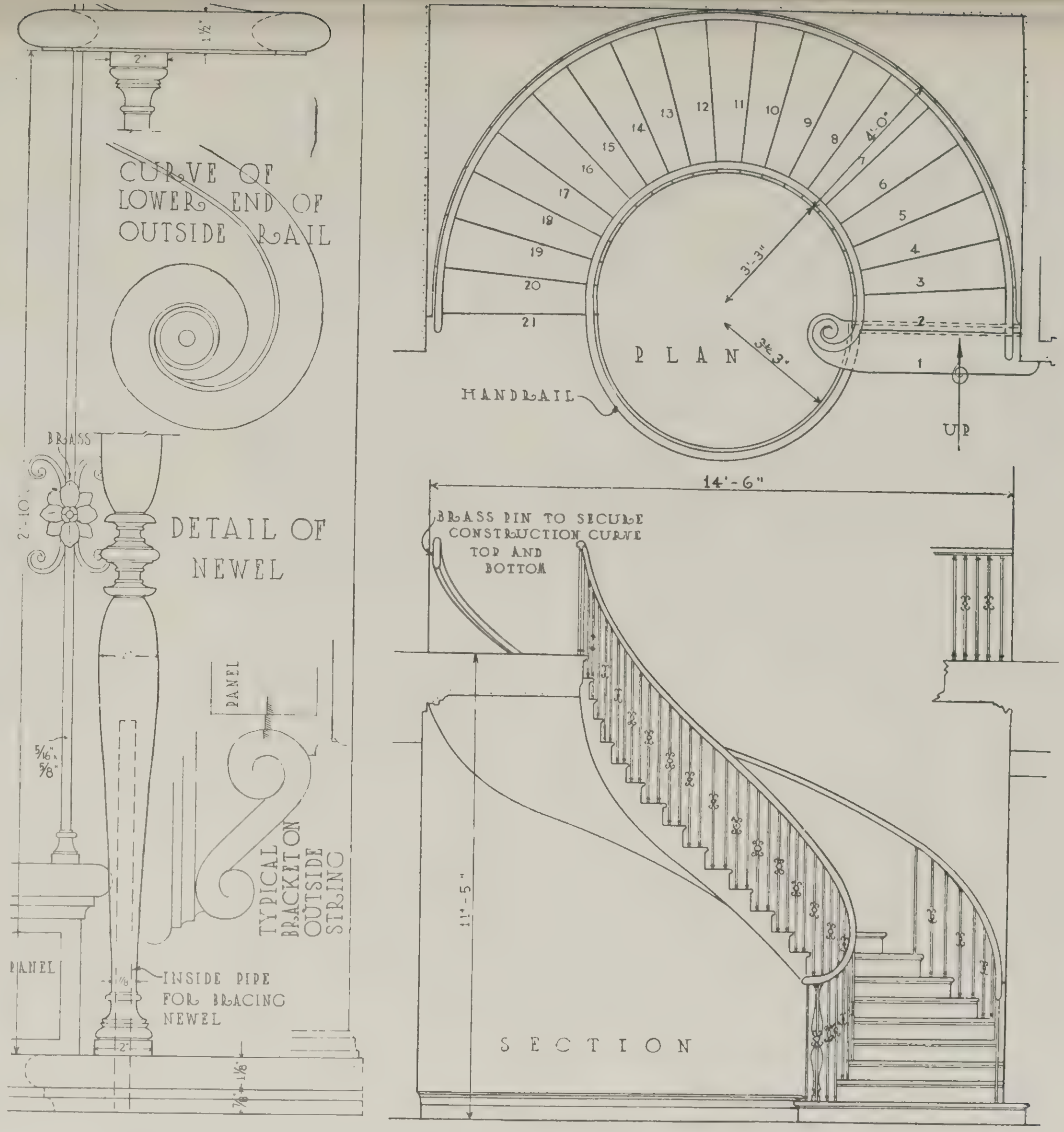
All the above magazines and many others may be in the Reading Room at 29 Tothill Street, West- er, S.W.8.



PUBLIC LIBRARY, KENNEBUNK, ME.: GENERAL EXTERIOR AND GROUND FLOOR PLAN.
HUTCHINS AND FRENCH, ARCHITECTS.
(*From "The Architectural Forum."*)



A CURVED STAIRWAY IN A SQUARE WELL.



PLAN, ELEVATION AND DETAILS OF BALUSTRADE.

HOUSE OF MR. ROBERT L. BACON, WEETBURY, N.Y.

JOHN RUSSELL POPE, ARCHITECT.

(*From "The Architectural Forum."*)

close examination of most of their work that exact adherence to tradition is the exception and not the rule, and that while their work is solidly based on the finest of Gothic precedent and is itself genuinely Gothic, it is still unlike any remaining examples of the historic styles.

"A not dissimilar process has gone on in our country work. Following the lead of Frank E. Wallis, Frank Chouteau Brown, Joseph Everett Chandler, and other close students of colonial work, and perhaps largely due to the splendid publication of many measured drawings of colonial work in 'The Georgian Period,' the architect began to see colonial without his spectacles, and new vision of the style was the result.

"Prior to 1900 there was but one outstanding example of the 'colonial' country house executed in modern times —the Breese house at Southampton, by McKim, Mead and White, but since that time what a number there have been, and by how considerable a number of architects!"

After mentioning a few of these architects he says that they "have all been doing country houses which may be roughly classed as 'colonial,' and which, given a proper setting and age, would have the same quality which endears to us the true colonial, in addition to an architectural interest not commonly found in real colonial work. This is true of almost literal transcriptions of old work, as well as of houses in which the detail is strongly Italian, and in which the proportions of the window openings and the mass are quite distinctly Georgian, for our architects have been quick to borrow from other architectural tongues to enrich the meagre vocabulary of our native art. In some cases the translation has been very free; kinship between the work of Samuel McIntyre and that of the Adams is close, although the American architect and woodworker had by no means the knowledge of precedent and the fertility of invention of the English brothers. Therefore, in enlarging the scope of colonial work by the motifs generally known as 'Adam' the difference is hardly perceived, and its effect upon the delicate and refined architecture of the late colonial period has been rather an enlargement of its scope than a change in its character. This refers, of course, especially to the modern work derived from the graceful and attenuated late New England style; the burlier style of the southern states is more easily influenced by the English Georgian or by the neo-classic Italian.

"Naturally enough, many of our architects have turned directly to the English Georgian for precedent instead of passing through the transitional stages between colonial and Georgian and, on the whole, a remarkable fidelity to the spirit of the best Georgian traditions has been preserved. Delano and Aldrich, Charles Platt and John Russell Pope of New York, Hugh Garden and Howard Shaw in Chicago, have worked with remarkable success in the Georgian school, very frequently combining pure Georgian motifs with the cognate Italian, and of the recent American work much of the most genuinely successful has been derived. English methods of life and conditions of climate very much resemble our own, so that it is unnecessary to twist or distort the historic motifs to new forms, and since the historic style was of straightforward, constructive character and of materials available to us, our Georgian work has been entirely successful.

"The same cannot be said of American work following the English cottage precedent or, as it is often called, the 'Elizabethan.' Of the many houses of this type that have attracted great attention upon their first publication few have been the source of continuous pleasure as have those of the classic tradition."

## Book Review

*German Arts and Crafts.*

The New work in the arts and crafts of Germany and Austria is abundantly illustrated in the sumptuous volume just edited by Alexander Koch, of Darmstadt. It is a book of three hundred pages, with hundreds of excellent illustrations of every description of *Das Neue Kuns handwerk.* Very many of these illustr tions reveal an original style, while som of them still reflect the cold light whic fell upon the emptiness of *l'art nouvea* and rendered that movement, in German in particular, so unpleasant. The new style, however, is quite a different matte and some very startling things in interi decoration and furnishing are to be note and great strides have been made i metal-work, jewellery, and ceramic In this last there is an amusing grote querie which we lack in England, an yet the exquisite puppets and dol exhibited show a solemnity which almost as amusing, and is even mo entertaining.

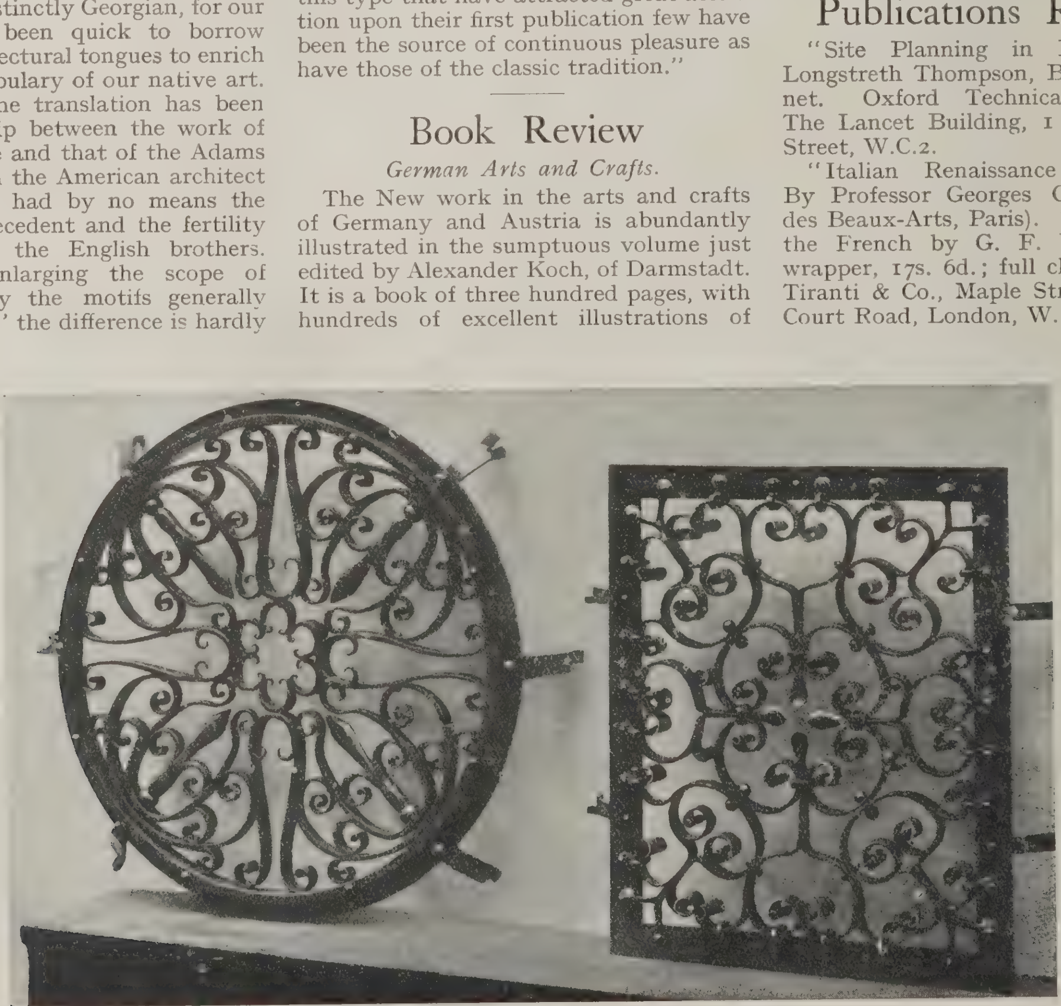
Fabric design has progressed, and s has iron-work, and in mosaic and staine glass the most startling things are to b seen, due largely to the example in desig set by Max Bechstein, that very origin painter whose Bible subjects are mo unconventional, and he is followed close by Richard Seewald. In bookbindin there is no approach to the richness of th traditional styles, although the gener taste is plain and good. Embroidery an lace are certainly good, and glass show a restraint in design wholly admirabl Many of the works illustrated were show at the Industrial Exhibition held Munich last year, and this fine volum forms a sumptuous souvenir of th important and interesting event. K. P.

Review of *Das Neue Kunsthandwerk in Deutschla und Oesterreich.* Folio, 300 pages, illustrated. Verla austalt Alexander Koch, Darmstadt. £2 2s.

## Publications Received

"Site Planning in Practice." B Longstreth Thompson, B.Sc. Price 16 net. Oxford Technical Publication The Lancet Building, 1 and 2 Bedfo Street, W.C.2.

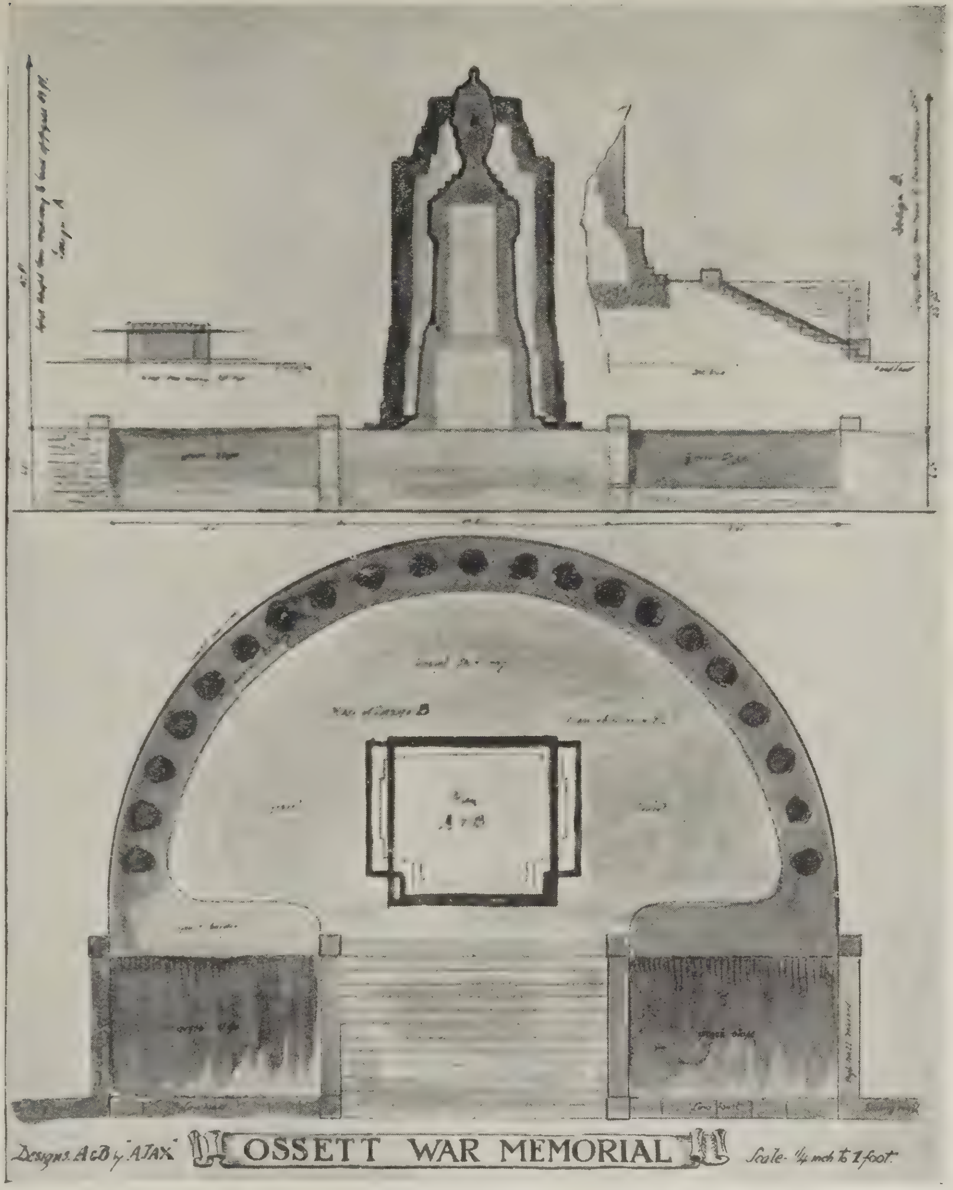
"Italian Renaissance Architecture By Professor Georges Gromort (Ecol des Beaux-Arts, Paris). Translated fro the French by G. F. Waters. Pap wrapper, 17s. 6d.; full cloth, 20s. Jo Tiranti & Co., Maple Street, Tottenha Court Road, London, W.1.



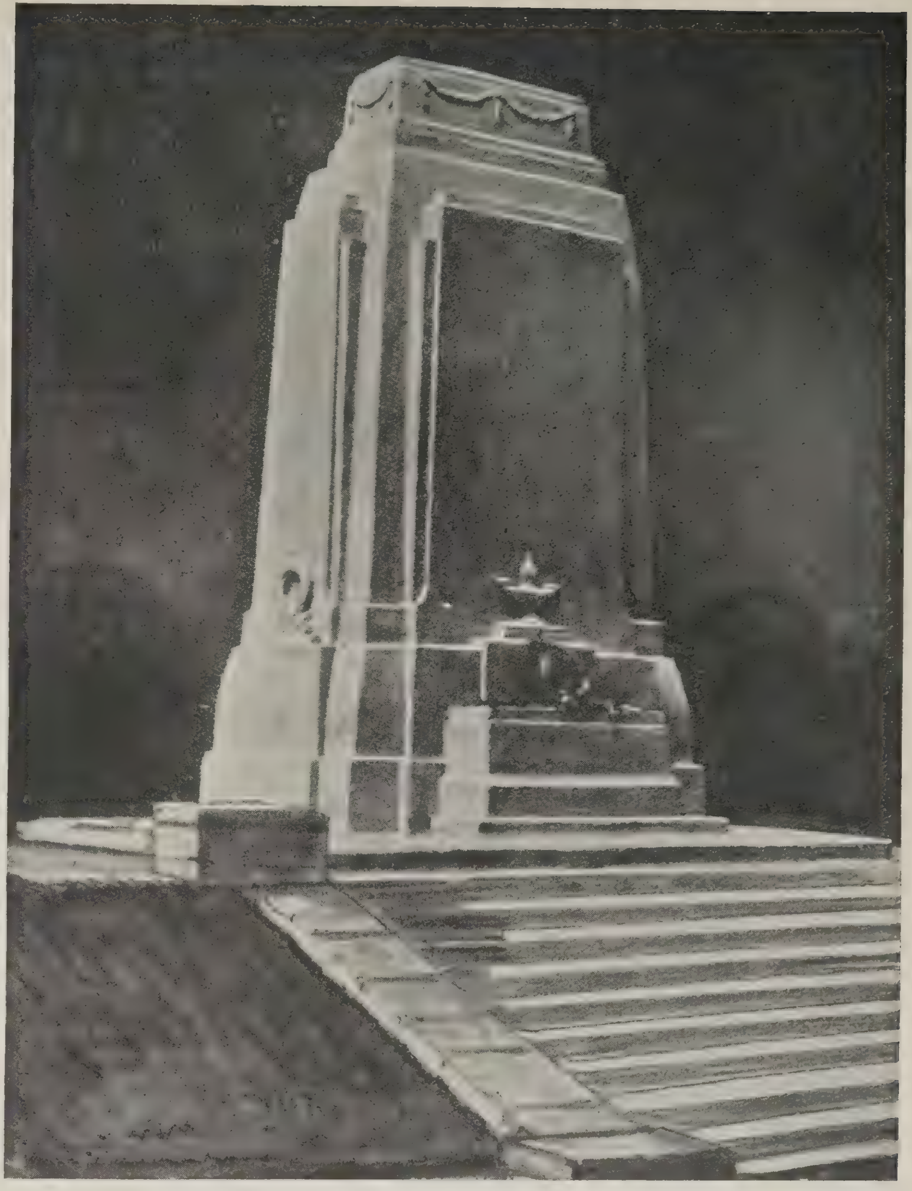
WROUGHT-IRON VENTILATION GRILLES BY PROFESSOR PETERSON, FROM THE TOWN HALL, POSEN

*(Reproduced by permission of Alexander Koch, Darmstadt.)*

## F. W. Doyle Jones, Architect



Designs A. and B.



First Premiated Design (B).

The first premiated design takes the form of a cenotaph surmounted by a sarcophagus. On the lower front is an altar for tributes, over which is carved a Lamp of Patriotism, and at the sides of the monument are carved wreaths. The side of the monument is about 6 ft. above the roadway, and faces a new road about 60 ft. wide. To make an approach to the memorial, the existing wall is cut into a flight of steps flanked by grass slopes terminated by the existing wall being returned. The height of the cenotaph from site level is 25 ft., and the total height from roadway 31 ft.

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# Timber Measuring.—I

By Professor HENRY ADAMS, F.S.Arc., Etc.

IRST of all, the question arises: What is timber? Every tree of substantial size is not necessarily ber. The Master of the Rolls (Sir rge Jessel) laid down the law, in the of Honywood *v.* Honywood (L. Rep. Eq. Cas. 309) as follows:—

By the general law of England, *ash* and *elm* are timber, provided are of the age of twenty years and ards; provided also they are not so as not to have a reasonable quantity iseable wood in them, sufficient, acling to a text writer, to make a good . Timber, that is, the kind of tree ch may be called timber, may be ed by local custom. There is what is ed the custom of the country, that is, particular county or division of a nty, and it varies in two ways. First ll you may have trees called timber the custom of the county—beech in e counties, hornbeam in others, and whitethorn and blackthorn and y other trees are considered timber eculiar localities—in addition to the nary timber trees. Then again in ain localities, arising probably from nature of the soil, trees of even nty years old are not necessarily ber, but may go to twenty-four years, ven to a later period, I suppose, if ssary; and in other places the test hen a tree becomes timber is not its but its girth."

here are five different modes of surement of timber known or practl in the timber trade, viz.:

uarter-girth.—Is that most used; it sists in measuring by a strap the rter-girth of the tree, usually at a ht of 6 ft., and measuring the length the ground to where it girts 26 in. content is then given by tables.

ring measure.—Is very similar, but a sion of 113 is used instead of 144.

rue content.—Is the mathematically bulk, calculated by formula for tum of cone or otherwise.

ie-square.—Is the bulk that would be after squaring up the tree to sharp arrisses, or the contents of the inscribed prism.

Calliper, or Custom House, measure.—Is used at H.M. Dockyards. Calliper the diameter in inches, square this, multiply by length in feet and divide by 183 to obtain cubic contents. A pane, or portion cut off on each of the four opposite sides equal in width to quarter of diameter, makes the log roughly squared, and is assumed to be a full square of that size.

These five modes applied to a tree 24 in. diameter and 20 ft. long would give—by quarter-girt, 50 ft. cube; by string measure, 64 ft. cube; by true content, 62 ft. cube; by die-square, 40 ft. cube; by calliper measure, 63 ft. cube, and the comparative prices to give the same total would therefore be in the inverse ratio to the quantities. For example, if the die-square timber be taken as the real value, and this be reckoned at 2s. per ft. cube, then corresponding prices for the other modes of measurement to give the same value for the tree would be $2 \times \frac{40}{50} = 1{\cdot}6$ = say 1s. 7¼d. for quarter-girt measure; $2 \times \frac{40}{64} = {\cdot}125$ = say 1s. 3d. for string measure; $2 \times \frac{40}{62} = 1{\cdot}29$ = say 1s. 3½d. for true content measure; $2 \times \frac{40}{63}$ = 1s. 3d. for calliper measure.

When a statement says " Prices are per cubic foot quarter-girth Hoppus measure tape over bark, with the customary allowance for bark," reference is made to the tables published by Hoppus, about a century ago, to save calculation; but Haworth's " Practical Timber Measurer " (Haworth & Co., 84, Leadenhall Street, London, E.C.3) will be found more useful. The same firm publish " British Timber Valuation Books," which will be found very useful.

There are various rules for the allowance for bark:—

1.—In oak, if old, allow $\frac{1}{10}$ of circumference; if young, $\frac{1}{12}$; elm, allow $\frac{1}{15}$; beech and ash, allow $\frac{1}{20}$.

2.—In all young timber allow ½ in. in quarter-girt, and full-grown timber, 1 in.

3.—In London it is customary to measure timber over the bark, and make an allowance of 10 per cent.

4.—Mr. Watney (P.P.Surv.Inst.) allows 1 in. per ft. girt for all sizes.

5.—Half-inch to 1½ in. per ft. of quarter-girt, according to roughness and irregularities.

6.—Under the Government Order as to home-grown timber, 1917, the allowance for bark was scheduled for different trees at from 7½ to 15 per cent. of the measured volume.

The actual measurement of growing timber is, of course, somewhat rough. A common method for small timber is to take the height to where it girths 26 in., then to take as the mean the quarter-girth halfway to the ground, allowing 1 in. per ft. girth for the bark, and multiply by the height from ground to the 26 in. girth. Usually the quarter-girth is taken at 6 ft. from the ground for the mean of the first 12 ft. and the remainder estimated by the eye; but the buyer may take the girth anywhere between the butt and the middle of the tree. In the county of Kent, in valuing standing timber for sale, it is the custom only to measure the spire of the tree, and in many other counties the spire and one limb, so that the purchaser gets all the other limbs or branches thrown in. In other districts all branches over 6 in. quarter-girt are supposed to be measured, but it is rarely if ever done. The practical rule for contents is $(\text{quarter-girth inches})^2 \times \text{length in feet} \div 144 = \text{cub. ft.}$, but tables such as Hoppus's or Haworth's may be used. Allowance is made for the " fall," or natural taper of the tree, by a deduction from the quarter-girt, say, 1½ in. for tall, regular trees.

The quarter-girth is supposed to be equal to the side of a square log of equal bulk, but it is really only a log of equal perimeter, which is a different thing. For instance, a cylindrical log 12 in. diameter has a circumference of 37·7 in., so that quarter-girt will be just under 9½ in., and 9½ × 9½ gives 90¼ area in sq. in. But 12 in. diam. = 113·1 sq. in., so that the area (and therefore the contents per ft. run) is underestimated by about 23 per cent., and the difference is greater when a tapering log is taken.

The tools of a timber measurer are:—

The razing knife, or scribe, used for marking the trees after they have been measured. (See Fig. 1.)

The needle (Fig. 2), used to push or pull the string under felled timber to obtain the girt when it is lying close to the ground.

The strap, or girt-strap (Fig. 3), for girting standing timber. It is a leather strap about 12 or 15 ft. long and ½ in. to ¾ in. wide, having at one end a loop for the hand and at the other a weight; but a seasoned gig rein is often used for the purpose. Standing close to the tree, the operator throws the weight round and catches it. The strap is divided in spaces of 4 in., which are marked ¼, ½, ¾, 1, etc.

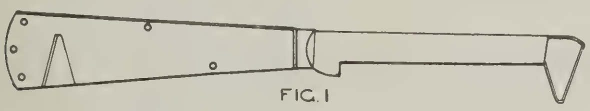


FIG. 1

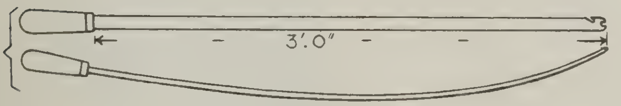


FIG. 2

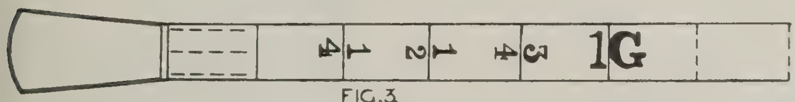


FIG. 3

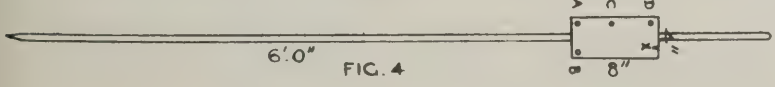


FIG. 4

each inch being reckoned only a quarter, thus showing at a glance the quarter girth of a tree. The strap is sometimes marked on one side in white paint for peeled timber, and on the other side black for timber with the bark on.

The staff (Fig. 4).—This is an instrument to find the height of a tree. It is a square-sided staff, 6 ft. in length, divided into feet for the purpose of taking distances. Upon this staff is fixed at a convenient height an oblong piece of wood, whose length must be exactly twice its breadth. At the corners A and B are fixed nails, or brass pins, projecting from the board. At C and D are two more, making AB equal to AC and CD. At *x* an eyelet is fixed to admit of the suspension of a plummet. The staff is pointed and shod with iron, for fixing in the ground. To use the instrument, keep the deal face edgeways, so that the points ACD are towards the tree and the point B towards the observer. Then fix the staff in the ground at such a place that, by looking across BC, you can see the top of the tree at the part where the quarter-girt will not be less than 6 in., the height of the tree will then be equal to the distance of the staff from the tree plus the height from the ground to the measurer's eye.

The pole, usually 14 ft. long, is marked in feet and half-feet from 6 ft. upwards. Sometimes a 20-ft. pole is used, or jointed bamboos. Then there are, in addition, the marking axe, brush and paint.

(*To be continued.*)

## Architects' Benevolent Society : Annual Meeting

Mr. Paul Waterhouse, P.R.I.B.A., presided over the annual general meeting of the Architects' Benevolent Society, held at the R.I.B.A. The seventy-third annual report of the Council, which was read by Sir Charles Nicholson, stated that seventy-seven cases had been helped during the year, and the sum of £1,705 4s. had been spent in relief, £1,320 14s. in grants, and £384 10s. in pensions. The augmented subscription list due to the appeal made in 1921 had been maintained, the sum of £1,119 14s. having been received in subscriptions. In addition £750 7s. 9d. had been received in donations and legacies. Notwithstanding the increase in subscriptions the Council feel that the number of subscribers is still disproportionately small compared with the number of practising architects, and that it is necessary, if deserving applicants are to be assisted adequately, to increase the Society's income. With this end in view the Council have developed a scheme of professional insurance by which the Society receives commission on life and other insurances effected through it by members of the profession. (This scheme, which, it is hoped, will in time add greatly to the funds of the Society, was described in a recent issue of the Journal.) There has been a generous response to the appeal for donations and subscriptions, and over a hundred inquiries were received with regard to insurance, many of which have since matured. To fill the position rendered vacant last year by the death of Mr. Ernest Newton, the Council report that Sir Reginald Blomfield has consented to become one of the trustees of the Society.

Mr. Paul Waterhouse, in moving the adoption of the annual report, said: One of the pleasantest of the duties which goes with the President's office is that of being allowed to act, perhaps on very false pretences, as chairman of our admirable Benevolent Society. My claims to be in any sense the head of its activities are certainly false, inasmuch as the hard work of the Society is all done by those whom I have on both sides of me here, but I should be unwilling to admit that I was a defaulter in respect of good wishes or goodwill.

My experiences in the now expiring year of presidency have taught me more than I knew before of the value of uniting in such a work as this. I am not thinking merely of the obvious worthiness of a confederation in which the better-off architects are banded together to help those whose declining years or helpless dependants are stricken with need. I am referring rather to a special happiness which comes from the mere fact of association in the common object at which our Society aims. It is a happiness bred of combined and mutual effort which we architects find also in other spheres, and perhaps notably in our various associations for the promotion of architectural education.

In the report itself the first item that will be noted by you with satisfaction is the fact that the hoped-for maintenance of the standard of annual subscriptions has been achieved, and the second point which will attract attention is the successful launching of the new insurance scheme. Its initiation has certainly been smiled upon, and the policies already effected (totalling, I understand, some six thousand pounds) have already indicated the prospect of a useful addition to the Society's annual revenue. The scheme promises, and can perform, most useful service. It secures for the Society half the agency commission on all insurances effected, it secures for the insured a like advantage, and, further—perhaps a more valuable gift—secures him the opportunity of forgoing this bonus in favour of the Society. Moreover, it encourages the thrift of which life-insurance is an index. I wish it all success, and I utter the only necessary warning, a warning lest our friends, thinking that by this new scheme the Society has discovered a gold mine, should relax any of their wonted energies on our behalf. I think it was due to Mr. Maurice Webb that the idea was put before us, and I am sure that we owe him our thanks.

In conclusion, gentlemen, our motto is the one word "effort." There are still tracts of architectural humanity undiscovered by our searchers or unresponsive to our call. Let us not rest till all architects who pay their way also pay, in however modest a degree, their tribute into our coffers.

Sir Charles Ruthen then proposed, and the meeting resolved upon the election of the Council as follows for the ensuing year: President—The President of the R.I.B.A. Ordinary members: Messrs. Dondy Watney, Henry Lovegrove, A. E. Kingwell (co-opted in place of Mr. Collcutt who expressed a wish to retire), Lewis Solomon, Percy B. Tubbs, Arthur Sykes, William Grellier, Osborn O. Hills, G. Hubbard, L. S. Sullivan, A. Saxon Snell, H. L. Anderson, R. Dircks, E. J. Partridge (representing the Society of Architects), and W. G. Newton (repr senting the Architectural Association).

Mr. W. Hilton Nash, in replying to vote of thanks, proposed by Mr. L. Sullivan, and seconded by Mr. E. Partridge, said that a circular was se out to all members of the R.I.B.A., tl Society of Architects, and the A.A., c February 21 announcing the propose scheme of insurance. Up to date 1; inquiries had been received. Thirtee policies had been effected of the tot amount of £6,486. The approxima result to the fund was £31 6s., and it w hoped that that figure would be increase during the year. In addition, one men ber who did not require insurance ha donated £300 in 3½ per cent. Conversic Loan to the capital of the Society. If tl interest of this sum was added to tl insurance scheme income, a sum nearly £50 would have been receive during the first three months of the worl ing of the scheme. The letter had al produced additional donations amounti to £214 12s. 6d.

## Architects' Approved Society : Annual Meetin

The annual general meeting of tl Architects' and Surveyors' Approve Society was held at the Surveyors' Inst tution under the chairmanship of M F. R. Yerbury. The first business of tl meeting was to pass a vote of condolen to the family of the late Mr. Geor Corderoy, who was one of the founders the Society, and Chairman for mar years.

The report of the Committee Management for 1922 was then submitte and approved. In this report it w stated the following benefits were ma by the Society during 1922: Sickne benefit, £144 5s. 9d.; disablement benef £81 13s. 6d.; maternity benefit, £3 subscriptions to hospitals, £27 2s.; dent benefits, £31 3s. 11d.; optical benefit £4 4s. 3d.; surgical appliances, 10s. 6 A donation of £25 was made to tl Hospital Saturday Fund. The Society invested funds now amount to upwar of £8,709 17s. 2d.

The following Committee was elected:- Committee: Members of Profession Assistants' Union—Messrs. W. H. Hamly A.R.I.B.A.; G. N. Hannam, P.A.S.I J. A. Gould; R. G. Strachan, F.S.I Chas. McLachlan, A.R.I.B.A.; J. Rhind, A.R.I.B.A.; H. D. Funnell, F.S.I L. E. Wheble; A. Benson; W. I. Wa horne, F.R.I.B.A.; S. V. Thompso S. R. Day; F. E. Hughes; J. O. Hughe M.S.A., A.M.I.S.E.; H. Worley; C. Cornelius. Messrs. Ian McAlister, M. (Oxon), Secretary, R.I.B.A.; Herbe Shepherd, A.R.I.B.A., representative R.I.B.A.; A. Goddard, C.B.E., Secretar Surveyors' Institution; representative Surveyors' Institution (not yet elected F. R. Yerbury, Secretary, Architectur Association; L. S. Sullivan, A.R.I.B.A representative of Architectural Associatio C. McArthur Butler, F.C.I.S., Secretar Society of Architects; E. J. Partridg F.S.I., representative of Society of Arch tects. Treasurer, Mr. H. D. Searles-Woo F.R.I.B.A.; General Secretary, Mr. Jo Mitchell; Administration Secretary, Mi S. Double, F.F.I. Mr. F. R. Yerbury w unanimously elected as Chairman Committee.

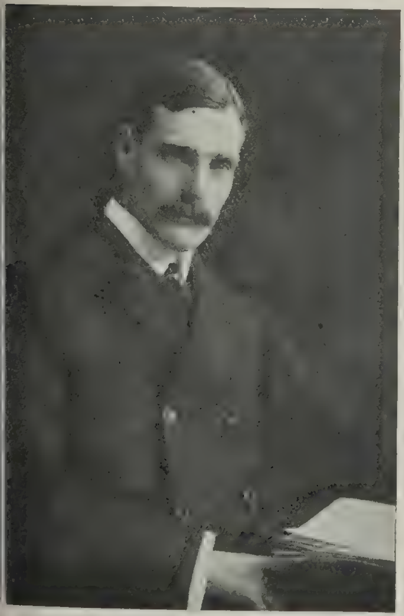
## ıe Late Maurice Drake

r. H. Wilson Holman, Furlong, Top- n, in a letter to "The Times," writes: last piece of work Maurice Drake ɔse death was announced in THE HITECTS' JOURNAL for May 16) did a stained-glass window, full of sym- sm, and dealing with the old handi- ts of the town of Topsham, near ter. The following verse, his own position, which appears with three ɛr verses in the window, seemed nticipate his impending death.

hing is here abiding, naught can
and;
dwellings but a house upon ye sand.
re's death amongst ye roses: even soe,
'tis from bones the fairest flowers
ow,
when death lays our weary bodies
ve,
soul sets sail and seeks Eternity.

## ıe Late Mr. J. T. Osler

r. J. T. Osler, of Hampstead, whose h at the age of forty-nine was ɔunced in a recent issue, was the st son of the late Alfred Clarkson r, of Edgbaston, Birmingham. He a business man of the highest type. y entering and in time becoming a ner in the firm, now known as srs. F. and C. Osler, Ltd., which was ded by his great-grandfather in 1807, as his care and pleasure to maintain tradition of human sentiment, mutual ect and goodwill which was an ritance in the business. This element never forgotten in the merely com- ial, and with him the relation of loyer and employed became a fellow- which the latter fully realized and ed. Among his public offices was of treasurer of the Pottery and Glass les Benevolent Association; he was vice-president of the London Associa- for the Protection of Trade. His grandfather having founded a fund irmingham for the purchase of pic- s for the Art Gallery, Mr. Osler in succeeded to the joint posts of tary and treasurer. He was also a member of the Executive of the League of Nations Union, a member of the Alpine Club, and of the Chapel Committee at Rosslyn Hill, Hampstead. It may be safely said that the standard of design of modern electrical fittings was greatly raised by his influence. He leaves a wife and three children.



THE LATE MR. J. T OSLER

## Law Reports

### Light and Air Case in Kensington Square

*Harris* v. *Barker.*

May 7. Chancery Division.
Before Mr. Justice Romer.

This was an application made to Mr. Justice Romer by the plaintiff, the owner and occupier of No. 37 Kensington Square, for an injunction, pending the trial of the above action, to restrain the defendants, Messrs. John Barker & Co., from so raising the existing party fence wall between Nos. 37 and 38 Kensington Square as to injure the lighting of his back windows and the access of sunlight and air to his garden.

Mr. Hughes, K.C., for the plaintiff, did not, for the purpose of the motion, press the claim to sunlight and air to the garden nor the claims in respect of several windows mentioned in the affidavits, a number of which had been filed on both sides.

His Lordship, in giving judgment, stated that the recent newspaper agitation as to how far Messrs. Barker should be allowed to invade Kensington Square was a matter which did not affect the present action. This, on the motion then before the court, was almost entirely confined to the light coming through two windows on the ground and first floor and lighting two small rooms on those floors, one of which rooms was an old "powder closet." Both rooms were provided with other windows, and it was admitted that they would remain well lit. But the plaintiff contended that light from the windows complained of passed through openings in the back walls of those rooms to two sitting-rooms to the rear, which were so badly lit that they could not afford to lose anything.

These windows are not in one sense ancient lights. Only at a comparatively recent date, namely in 1918, did they become windows at all. Before that time these two little rooms each communicated by an opening with a small building, which on the first floor was a greenhouse, and on the ground floor was a very small room lighted by a window. For the purpose of this case I must treat the plaintiff as being entitled to the same access of light that used to come through the portion of the openings which are now used as the windows in question.

It is not easy on the present materials to come to any very definite conclusion, but the plaintiff has far from satisfied me that the erection of the defendants' wall will have any appreciable effect on the lighting of the back sitting-rooms, which are not only lighted by the borrowed light, but also by windows overlooking the plaintiff's garden.

Mr. Waldram, a very well known expert in these matters, has made a report which is verified by an affidavit in which he says that the back sitting-rooms have a large adequacy of light except in so far as their original lighting has been spoilt by the plaintiff's own building operations in 1919. The evidence in opposition consists of a very general statement by the plaintiff's surveyor which does not assist me very much. Such general statements are not of great assistance in matters of this kind, and I don't think I can attach very great importance to that statement in view of the very definite statement made by Mr. Waldram, who says that he has carefully examined the light in the various rooms.

Having regard to the evidence of Mr. Waldram, which on this point is not challenged, that the plaintiff has himself diminished the light coming through the windows of the back sitting-rooms, I am not prepared to say that the plaintiff has discharged the onus which lies on him of satisfying me that the defendants' operations will result in such a diminution of light to these back rooms as will constitute an actionable nuisance, and I must therefore refuse the motion.

## Parliamentary Notes

[BY OUR SPECIAL REPRESENTATIVE.]

### *Fixed Baths in Subsidized Houses.*

Further amendments made in the Government's Housing Bill include a provision that except where otherwise approved by the Minister of Health, on the recommendation of the local authority every subsidized house shall be provided with a fixed bath.

### *Housing Progress.*

Mr. N. Chamberlain informed Captain W. Benn that 33,267 houses had been completed under the Housing, Town Planning, etc., Act, 1919, by local authorities and public utility societies by June 30, 1921; and 77,526 houses by December 31, 1921.

### *Building Operatives and Housing.*

The following table shows the number of men employed on the building of houses in schemes of local authorities and public utility societies in 1922:—

| —— | Jan. 1. | Feb. 1. | Mar. 1. | April 1. | May 1. | June 1. |
|---|---|---|---|---|---|---|
| Carpenters .. .. | 20,421 | 18,286 | 16,575 | 15,951 | 14,649 | 13,513 |
| Bricklayers and Masons .. | 18,854 | 15,272 | 14,099 | 13,587 | 12,488 | 11,093 |
| Slaters and Tilers .. .. | 1,988 | 1,670 | 1,499 | 1,395 | 1,218 | 1,115 |
| Plasterers .. .. .. | 9,706 | 8,990 | 8,804 | 8,367 | 7,737 | 6,965 |
| Painters and Glaziers .. | 7,638 | 6,793 | 6,716 | 6,699 | 6,314 | 6,150 |
| Plumbers .. .. .. | 5,510 | 5,033 | 4,899 | 4,584 | 4,315 | 3,951 |

# The Week's News

### *Blaydon House Shortage.*

2,500 houses are required in the Blaydon Urban District.

### *More Cottages for Atherstone.*

Colonel P. Fletcher has given £2,000 to the Atherstone District Council for building cottages.

### *Open Market for Brighton.*

Brighton Corporation have under consideration a £11,000 scheme for the provision of an open market.

### *Private Housing at Nuneaton.*

In the near future private enterprise will provide some hundreds of new houses in different parts of Nuneaton.

### *Paving Works at Westminster.*

Paving works are to be carried out by the Westminster City Council at an estimated cost of £59,485.

### *West Riding House Shortage.*

It is estimated that 45,000 houses are urgently needed in the West Riding of Yorkshire.

### *A Brick Manufacturer's Estate.*

Mr. Benjamin Pollard Blockley, of Wellington, Salop, brick and tile manufacturer, left £49,455.

### *The Institute of Metals.*

The annual meeting of the Institute of Metals will be held at Manchester from September 10 to 13.

### *New Operating Theatre for Romford.*

The Board of Guardians have decided to apply for sanction to borrow £1,970 for erecting a new operating theatre at the hospital.

### *New Drill Hall for Barnstaple.*

A new territorial drill hall has been erected at Barnstaple from the designs of Messrs. Ellis Son & Bowden, of Exeter, architects.

### *Housing at Manchester.*

The Manchester City Council have decided to erect 690 houses on the Wilbraham and Newton Heath estates at an estimated cost of £347,000.

### *Housing at Sunderland.*

The Sunderland Co-operative Society are to erect 276 houses of the semi-detached and bungalow type at Roker and Fulwell.

### *Ludgate Hill Station.*

Negotiations are proceeding for the execution of the pre-war scheme to build shops and offices in the present entrance to Ludgate Hill station.

### *Public Baths for Arnold.*

The Arnold Urban District Council invite designs for public baths from local architects. For the winning design an honorarium of £15 15s. is being offered.

### *An Assisted Housing Purchase System.*

The Housing and Town Improvements Committee of the Glasgow Corporation have approved the preparation of a scheme for the erection of dwelling-houses at Kelvindale which might be purchased by citizens with assistance from the Corporation. It is proposed to erect 220 houses of 3, 4, and 5 apartments, and that each of these should be disposed of by the Corporation for a cash payment of £100 and half-yearly instalments representing redemption of cost and interest.

### *A New London Store Building.*

The old block of premises at the corner of Goodge Street and Tottenham Court Road is about to be rebuilt for Catesbys store.

### *Housing at Middlesbrough.*

The Middlesbrough Housing Committee are applying for permission to proceed with the erection of 180 houses to complete the Marton Grove scheme, estimated to cost £97,572.

### *New Institute near Doncaster.*

At an estimated cost of £6,000, a scheme has been adopted by the miners of Bebside for a new institute building, which will also house the local war memorial. About £3,000 has already been provided.

### *An Underground Piccadilly.*

The Westminster City Council, who have approved the plan to build subways beneath Piccadilly Circus, are now discussing with the electric railway authorities the possibility of constructing an underground Circus complete with shops.

### *The Condition of Dittisham Church.*

The roof, arched ceilings, and the tower of the ancient church of St. George at Dittisham, near Plymouth, is in a serious condition. The history of the church dates back to 1050. A survey of the building has been made by Mr. Harbottle Reed, architect and diocesan surveyor.

### *New Garden City.*

The Virginia Water district of Surrey is to have a garden city, on the large Wentworth estate, which lies between the station and the lake in Windsor Great Park, one of the largest artificial sheets of water in England. The estate comprises several hundred acres, and already the roads are being laid out.

### *London's Largest Hotel.*

London's largest hotel, with 2,000 bedrooms, will be erected on the 2½-acre site at the corner of Tottenham Court Road and Oxford Street, if the negotiations of a group of business men who wish to purchase the site are successful. It is expected that the new building will cost over £700,000 to erect.

### *Hitchin Slum Clearance Scheme.*

The Hitchin Urban District Council have embarked upon an important scheme of slum clearance and re-housing in the Queen Street area. The whole scheme is estimated to cost £36,000, and the Council are asking the Government to sanction the borrowing of the money at 4¾ per cent. for a period of sixty years.

### *New Super-Cinema for Fleetwood.*

Fleetwood is shortly to have yet another cinema theatre, which will be one of the finest in the North of England. The proposed new building is to be situate on a site between the Ship Inn and the Crown Hotel, Warren Street, one of the best sites in t
district. The architect is Mr. Halste
Best, Church Street, Blackpool.

### *New American Residential Club.*

A residential club, thirty-five stor
high, is now in course of erection in N
York. There are to be 1,200 bedroon
dining-rooms, private roof gardens,
swimming pool, complete Turkish ba
equipment, and bowling alleys. On t
thirtieth floor will be an infirmary, a
on the floor above, squash courts and
gymnasium.

### *The late Mr. R. W. Collier.*

We regret to announce the death,
the age of sixty-eight, of Mr. Rob
William Collier, F.R.I.B.A. For upwar
of thirty years Mr. Collier had offices
Lincoln's Inn Fields, where, as an exp
in domestic architecture, especially on
archæological side, his services we
much in request for the restoration
historic mansions, old family seats, a
ancient castles. He devoted mu
attention to the restoration of interi
and ornament as well as of the fabr
generally, and there are many exampl
of his knowledge, taste and skill throug
out the country.

### *Scavenging the Sky.*

It appears from what Sir Arth
Holbrook, M.P., said in the course of
lecture on the Smoke Nuisance, deliver
to the London Society, that in 1307
man was tried, condemned and execut
for burning coal in London. Accordi
to Sir Arthur, he got what he deserv
He pointed to the need for new a
effective legislation against smoke; t
present laws were easily evaded and h
become inoperative. If Essen a
Pittsburg and New York could ha
clean air, why could not London? T
public should insist on legislation—t
nature of which Sir Arthur outlined
show it need involve no hardship
industrial smoke-producers—and reali
in this country an ideal which had el
where been proved attainable.

### *Professional Practice.*

Mr. Reginald W. Lone, A.R.I.B.
P.A.S.I., M.R.San.I., of Fullers Aven
Woodford Green, Essex, architect a
surveyor, has secured offices at 63 L
coln's Inn Fields, W.C.2. In future
will carry on practice at this address,
well as at Woodford Green. Telepho
numbers: Holborn 783; Woodford
Mr. Lone will be pleased to recei
manufacturers' catalogues and samp
at the Lincoln's Inn address.

Mr. Sidney Simpson has commen
practice on his own account as a consulti
engineer in connection with the stea
heating, power, and lighting requireme
of the various West Riding industri
rural and urban districts, and estat
His offices are at 9 Market Street, Br
ford; Telegrams: "Therm, Bradford
Telephone No. 6705 Bradford. Manuf
facturers' catalogues will be appreciat
Mr. Simpson was formerly on the Yo
shire Electric Power Co.'s staff (19
1919), latterly as assistant to the engin
and manager, Mr. W. B. Woodhouse, a
has been (since 1919) associated w
Mr. J. E. Schofield, Bradford, and Mes
Mark Shaw and Sons, Ltd., Huddersfi

## The Crown Journal"

ere are many interesting literary other features in "The Crown nal"—the house journal of Messrs. s and Hill, Ltd. Among the most inent are a congratulatory message the Duke of York; Architects we are king For, 5, Messrs. Edwin T. and E. ley Hall; London Sketches, I—lebone; and Our Veterans, Mr. les B. Jenkin (general offices). Mr. in joined the firm in 1867 and is seventy-one years of age. There are a number of interesting articles deal-vith some of the work—for the Irish n Co., New Bond Street; Messrs. vey Nichols & Co., Knightsbridge; rs. Liberty & Co., Regent Street; Lock Hospital and Rescue Home, ow Road, and the St. John Institute, ing Hill—which is being carried by the firm. The journal is a most esting record of building, social, and r work. Our readers will remember Messrs. Higgs and Hill had the signal ur of nominating a boy to represent building industry at the Duke of 's wedding.

## sgow School of Architecture

e third and final exhibition and cism of the work carried out by the gow School of Architecture during session was held recently. Mr. T. P. wick, F.R.I.B.A., President of the rporation of Architects in Scotland, an address to the students and cized the designs.

e following designs were placed first heir respective years :—

rst year.—Design for a Pump Room, F. Wylie.

cond year.—Design for an Art Gal- Mr. G. Bartholomew.

ird year.—Design for a Monumental rcase, Mr. L. G. Farquhar.

urth year.—Design for a Royal hange, Mr. G. F. Shanks.

the conclusion of the criticism, the wing prizes, given as a result of the of the session 1921–2, were distri-d by Mrs. Lochhead :—

ploma: Mr. G. B. Scotland.

thur Leslie Hamilton Memorial Stu-ship and Medal: Mr. J. A. Coia.

stitute of Architects Prize (£3 3s.): G. F. Shanks.

stitute of Architects Prize (£2 2s.)—sured Drawings: Mr. W. M'Crea.

stitute of Architects Prize (£2 2s.)—ving: Mr. L. G. Farquhar.

inor Travelling Scholarship (£10): S. Lipson.

hool Gilt Medallion: Mr. J. A. Coia.

hool Silver Medallions: Mr. L. G. quhar, Mr. R. M. M'Naught and George G. Howard.

hool Bronze Medallions: Mr. E. A. ly, Mr. A. Lipp, Mr. D. L. Crawford Mr. R. Elder.

hitelaw Silver Medallion: Mr. W. rea.

hitelaw Bronze Medallion: Mr. John son.

onourable Mention: Mr. P. M'Neil, J. C. Scotland, Mr. A. G. Walker, W. Adam and Mr. A. Purves.

t the conclusion of the prize-giving, a of thanks was proposed to Mrs. Loch-l by Mr. John Watson, F.R.I.B.A.

## Sir Aston Webb

Sir Aston Webb was prevented from delivering his lecture on "The Development of London" at the Royal Institution last Friday by a strained knee. Sir Aston was waiting for a train at Victoria Underground Station on Wednesday, when a passenger in a hurry caught the back of his knee with a suit case. He was thrown to the ground, straining his knee badly. The injury is not serious.

## York and East Yorkshire Architectural Society

At the annual meeting of the York and East Yorkshire Architectural Society, Mr. Stephen Wilkinson, F.R.I.B.A., was elected president, and Messrs. J. M. Dossor and E. A. Munby, vice-presidents. The following members were chosen to serve on the council: Messrs. George Benson, A. B. Burleigh, C. H. Channon, S. R. Kirby, L. Kitchen, H. Monkman, C. W. C. Needham, S. Needham, A. Pollard, J. S. Syme, W. S. Walker, T. W. Whipp, R. Jackson, D. Harbron, C. Leckenby, and T. Snowdon.

Mr. J. E. Reid was re-elected hon. secretary, and Mr. E. A. Pollard as hon. treasurer. Messrs. S. G. Highmoor and A. Cowman consented to act as hon. auditors. The following resolution was passed: "That this Society approve of the Northern Architectural Association extending its area so as to include the County Boundary of Middlesbrough." It was resolved that members of this society who are members of the R.I.B.A. support the nominations of the committee known as the Emergency Committee at the R.I.B.A. Council election 1923–1924.

## Exhibition of Dutch Architecture at the A.A.

The Crown Prince of Sweden on Friday paid a visit to the Exhibition of Dutch Architecture now open at the Architectural Association. Mr. F. R. Yerbury, the Secretary, showed him round.

## Coming Events

*Wednesday, May 30.*

A.A.—"Danish Architecture." Election of Officers and Council for Session 1923-4.

*Thursday, May 31.*

A. & S.A.P. Union.—Visit to New Marylebone Town Hall, W.1. Meet outside 6.30 p.m.

British Museum.—Lecture on Greece: "The Corinthian Order." By Miss Claire Gaudet. 3.15 p.m.

*Friday, June 1.*

The Art Workers' Guild.—"Eighteenth-Century Glassware." 8 p.m.

## Competition News

*Proposed Pavilion Competition, Largs.*

Members of the Society of Architects are notified that the conditions of this competition are not in accordance with the regulations, and they are requested not to take part in the competition without first ascertaining from the secretary that the conditions have been approved by the Council.

*Birkenhead Art Gallery Competition.*

The President of the R.I.B.A. has nominated Sir Robert Lorimer, A.R.A., F.R.I.B.A., as assessor in the Birkenhead Art Gallery Competition.

*Burial Ground, Yeovil, and Pavilion at Largs.*

The R.I.B.A. have issued the following notice with regard to the competitions for the laying out of land as a burial ground at Yeovil, and a pavilion at Largs: "Members and Licentiates of the Royal Institute of British Architects must not take part in the above competitions because the conditions are not in accordance with the published Regulations of the Royal Institute for Architectural Competitions."

## List of Competitions Open

| Date of Delivery. | COMPETITION. |
|---|---|
| June 1 | New Municipal Buildings and Town Hall, Cork. Total cost not to exceed £120,000, Assessor Mr. Lucius O'Callaghan. F.R.I.A.I., A.R.H.A. The successful competitor will be appointed to carry out the work. Second and third premiums £200 and £100 respectively. Apply Mr. William Hegarty, Town Clerk, Cork. The competition is limited to architects living and practising in Ireland. |
| June 12 | Concert Pavilion, Bournemouth, to seat 2,000. Estimated cost £100,000. Assessor, Sir Edwin Cooper, F.R.I.B.A. Premiums: £300, £200, and £100. Apply Town Clerk, Municipal Offices, Bournemouth. Deposit £2 2s. (cheque). |
| June 30 | Bridge over Nygaardsstrommen in Bergen. Apply Department of Overseas Trade (Room 50), 35 Old Queen Street, Westminster, S.W. 1. |
| June 30 | National War Memorial at Melbourne to cost £250,000. Competition, in two stages, open to Australians, not necessarily residing in Australia, and British subjects resident in the Commonwealth. Preliminary designs to the Right Hon. the Lord Mayor of Melbourne, Chairman of the Executive Committee, Town Hall, Melbourne, Australia, by June 30. Apply Agent-General in London, Victoria House, Melbourne Place, Strand. Deposit £2 2s. |
| June 30 | Pavilion to serve as Public Hall at Largs. Premium £25. Apply Mr. Peter Morris, Town Clerk, Largs. |
| July 3 | Pavilion in Calverley Gardens, Tunbridge Wells. Assessor Mr. E. Guy Dawber, F.S.A., F.R.I.B.A. Premiums £150, £100, and £50. Apply Town Clerk. |
| Aug. 25 | Public Swimming Baths and Washhouses, East Greenwich. Assessor, Mr Henry V. Ashley, F.R.I.B.A. Premiums: £300, £200, £100. Apply Mr. Frederick J. Simpson, Town Clerk, Town Hall, Greenwich. |
| Sept. 30 | Designs for a series of plaquettes in bronze illustrative of London as the capital city of the Empire, or of one or more of her main architectural features. Designs should be submitted in the form of models in plaster. The following prizes are offered:—One prize of 100 guineas, two prizes of 50 guineas, three prizes of 25 guineas. The plaquettes, when finished, may be of any shape or size, not exceeding 3 in. square, that the artist may choose, and must show designs on one side only. The plaster models should be twice as large as the intended plaquette. No competitor may submit more than three models. Apply Deputy Master of the Royal Mint, London, E.C.1. |
| Nov. 5 | Art Gallery for Hull. Assessor, Mr. John W. Simpson, PP.R.I.B.A. Apply (with cheque for £2 2s.) to Mr. H. A. Learoyd, Town Clerk, Guildhall, Hull. |
| No date | Designs for lay-out of about three acres of land as burial ground at Yeovil. Premium £20. Apply Mr. H. C. Batten, Clerk to the Burial Committee, Yeovil. |

# R.I.B.A. Council Meeting

Appended are notes from the minutes of the last meeting of the Council of the R.I.B.A. :—

Academic Dress Committee.—The following members have been appointed to serve on the committee to consider the details of the proposed academic costume and to receive suggestions on the subject from members and Licentiates : Messrs. W. E. Riley, W. Gilbee Scott, and W. W. Scott-Moncrieff.

Public Museums and Picture Galleries. —It was decided to urge H.M. Board of Education and H.M. Office of Works, in the interests of the large number of workers whose employment renders visits and study by day impossible, to open the public museums and picture galleries under their control on certain evenings.

Architects' Fees for Speculative Housing Work.—A scale of fees for architects in connection with speculative housing work, drawn up by a conference of representatives of the R.I.B.A. Practice Standing Committee, and of the London House Builders' Association, and of the National Federation of House Builders, was approved.

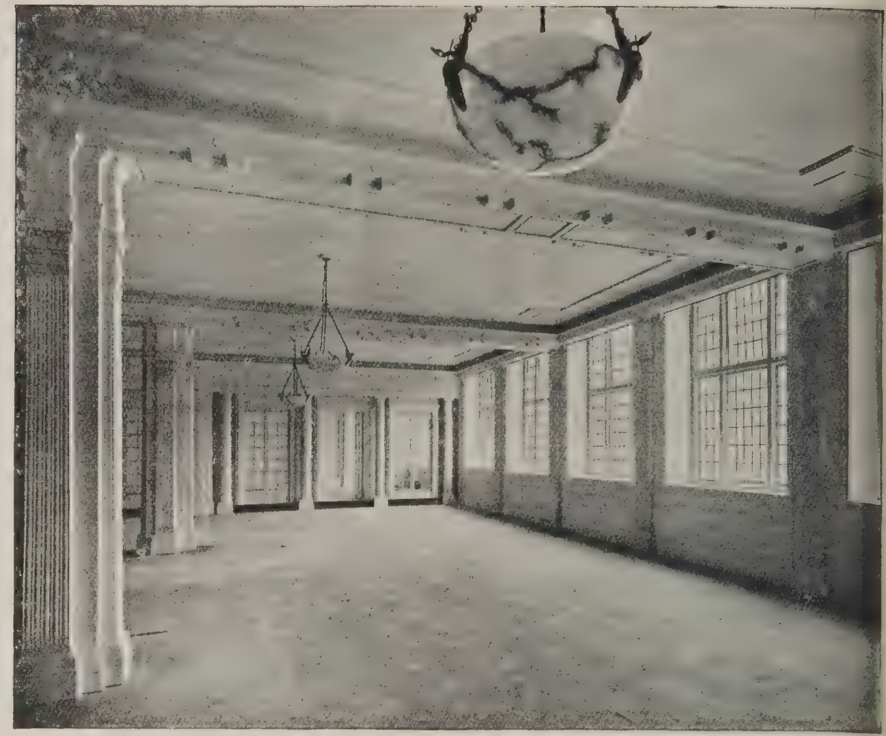
The General Council for the National Registration of Plumbers.—Mr. H. D. Searles-Wood and Mr. C. H. Heathcote were appointed to represent the R.I.B.A. at the meeting of the General Council for the National Registration of Plumbers to be held in Bournemouth on June 8 and 9.

The City Churches.—Mr. Paul Waterhouse, president, and Mr. Arthur Keen, hon. secretary of the R.I.B.A., have been appointed as additional delegates of the R.I.B.A. on the Royal Academy Conference on the City Churches.

Re-instatement.—Mr. F. W. Wade has been re-instated as an Associate, and Mr. William Evans as a Licentiate.

# The Architectural Association

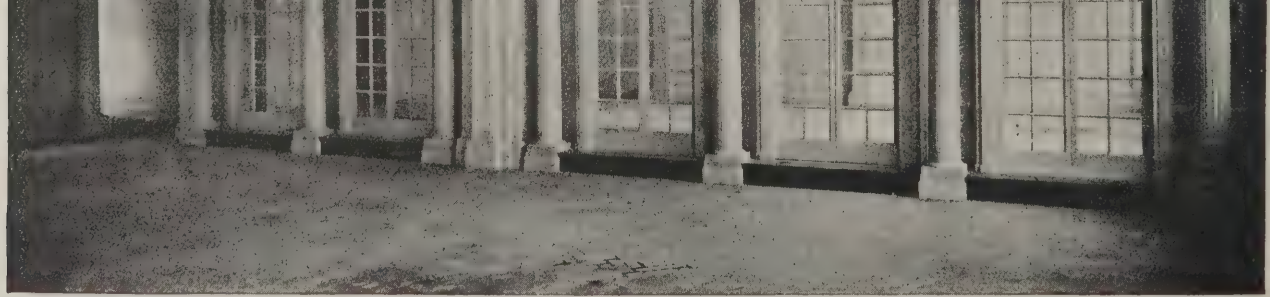
On June 30 a visit will be paid by the A.A. to Long Crendon Manor, Long Crendon, near Thame, where alterations and additions have been carried out by Mr. Philip Tilden. The annual excursion will be held during the early part of September, and will be to the Albi or Avignon District. Full particulars will be announced in due course. It will be of assistance if members interested in joining the excursion will send their names to Mr. F. R. Yerbury, the Secretary.



THE NEW MUSIC GALLERY AT MESSRS. OETZMANN'S, LONDON

# New Music Rooms at Messrs. Oetzmann's

Very considerable extensions have been made to the premises of Messrs. Oetzmann & Company, Ltd., of Tottenham Court Road, London, N.W.1. One of the most interesting floors is that for the pianos and gramophones, and the accompanying illustrations give some idea of the structural and decorative work, which has been carried out under the supervision of the architect, Mr. W. H White, F.R.I.B.A., and Mr. Theo. H White. The art of music requires i correct "atmosphere" in order that n disturbing element may be allowed t intrude, and the piano room, with i pillars and decorations of neo-Grecia character, and walls of antique ivor enamel, will ensure the perfect enviro ment. Behind the ornamental partitio screen in the view reproduced there i the gramophone showroom, and adjoinin the sound-proof audition room, where th latest and most exclusive records can b listened to in complete comfort. Th whole scheme of these showrooms ha been most carefully thought out in ever detail, and no point has been overlooke to make them what Messrs. Oetzman evidently intended them to be—the fines in London. The opening of the musi gallery was made a special occasion.



THE NEW MUSIC GALLERY AT MESSRS. OETZMANN'S
W H. WHITE, F.R.I.B.A., ARCHITECT

esday, June 6, 1923.
Vol. LVII. No. 14

# THE ARCHITECTS' JOURNAL & Architectural Engineer

*With which is incorporated "The Builders' Journal."*

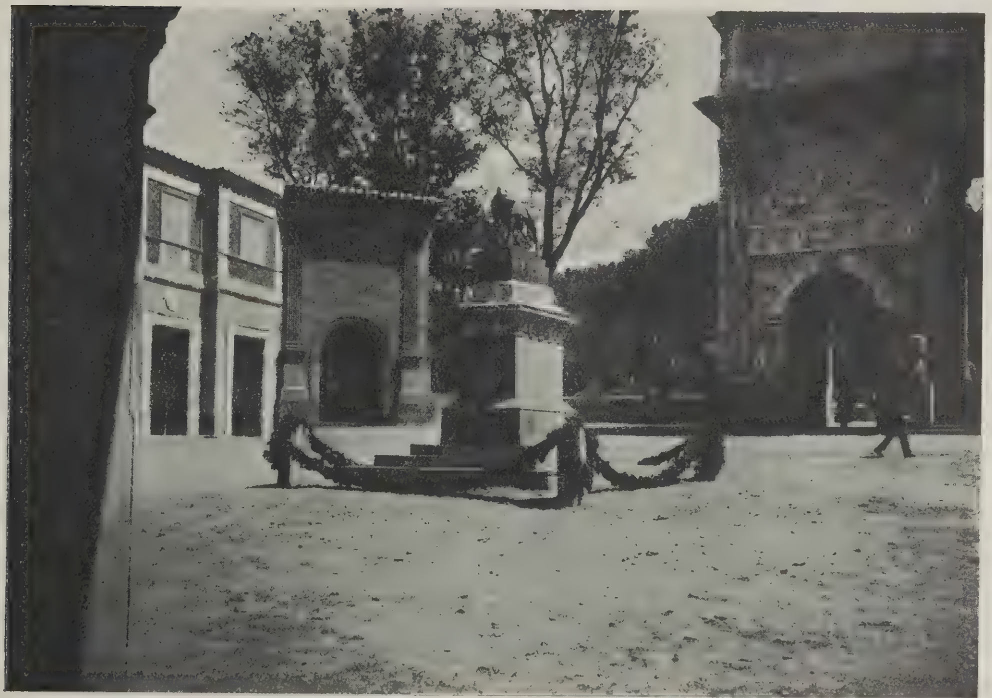


*Photo: S. R. Pierce.*

"PRIMA MOSTRA ROMANA": THE ENTRANCE PIAZZA, WITH THE CAPITOLINE WOLF AND SOME SHOPS.

*(See article on page 953.)*

27-29 Tothill Street, Westminster, S.W.1.

# "Prima Mostra Romana": The Entrance to the Exhibition

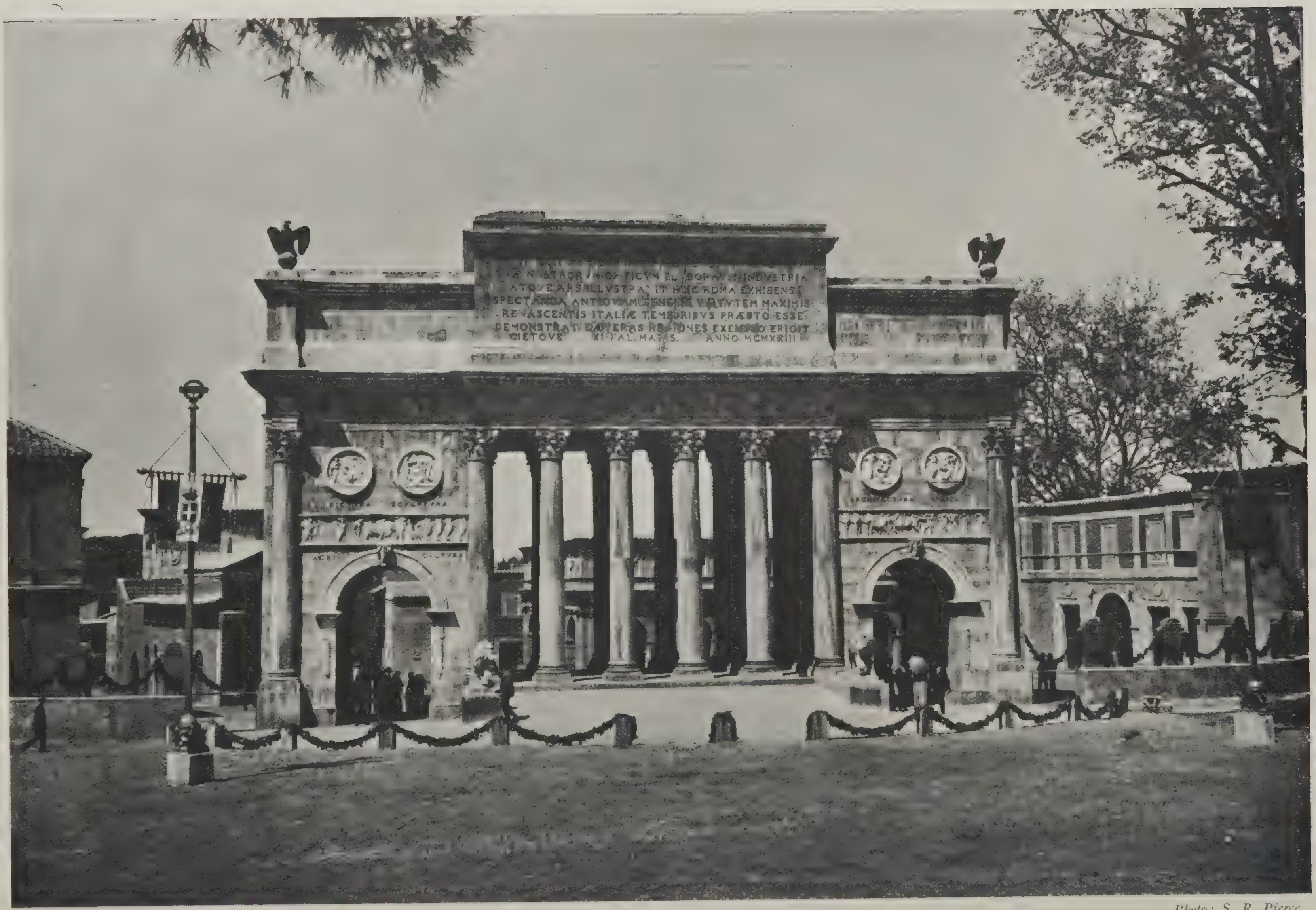


*Photo: S. R. Pierce.*

The first Roman Exhibition of Agriculture, Industry, and Applied Art was recently opened by the King of Italy. The entrance to the Exhibition is placed approximately on the angle of the irregularly square site, and faces towards the Pincian Gate. (See article on page 953.)

THE
ARCHITECTS' JOURNAL
27-29 Tothill Street, Westminster, S.W.1.

ednesday, June 6, 1923 Volume LVII. No. 1483

# Height of Buildings and Ancient Lights

LONG-CONTINUED submission to irritating restrictions is apt to blunt our appreciation of their necessity. It produces a state of mind favourable to any suggestion that, however desirable they may ave been when first introduced, they are now unnecessary nd unsuited to the conditions of modern life. Hence it is ell sometimes to remember that the comparative peaceulness of modern life is no criterion of the magnitude of the emental forces which are kept in equilibrium by a system f law and order. The surging tides of the aspirations of hose who have, and of those who would like to have, are ever really still, and the dynamic forces which cause them ave their roots deep down in human nature. Controlled nd balanced by wise law, justice and common sense, those orces can form powerful incentives to human progress and chievement. Uncontrolled they can only add disastrous momentum to the waves of social unrest or revolution.

The paper read by Mr. Delissa Joseph before the R.I.B.A. n the height of buildings and ancient lights, was a seful reminder of the presence of that impelling force hich induces the desire to add field to field, and storey o storey. In civilized communities it has been found ecessary to impose legal checks upon acquisitiveness, for is never satisfied, but always wants a little more, preferbly for nothing. The discussion which followed this aper was equally a reminder, not unwelcome, that public pinion in this country may confidently be expected to ondemn without hesitation any proposal which would tend o give advantages to the few at the expense of the poorer many.

The proposals put forward in the paper might well have een expected to appeal very strongly indeed to architects. ncrease of the legal limits of height of buildings, and the bolition or severe limitation of the present rights to light nd air, would make directly for increased business and larger ees; whilst the alternative proposal that rights to light retained should be taken out of the hands of High Court udges and tried exclusively by architects is scarcely less ttractive. The attitude of the Institute is therefore all he more creditable. No formal vote was, of course, taken, ut the discussion disclosed emphatic opposition to all hree proposals. This result became, in fact, inevitable hen the author asked for the sympathy of his audience on ehalf of architects and owners, who "are forced to build n strict accordance with the rights of their neighbours."

These words expose the inherent weakness of the whole ase. Let there be no doubt about it. However skilfully may be camouflaged as a necessity of modern conditions, owever speciously it may be described as a desirable mprovement in the public interest, the agitation against estricted heights and against the law of ancient lights is ssentially an expression of the desire of the few to build ithout regard to the rights and amenities of their neighours and the public. As such it would appear to have no hance whatever of obtaining that Parliamentary sanction hich is a necessary preliminary to legislative reform. ommon sense and the love of fair play are the prerogatives of no one party, and a Parliamentary majority in favour of repealing reasonable laws framed for the public good would appear to be unthinkable, whatever the political situation. But strange laws occasionally slip through at Westminster, and it is well that the Institute has shown, in no uncertain fashion, that the proposals are not to its liking.

Of even greater value was the evidence adduced during the discussion that the so-called stunted and inadequate buildings of London do not excite the contempt, but rather the envy, of more progressive countries; and that in America, the birthplace of the skyscraper, severe restriction of high buildings is making rapid and extensive progress. The principal argument in favour of higher buildings in this country received a shrewd blow from the blunt declaration of Mr. Bossom, himself the designer of many skyscrapers, that the object of high buildings in America was not, as is so frequently suggested, to relieve congestion at lower levels, but merely to provide arresting advertisements for enterprising firms. The last shred of economic excuse for higher buildings would appear to be destroyed by the publicity given at a recent meeting of the Surveyors' Institution to the fact that the zoning laws of American towns, which operate to restrict undue height after the manner of our local by-laws, receive their chief support and advocacy from those who are interested solely in *high* property values. The result of unrestricted licence to cover sites with high and expensive buildings does not, as is contended, offer any prospect of high rateable values, but the reverse. It is found that immediately a district is protected from the ambitious schemes of a few owners the value of all property in that district tends to rise sharply.

It is often stated that the law of ancient lights is peculiar to England, and that if other countries can do without it we could. But this country has always been a pioneer in sanitary legislation; and the protection of reasonable light and air is primarily a sanitary law, communal in its object and spirit, even though it may be, unfortunately we think, extremely individual in its application. Other countries, if and when they attain the density of industrial and commercial population characteristic of our busy towns, will undoubtedly be compelled, in the interests of health, to limit the obstruction caused by the backs and flanks of new buildings as they already limit the height on street frontages. Already in America, to quote again from the recent discussion on zoning laws at the Surveyors' Institution, there are ancient-light laws somewhat similar to our own in at least three important States, including New Jersey.

But although the repeal of the Prescription Act would be little short of disastrous to our crowded towns, there is much to be said in favour of amending its obvious anomalies. Its application under the present-day precedents of the Courts is on the whole eminently fair, reasonable, and expeditious. A plaintiff, except of course in cases of specific grant, can only secure a reasonable ordinary light, whatever may be the special requirements of his particular business; and if it can be shown that he will have a sufficiency of light left to him for ordinary purposes, whatever its source, he cannot succeed.

Naturally very few architects have a good word to say for the Prescription Act. Those of an older generation recall the tyranny of the legal precedents prior to the Colls case, whilst younger men have often cause to remember regrettable incidents where they have failed to summon up sufficient moral courage to warn their client off a dominated site or have tried to bluff an adjoining owner whom they suspected of a reluctance to embark upon expensive litigation, when frank and timely negotiation might have produced an amicable settlement satisfactory to both sides.

We have no sympathy with those who condemn the administration of the Act by Chancery Judges and clamour for arbitration by architects in all cases. Reference to a professional arbitrator presupposes special knowledge with regard to daylight. But until architects generally appreciate that the unaided eye cannot be trusted not to make absurd mistakes in judging daylight, the remarkably wideawake official ignorance of a Chancery Judge would appear to be preferable to the knowledge of a technical arbitrator; knowledge which is dangerous because it is small, and particularly dangerous because its narrow limits are often wholly unsuspected. But judges are necessarily bound by precedents until they are reversed by a higher court or by amending legislation—and some at least of the precedents which constitute ancient light case law seem to stand very badly in need of a short revising Act.

Why should an owner have to wait many years for protection in one case, and receive it in another immediately he has built a new window, simply because the adjoining land happened to belong to his vendor at the time he bought his site? Why should a new window lighting an entirely new building receive immediate protection simply because it happens to coincide with the position of an opening lighting an old building which has totally disappeared, whilst adjoining openings must remain in danger for years? Why should it be absolutely necessary to grant the almost unlimited powers of a mandatory injunction in *quia timet* cases which would fairly be met by trivial damages simply because an obstruction is not erected but merely intended? Why should there be no legal bar whatever to the complete blocking of a window which has existed for nineteen years, whilst one which is but one day older is sacrosanct?

Why, indeed, should any period of prescription be necessary where health is threatened? Surely it should be possible so to amend the Act as to define and to render illegal all obstructions which constitute an obvious and immediate danger to health—thus limiting the scope of those arrangements whereby adjoining owners mutually agree to build close up against each other's windows—whilst preserving to any individual owner power to prevent encroachments which, whilst not absolutely unhealthy, interfere with his reasonable comfort and convenience and depreciate the value of his premises.

## Exhibition Architecture in Rome

"Exhibition Architecture" has long been a term of reproach—in this country, at any rate. The words call up a picture of tawdry plaster buildings, mostly of a quasi-oriental character, with a multiplicity of redundant domes and minarets and an overspreading mass of floral decoration. On the Continent and in the United States they have the reputation of doing these things better. One of the Paris exhibitions produced the Grand Palais and the Petit Palais; buildings so good architectually that they had to be preserved in permanent form. And who does not remember the magnificent achievements at Chicago and San Francisco? Now we have the Eternal City itself showing what it can do in the way of exhibition architecture. In this issue Mr. Rowland Pierce gives an illustrated account of the glories of Prima Mostra Romana. The exhibition presents a realistic picture of an ancient Roman city in the heyday of its classic splendour. Triumphal arches, palaces, amphitheatres, patrician villas—all are here assembled to make a modern Roman holiday. It is a curious commentary upon the shifting of the centre of architectural gravity that, at first sight of these monumental structures, one instinctively exclaims "How American!" McKim himself never did better than this

## The New President of the Architectural Association

Our congratulations to Mr. E. Stanley Hall, who, at the last meeting of the Architectural Association, was elected President in succession to Mr. Stanley Hamp. Mr. Hall who is M.A. of Oxford, had been in partnership with his late father, Mr. Edwin T. Hall, for a great many years and is now carrying on the practice by himself. Although an extremely busy man, Mr. Hall has always taken a practical interest in professional affairs. He was first elected to the Council of the R.I.B.A. in 1913, and he is a member of the Board of Architectural Education as well as a member of the Literature Committee of the Institute. He has acted as Hon. Sec., Vice-President, and Hon. Treasurer of the Architectural Association, and at the present time he is one of the External Examiners for University College, London. Among Mr. Hall's many works, either recently completed, at present in course of erection, or immediately contemplated, are the following: St. Cuthbert's Church, Copnor, and Vicarage; a school called St. Cross, Walton-on-the-Hill; Chapel at Pontywal Sanatorium at Brecknockshire; alterations of the Ashmolean Museum, Oxford; alterations and additions at Gregynog Hall and at Plas Dinam, both in Montgomeryshire; additions and alterations to a Tudor mansion at Cefn Mably, Glamorganshire; to Kington Manor, near Chippenham; to Perry Hill Cottage, Worplesden; additions to the Dulwich Picture Gallery; houses at Weybridge, Croydon, Woking, Dymchurch, and Warwick; the War Memorial to the Queen's Royal Regiment at Trinity Church, Guildford. Mr. Hall is acting as architect for Liberty's building, and is consulting architect to the King Edward Sanatorium, Midhurst, and the King Edward VII. Hospital, Cardiff.

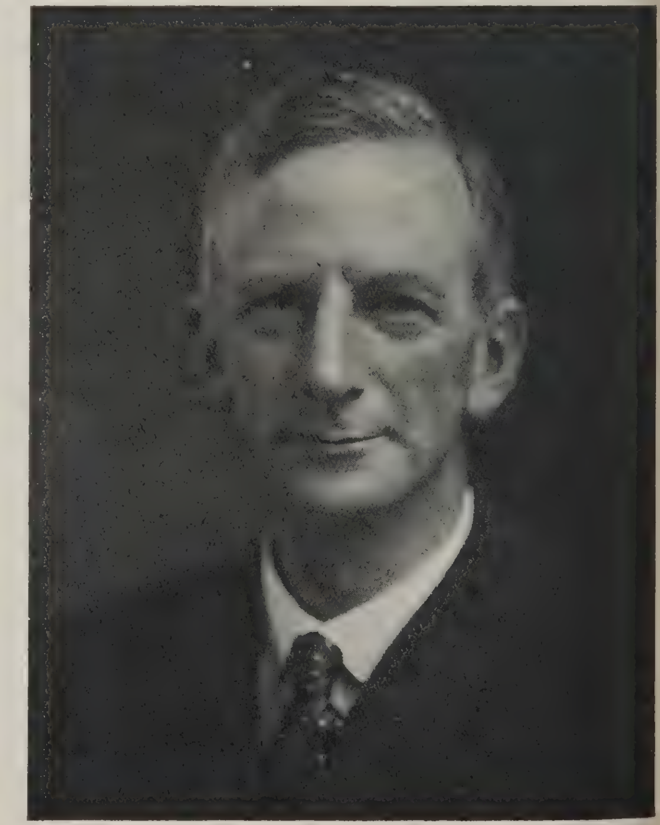


*Photo: Haines.*

MR. E. STANLEY HALL, M.A., F.R.I.B.A.
The New President of the A.A.

# The "Old Lady" of Conduit Street

## A Fantasy

I ALWAYS think of her affectionately as the "Old
Lady," not that she is really old—as the age of
Institutions go she is probably youngish—at any
rate of no more than a robust middle age, but of a
rprising dignity. That she was ever an "irresponsible
pper" is inconceivable; a youthful matron she may once
ve been, nay, must have been—but anything younger is
ll-nigh incredible.

* * * * *

I remember the awe with which I first approached her
my student days, an awe probably increased by her
ful powers of acceptance and rejection; but even in
ose days of youthful impressions she had to me nothing
the goddess about her—she was too essentially respect-
le, her cloak too voluminous. One could never imagine
unclothed; in fact, the very idea is incongruous—she was
weightily Victorian. Even in those far-off days I could
ver quite accept her at her own valuation; she demanded
very much, like some dear old lady of Bayswater of mid-
eteenth-century times; she was, in a way, more regal
n the Queen!

* * * * *

Her official residence is in the West End, but spiritually
m sure her home is in Bayswater. Mayfair is altogether
smart for her, and I am sure she has a lurking doubt
out the artistic morals of that much-maligned neighbour-
od; and one imagines that she would consider even
nsington not quite sufficiently serious; while as for
lsea and St. John's Wood, she only tolerates them when
their Sunday clothes and on their very best behaviour.
t that she does not at times unbend—otherwise how
ld one be so fond of her?—but the occasions are very
; generally she prefers a safe but impressive dullness.

* * * * *

remember the first occasion on which in my experience
departed from those accepted canons of strict decorum
which her power is enthroned. It was on the occasion
n address by one of the most distinguished of the "Old
ly's" favourites, who was telling a roomful of impressed
lents how he had always throughout his not unsuccessful
er based his work on the conscientious study of the
ks of the old masters, such as Inigo Jones, Wren, and
n mentioned the names of a few famous Italians, and
nowing the work of this favourite of fortune, and being
absolutely unacquainted with the work—or at any
some of the work—of the aforesaid old masters, gasped
surprise, and turning, with my face evidently one
tentous question to the "Old Lady," received a straight,
look—and then, oh, unblushing one! how can I tell
—a most deliberate though stately wink. From that
nent I have been more or less in love with her.

* * * * *

have referred to the "Old Lady's" favourites—for she
like most strong-minded people, decided preferences:
ething rather gentlemanly in demeanour with a reput-
bank balance, and, if possible, bearing the hall-mark
ne of our older universities—a certain amount of
ty goes without saying—but, if the other qualifications
there, this is not too rigidly insisted upon. Anything
he way of Bohemianism is to her abhorrent, and she
t to look askance at genius unless it be officially recog-
d; but give her genius accepted and resplendent, proudly disporting itself under the ægis of the Royal Academy, and she can do a little mild toadying with the best of us—which is only another way of saying that the "Old Lady" is distinctly human.

* * * * *

I can only remember once seeing her really ruffled, with two nice little bright spots of colour on her cheeks, her hands agitatedly smoothing out imaginary creases in her always immaculate silk apron—and this with one of her most devoted defenders! Not that he was undeserving of her displeasure—well-intentioned he may have been, but with a carelessness as regards facts and names that warranted something more than displeasure.

* * * * *

He was, with all the impassioned vehemence of the Celt, upholding the "Old Lady" as one of our most cherished Institutions, and in support of his argument he instanced the number of distinguished artists who had held the highest office at her disposal. Unfortunately, he had in his excitement muddled up the names, and when he recited a list containing, amongst others, those of Norman Shaw, Bentley, Philip Webb, and of the later men, Lutyens, Burnet, and that brilliant young architect who built the cathedral at Liverpool (perhaps he was thinking of Scott's grandfather!) as having held presidential rank at the "Old Lady's" bidding, I held my breath and waited for the inevitable outburst. But never have I admired her more; her dismissal of that well-meaning but foolishly inexact person was epic!—she, in fact, said nothing, but when he next called informed the footman in the most chilling accents that she was "Not at home."

* * * * *

She takes a mild interest in architecture, but is most whole-heartedly in agreement with Talleyrand in deploring too much zeal; there is to her, with her very Britannic outlook, something a little un-English in too much enthusiasm. She prefers the solid comfort of the domestic fireside and a nice cup of tea to the somewhat excessive heat of "the sacred fire"—the wine of Olympus is a little too strong and heady for her well-disciplined taste.

* * * * *

But see her on suitable occasions, foregathered with her staunch and well-tested sons, sipping her favourite beverage, and discussing some problem of financial emoluments or whether "we should" or "should not" exclude from our select circle certain low fellows who dare to practise without our authority (sometimes, be it whispered, very softly, not altogether unsuccessfully), then the "Old Lady" betrays no lack of interest and animation, her voice may even become a little shrill in her excusable excitement, and she may even so far forget herself as to be a little waspish at any "impertinent" who would offer even the mildest of criticism at such an inauspicious moment. There is a whisper abroad that at the present time she is, with almost youthful indiscretion, thinking of arraying herself in new and more modish robes, and who would begrudge her the feminine thrill of so triumphant a reblossoming?

* * * * *

But, despite her little foibles and weaknesses, she still retains a large measure of our affectionate adherence, and we can only wish her a successful emergence from her present time of trial and tribulation, and a long-continued reign of health, wealth, and prosperity.

S. C. R.

# Architecture and the Complementary Arts

## By FREDERICK R. HIORNS

IT is pleasant to turn from other matters now occupying the architectural stage, many of which are relatively unimportant, to the interesting article by Mr. W. W. Scott-Moncrieff in your issue for May 23. He outlines a subject of first-rate importance. It demands indeed the serious consideration of all who desire a real advance in architecture, regarded in its most comprehensive aspect, and who realize that it is useless to expect any general improvement of public taste, or real encouragement of the industrial arts, while practically everything beyond the carcase of our buildings (and often not excluding that)—their internal fitting-out, furnishing and equipment, in respect of the hundred-and-one things with which we surround ourselves—is provided by commercial firms, many of whom have little or no regard for fitness, workmanship, or taste. As a people we seem, indeed, to have almost, if not entirely, lost the conception of art as an essential factor in everyday life.

Accordingly we have long ceased to expect that all the objects that we live with and use—from buildings, and the general amenities of towns, down through the whole range of craftsmanship in such matters as wall-decoration, metalwork, furniture, textiles, and everyday household utensils—shall be not only well designed from the standpoint of utility, but pleasant to look upon; to contain, in other words, the element of beauty. Architecture, among other things, obviously implies and requires the best craftsmanship applied to material, and it equally involves application of the same principle to the decorative finishing and equipment of buildings.

### Dangers of Commercialism

While the provision of all, or nearly all, that makes up our general material environment continues to be looked at, in its inception, purely from the money-producing point of view, the elements that make for real fitness and beauty will certainly be missing. And we shall get, as one of the many resultant disabilities, the destruction of fine things—in the interests of what is, commercially, more showy and blatantly attractive.

The majority of our business houses strive to shriek on a higher note than their neighbours and are prepared to moderate nothing, and compromise on nothing, for the common good and a quieter conception of life. The history of past ages shows us a much better way, if we would learn it—if, for example, we thought of Florence, under the Medici family, when, as Miss Sichel says ("The Renaissance"), Art was fed "by every common sight in the streets, by every civic custom and institution, first and foremost by those of the Guilds; and, in its turn, gave back with interest what it received. . . . Artists and sculptors were only craftsmen like any others, and the standard of work was so high that the distinction between skilled and unskilled work would have scandalized them." Such were days when all artists worked together in really fraternal fashion; when men took pride in producing the best possible, and the aim was to make the material associations of life beautiful. Craftsmanship was respected and the working artist accepted as belonging to the aristocracy of talent and high purpose, the only form of social distinction deserving of serious attention.

### The Present-day Craftsman

Is it to be regarded as impossible to get back to this? Our real artist-craftsmen of to-day can, as Mr. Scott-Moncrieff implies, do work worthy of any age, if the opportunity is given to them; which, unfortunately, is rarely the case. The public go instead, for what of decoration or use they may require, to the tradesmen, many
whom are absorbed in profit-making and care little f
the fine things and the men who can produce ther
Architects, in the collective sense, are ultimately respo
sible for the existence of such wrong notions—they contr
within certain limits, the art that comprehends, in effe
all others; and by taking a proper stand in relation
their brother craftsmen, the decorative painter, the sculpt
the stone, wood, or metal-worker, the modeller and pla
terer, and so on, they might effect many sorely-need
changes for the good of our country. In this way mig
public taste be stimulated and changed, and the tin
hastened when general and intelligent appreciation
shown in architecture and the crafts allied to it.

### Co-operation Needed

It is a work and an aim in which the R.I.B.A., as t
representative architectural society of the country, mig
and should definitely take the lead, assisted, in th
various districts, by its allied societies. What better mea
indeed, could there be of encouraging real union betwe
architects themselves and the craftsmen upon whose h
they depend, and for showing effective sympathy for t
many talented men who—kept under by the power
mercantile interests of to-day—have no outlet for th
abilities? It is so difficult always to get ideas of this ki
(usually, and often contemptuously, dismissed
"visionary") seriously considered, though we wa
time and energy enough, Heaven knows, in fut
professional politics that in no wise assist the art
profess to serve. I think if architects and craftsm
interested in such a movement as this could be broug
together to consider its many and far-reaching possibilit
—a species of advisory council, really representative
art interests and including the more practical and use
of the existing societies—we might get a body form
*under the ægis of the Institute*, that could effect much
encouraging a more comprehensive view of the real re
tion of art to life. So many civic, artistic, and cr
societies will occur to us who, without setting aside th
own individual and useful functions, might well co-opera
in more or less permanent fashion, with the R.I.B.A.
assisting the aims they have—or should have—in comm
to the general advantage of all concerned. It is only
some such joint and widespread effort that we can exp
to get the claims of beauty, as a factor in common li
accepted by the public and so change the present attit
of indifference to the spiritual, as opposed to the pur
material, aspect of life from which we suffer. If
joining together of those interested in such things offer
reasonable prospect of being effected it is surely well wo
attempting. And architecture might eventually be rea
recognized as Mother of the Arts, as Mr. Moncrieff sugge
instead of being merely named so.

### Future Possibilities

It would certainly form no reason for setting this mat
aside that practical and financial difficulties would
encountered. That is so with all reforms. The inter
of coming generations of artists of all sorts—or, as
prefers to think, of artists in the universal sense—requ
that a matter so vital to our best interests should now
faced. And if, indeed, that is done, there may yet
some prospect of the mass of our people, now concentrat
the limited attention it devotes to such matters upon e
painting, becoming no longer indifferent to the objects
both utility and beauty with which they might, if t
would, surround themselves.

# he First Roman Exhibition of Agriculture, Industry, and Applied Art

### By S. ROWLAND PIERCE

THE "Prima Mostra Romana" has been recently opened by the King of Italy, and is now fully open to the public, and was visited by their Majesties King George and Queen Mary during ir recent stay in Rome. Here are to be seen the wines, vers, fruit, lace, silk, and jewellery—to name only some tions—of the capital province of Italy; and the exhibi- n has been planned and designed in a typically open- ided Italian way, in the central space of the "Galoppa- o" (the "Rotten Row" of Rome), situated near the ta Pinciana and in the Borghese Gardens—an admirable , surrounded by large, old trees, and backed by the high- led gardens of the Villa Medici. In style the exhibition taken the form of a very freely handled reconstruction of an ancient Roman city on a small scale; and although many details savour of Renaissance, of neo-Roman, and of neo-Grec elements, such freedom is welcome, rather than otherwise, as a help to the general effect.

The entrance to the exhibition is placed approximately on the angle of the irregularly square site, and faces towards the Pincian Gate. It is a triumphal arch of truly monumental proportions, vaguely reminiscent of the arches of Titus and Septimus Severus, but unlike any ancient example. The decorative reliefs are symbolic of Painting and Sculpture, of Architecture, and of Industry, while on the attic over the columned central way is a long Latin inscription, setting forth the objects and sources of the exhibition. Flanking the central way are reproductions of the lions in

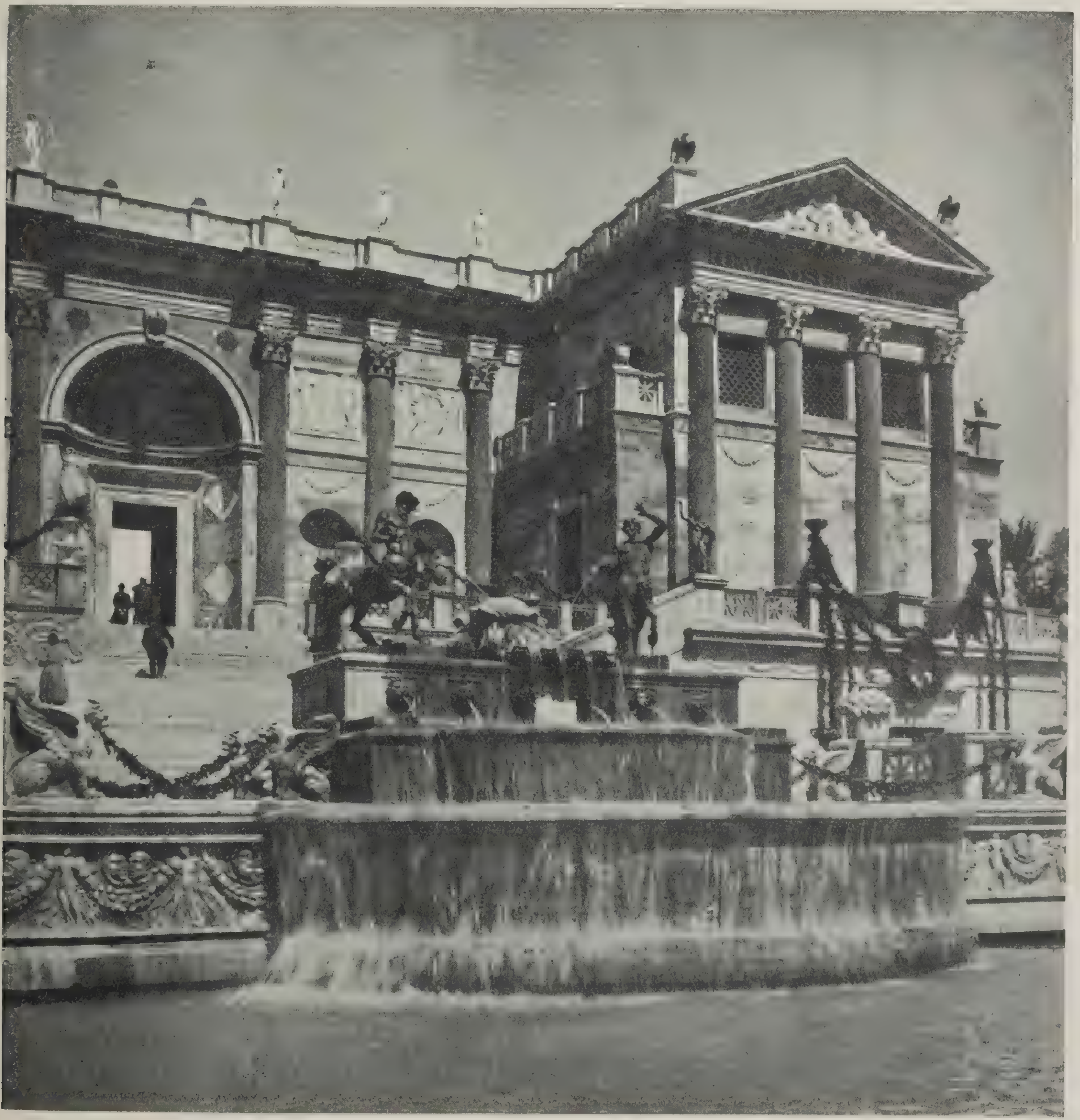


*Photo: S. R. Pierce*

THE FOUNTAIN IN THE FORUM.

"Fed by the seemingly inexhaustible waters of Rome."

the loggia of the Villa Medici; colour is added by the Roman and Italian banners hung on red and gilt masts, and by the festoons of natural laurel bound in scarlet cloth, hung from the surrounding bollards.

Entering the exhibition by the “Arco della Vittoria” (happily devoid of turnstiles, tickets being purchased at small kiosks near the public road), the visitor enters the first “piazza” of the miniature city. Nearly opposite is the “Marcellum,” a market-like building supported on open arcading, and devoted to floral and horticultural exhibits. To the right, in irregular lines, are the first of the shops, or exhibition stands of individual firms; while to the left is an unostentatious building for the exhibits of the Post Office, with telegraphic and wireless instruments in active connection with the Central Post Office.

In the centre of the piazza is a pedestal of “granite” and “marble,” bearing a replica of the bronze Capitoline Wolf. Branching from the entrance piazza, in delightful irregularity, are three streets of shops, often having the appearance of two-story buildings.

Between the two left-hand streets is situated a so-called reconstruction of the “House of Bibulus,” intended to house the committee of management, which committee, it was humorously suggested by the Roman “Messagero,” should be clad in the togas of the time of Imperial Rome!

The principal street leads by a somewhat circuitous course to the “Forum” of the city, passing many shops built in imitation of Ostian and Pompeian examples, and passing also two replicas of the bronze statues of Augustus and of the Athlete in the Museo Nazionale. The Forum is an open space of ample proportions, almost entirely surrounded by buildings, and opening out on a cross axis to formal gardens, laid out with flower-beds and box hedges, and decorated with vases and statues based on the antique. On the right-hand side of the principal street stands the restaurant and caffè, a simple, well-proportioned building with three h windows facing on the piazza and an entrance at eit end; it is decorated internally with freely handled Pompe motifs. On the frieze of the building is a significant inscr tion: “Ridet convivitum auspex lætitiæ vitæ.”

On the other side of the principal street is a reconstr tion of a “house of a patrician,” of irregular design and two “periods,” in part that of the “opus quadratum,” a the rest of “later” brickwork; on its walls are liv coloured frescoes and reliefs. On its ground floor ar series of “caffè-bars” opening on to the Forum.

Flanking the sides of the Forum are porticoes, approac by steps, with columns of “porphyry” and walls “marble.”

The fourth side of the Forum is closed by the *tour force* of the exhibition—the “Palazzo delle Feste.” rises to a height of about 70 ft., and it is fronted by a tr monumental fountain of three stages and a miniature la fed by the seemingly inexhaustible waters of Ro Around the fountain are placed gilt electric “candelabr and “marble” statues, while the climax is formed by t “bronze” centaurs holding water-jets.

Behind the fountain rises a broad staircase, which le to the exhibition halls on either side, and to the o terraces of the building, and finally to the open-air theat of which the main portion of the “palazzo” forms the lo back. Although based on no known precedent, this h structure of scaffold poles and stucco takes on itself air of a massive and gorgeous reconstruction of so Imperial Roman building. Built entirely of “marbl weathered by “time,” its columns of “granite” and “p phyry,” its “bronze” and white “marble” statues a eagles, its “marble veneer” and “mosaics” in the nich all enhanced by the actual genuineness of its laurel and r wreaths and swags, tumbling in profusion from its terrac

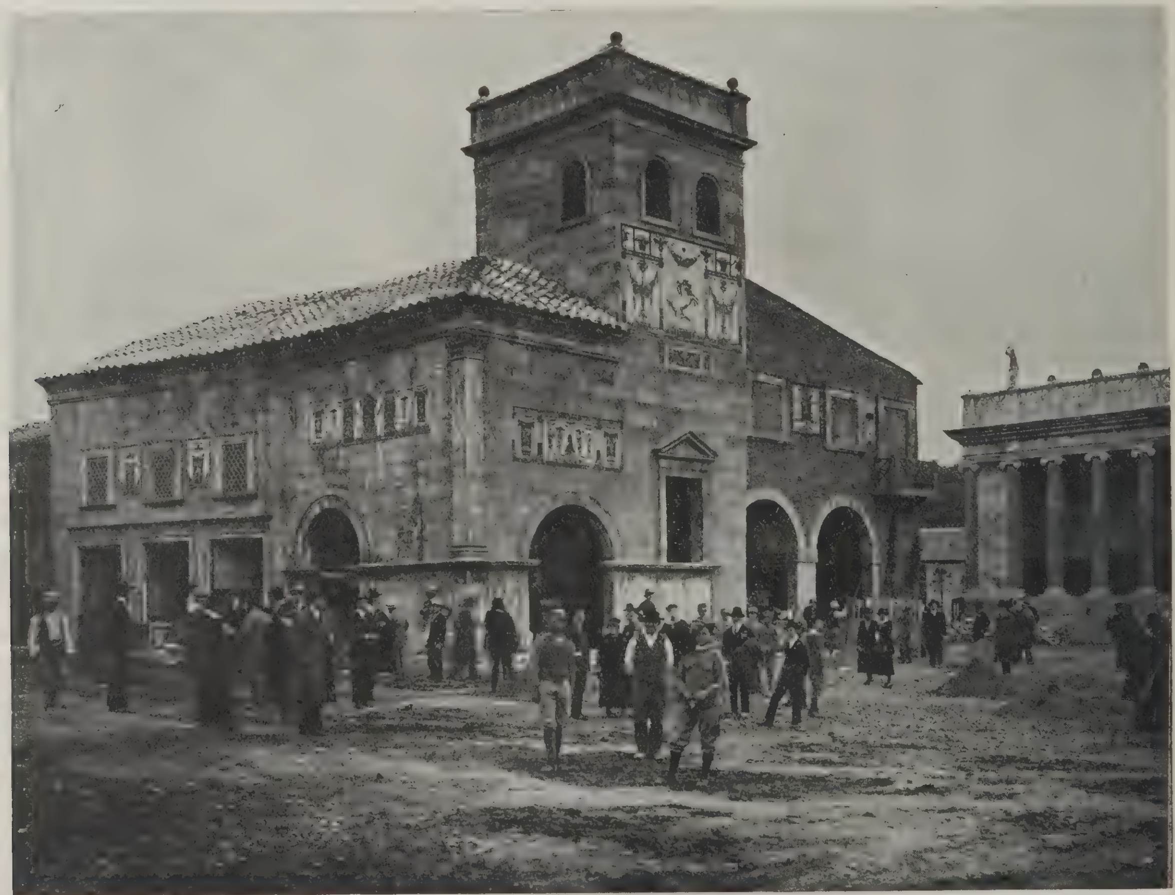


*Photo: S. R. Pierce.*

‘PRIMA MOSTRA ROMANA”: THE HOUSE OF A PATRICIAN.

“Of irregular design and of two ‘periods,’ in part that of the ‘opus quadratum,’ and the rest of ‘later’ brickwork; on its walls are lively coloured frescoes and reliefs.”

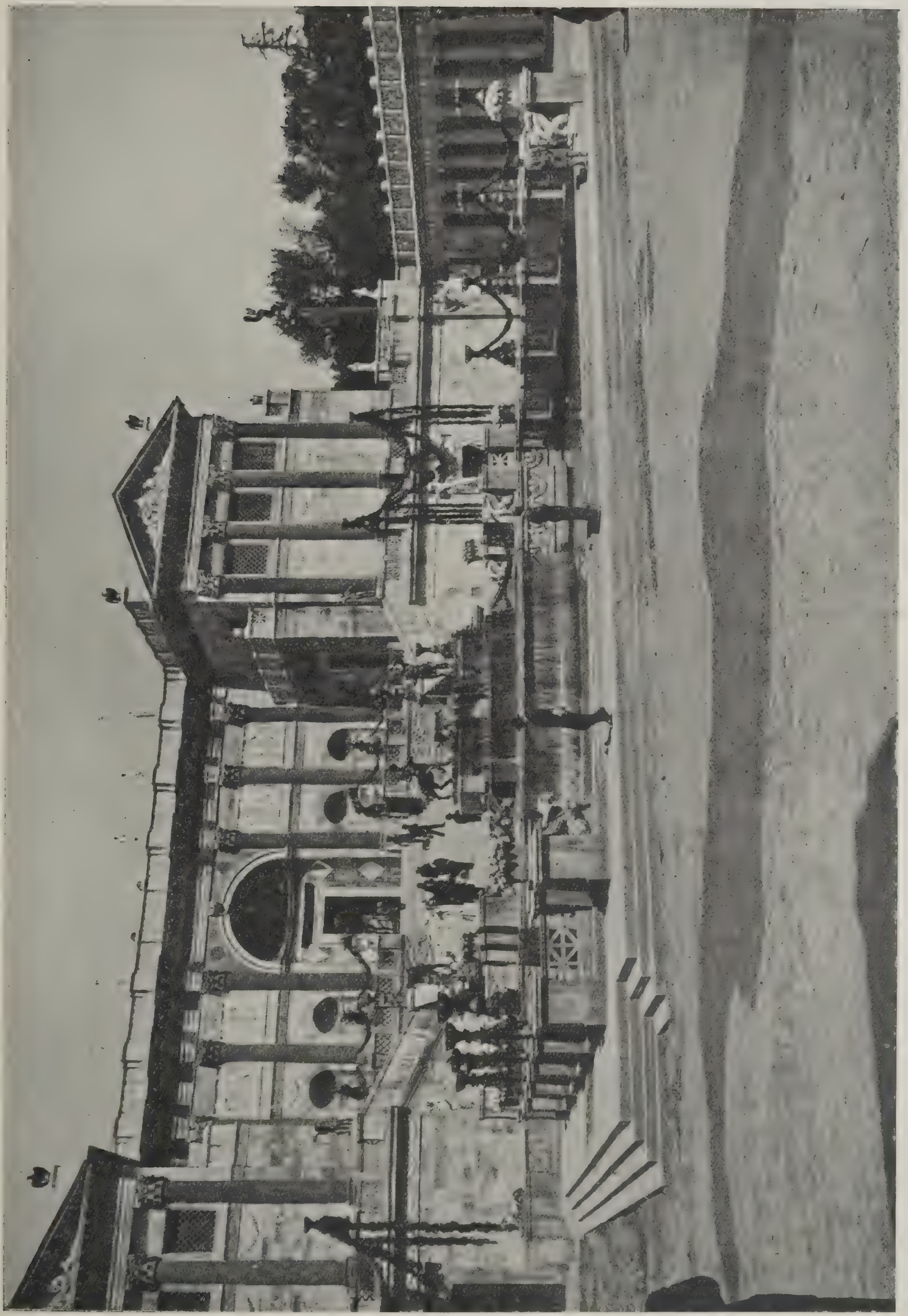


*Photo: S. R. Pierce.*

"The Fourth Circle of the Forum is flanked by the *tour de force* of the exhibition—the Palazza delle Feste. It rises to a height of 70 feet, and it is fronted by a truly monumental fountain of three stages and a miniature lake."

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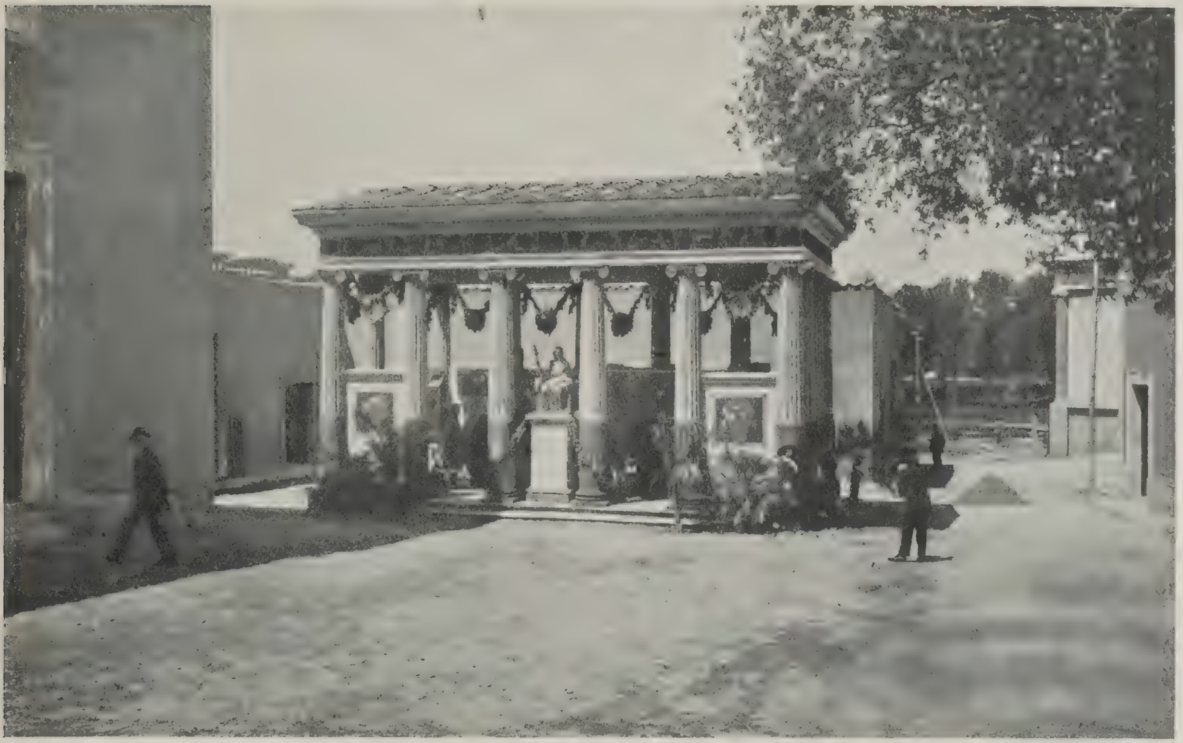
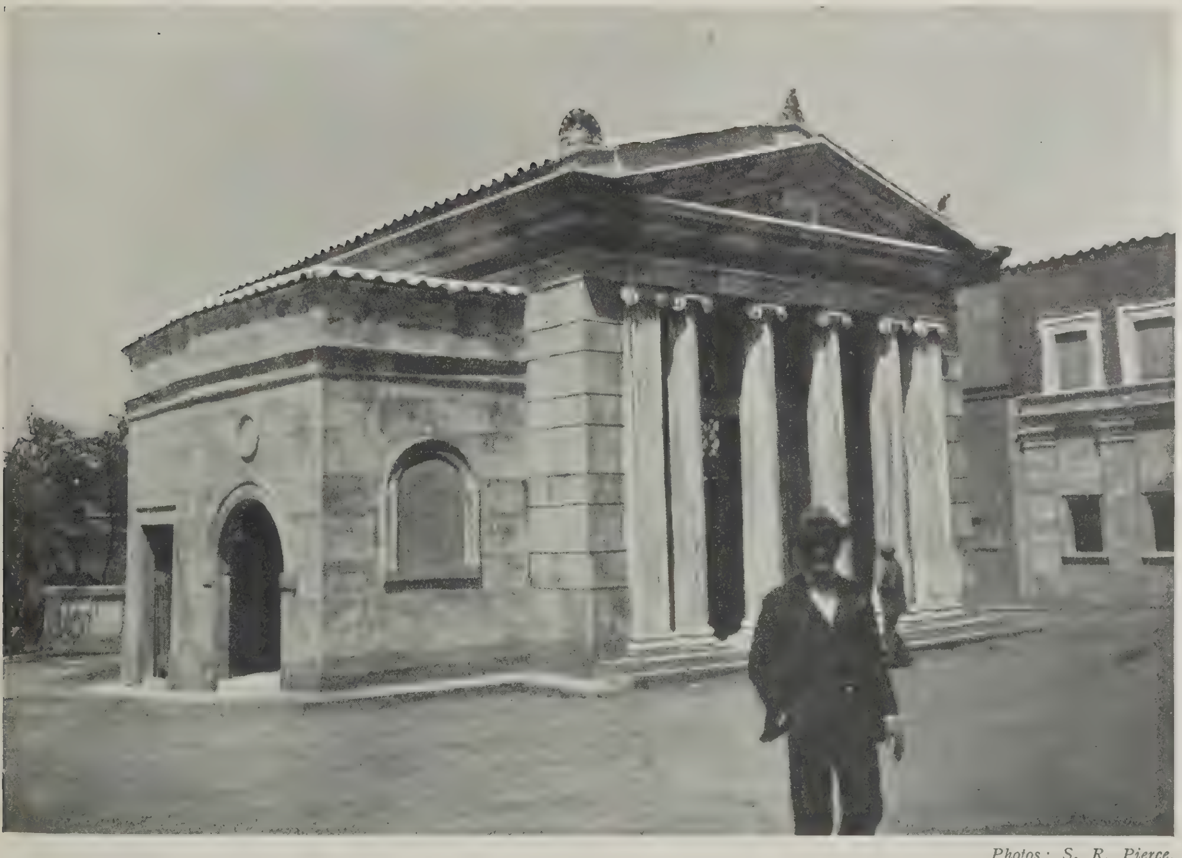


A BAKER'S EXHIBIT—"THE TEMPLE OF CERES."



Photos: S. R. Pierce.

THE GOLD AND SILVERSMITHS' BUILDING.

"PRIMA MOSTRA ROMANA."

gives the dreamlike vision in the solid of the ancient glory that elsewhere has been committed to paper by the water-colours and temperas of Mr. Walcot.

Passing through the central "bronze" portal, on the terrace of the "palace of fêtes," the visitor finds himself on the rostra-like structure which forms the central feature of the semicircular sweep of the seats of the open-air theatre. The "rostra" is surrounded (as are all the terraces of the building) by a "marble" balustrading, bearing gilt candelabra, and at the angles two "porphyry" columns surmounted by gilt-winged Victories. While over its front is hung, centrally, a huge banner of rich red with gold patterning bearing the insignia of the city. The building screening the theatre at the back is similar in design to its Forum façade, but with less prominent projections to the end pavilions. During performances the semicircular chorus is occupied by chairs, and the ranges of steps by cloth seats. The stage or proscenium is flanked by massive square "marble" pylons bearing reliefs relating to the theatre, and crowned by "marble" statues; these pylons support a system of huge side hangings, and a central curtain which draws to either side, all of which is of a rich russet-brown canvas decorated with yellow edges of restrained pattern. The stage proper is of the usual slope for modern usages, and is adaptable for the movements of modern scenery and hangings necessary for the production of the plays which are frequently given. The acoustic properties of the theatre have proved to be entirely satisfactory in windless weather. Among other buildings of particular note in the exhibition may be mentioned that of the gold- and silver-smiths, which takes the form of a temple-like building of white "marble," with a portico of Ionic columns in imitation "Cipollino" marble. Even in this "back-street" temple the architect has followed the eccentric inspiration of a Roman town by the irregularly planned appendage attached to one side in a haphazard, though quite pleasing manner. And also in the highly coloured little Ionic temple that stands in a "piazzetta" of its own, with painted frieze and columns an highly coloured frescoes on its intercolumnar walls, a hung with festive garlands and masks; a truly lively templ of Ceres, though somewhat incongruous in its exhibits which take the form of the appliances and ovens of a moder steam-bakery.

The buildings of the exhibition were constructed i skeleton, almost entirely of wooden framework, in scant lings of about 4 in. by 4 in., bolted and spiked togethe and covered with stucco on wire lathing. The applied fla decorations are in fibrous plaster. The whole of th stucco surface is coloured to represent different stones marbles, and bricks, with the joints carefully lined in, in constructional manner; while the weathering that woul occur with lapse of time has been applied over the colou by dragging on almost dry distemper of various greyis colours. Where roofs are visible from inside the exhibitio dark Roman tiles have been used. The steps and terrace of the theatre and other buildings are constructed of timbe boarding, covered by a thin layer of asphalt where expose to much wear. The timber used for supports and genera framing is calculated to cover a distance of 50 kilometres while 30,000 square metres of boarding and heavier timbering have been used in floors, roofs, and walls.

The total area of the exhibition grounds is about 60,00 square metres, of which about 12,000 square metres i occupied by streets, squares, and gardens. The construc tion of the buildings, laying out the grounds, etc., wa completed in a little over ten weeks. The present exhibi tion is to be followed in August by another devoted t Fashion, Sport, and Colonial products, and by a Motor an Aviation show in September; though how the presen buildings are adaptable to such varied uses, especially t the September exhibition, is difficult to understand. Th architect responsible for the entire scheme and for th carrying through of the works was Professore Armand Brasini, of 45 Via Prefetti, Rome.

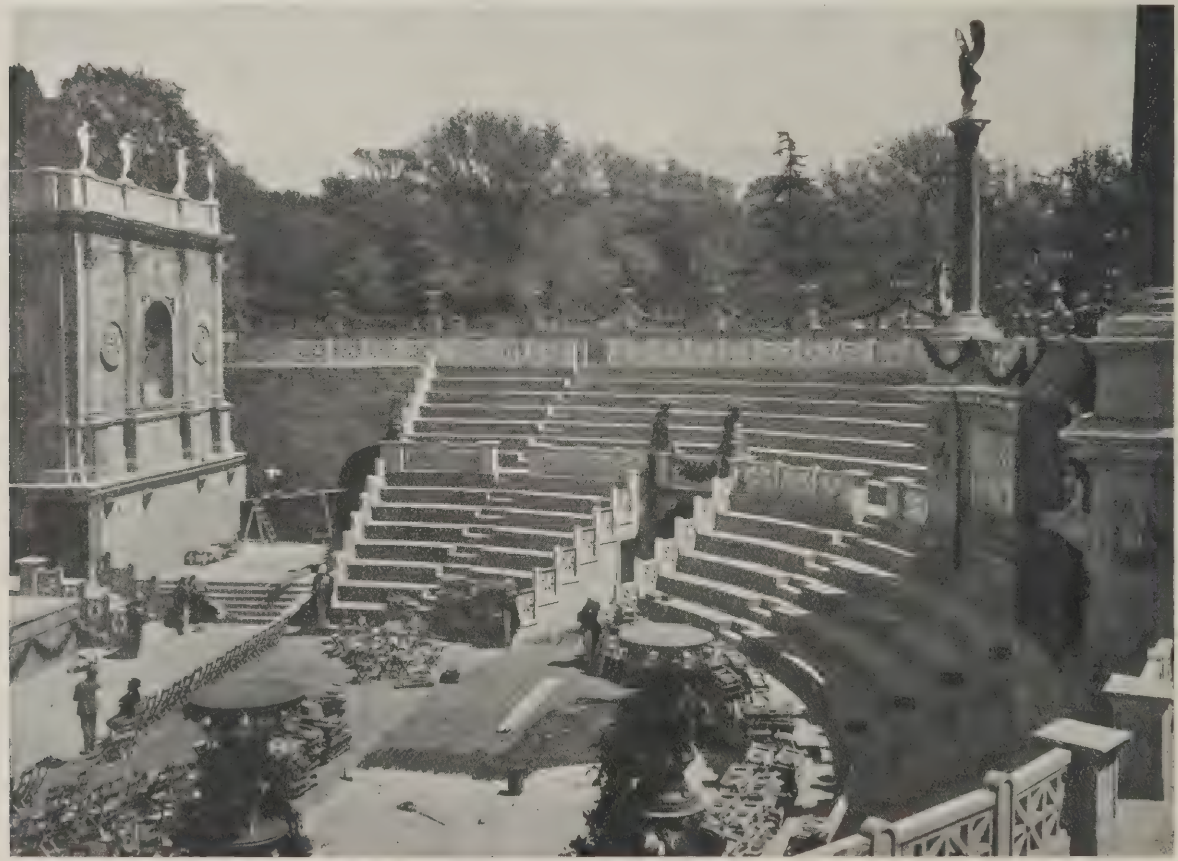


Photo: S. R. Pierce

THE THEATRE: CHORUS AND PROSCENIUM PYLONS.

"During performances the semicircular chorus is occupied by chairs, and the ranges of steps by cloth seats . . . the pylons support a system of huge side hangings, and a central curtain which draws to either side."

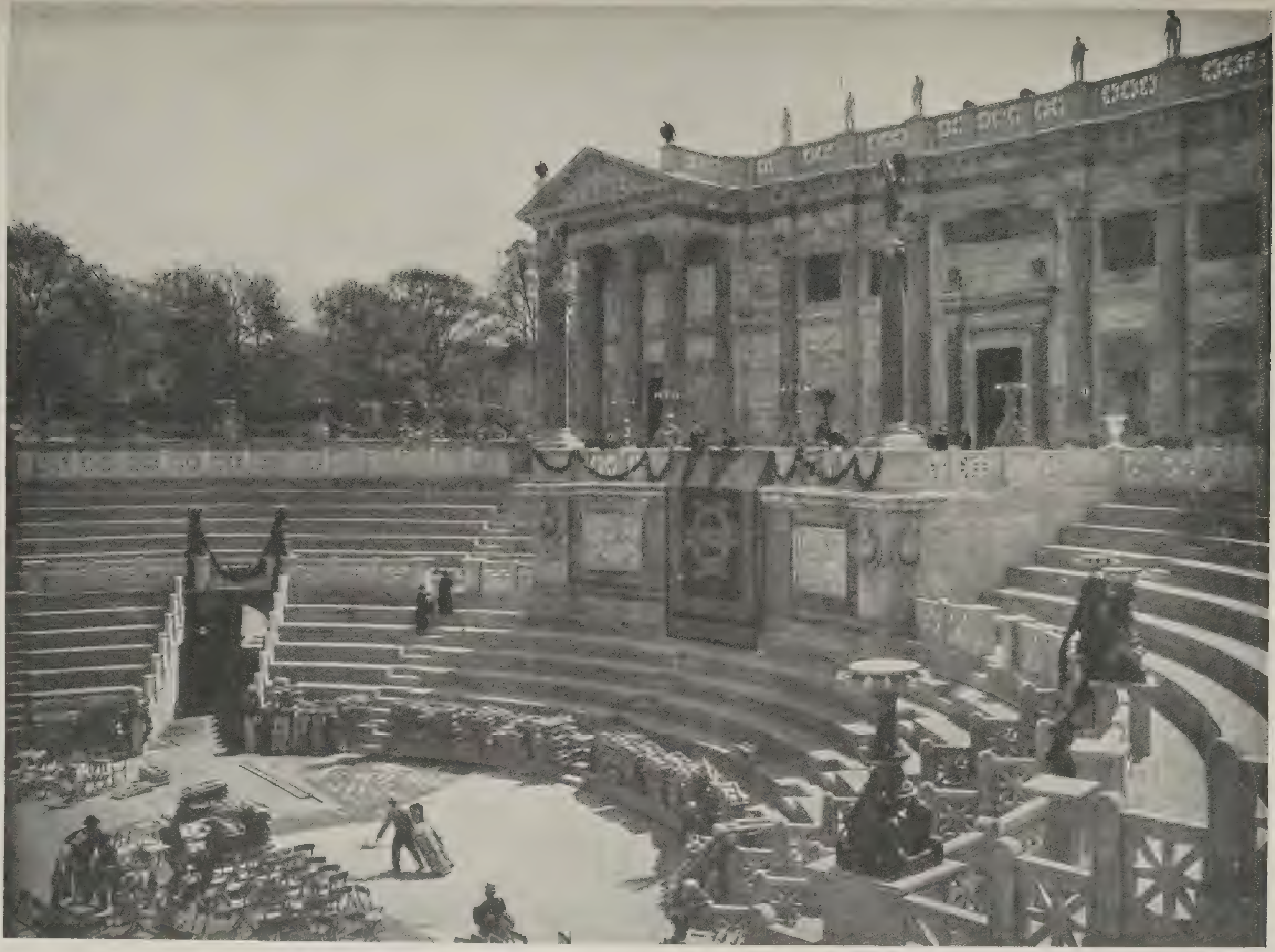


Photo: S. R. Pierce.

"Passing through the central 'bronze' portal, on the terrace of the 'palace of fêtes,' the visitor finds himself on the rostra-like structure which forms the central feature of the semicircular sweep of the seats of the open-air theatre. The 'rostra' is surrounded by a 'marble' balustrading, bearing gilt candelabra, and at the angles two 'porphyry' columns surmounted by gilt-winged victories."

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# Building Heights and Ancient Lights

## Mr. Delissa Joseph Still Meets with Opposition

N the course of a paper read before the R.I.B.A. last week, upon "Building Heights and Ancient Lights," Mr. Delissa Joseph said: The subject of higher buildings is likely to soon again reach a prac- l issue, because the present Council of the Institute have ppointed its Building Act Committee, with instructions study the whole of the Act of 1894 in the light of the ds of modern practice, and this Committee, which is now ing, has already given some attention to the topic of her buildings. It will probably be found, when it sents its report to the Council, to recommend a more erous administration of the present Act, although it y not be prepared to go quite as far as the Building Act nmittee which was first appointed.

he broad principle of these recommendations will bably be found to take some such form as follows :—

hat in streets 40 ft. in width, buildings should be per- ted up to 60 ft. in height; that in streets 50 ft. in width, ldings should be permitted up to 75 ft. in height; that treets 60 ft. in width, buildings should be permitted up 90 ft.; and that in streets 80 ft. in width, buildings uld be permitted 120 ft. in height; the broad principle ng that the height of the building may be half as much in as the width of the street. The City, by reason of its uliar circumstances, would still be allowed to put up t. buildings in any street, however narrow, provided it constructed before 1862, subject to the surrounding ient lights, but it would have the advantage, in its t. streets, of being able to erect buildings up to 120 ft. eight.

n this connection a striking fact emerges. Under the sent Act, a building may be 80 ft. high in a 50-ft. street, n two stories in the roof, absorbing thereby an angle n the pavement level at the opposite side of the street 1½ deg., whereas, in the proposed extension of the Act, uilding 120 ft. high with two stories in the roof, in an t. street, will only absorb an angle from the pavement l at the opposite side of the street of 58½ deg. In other ds, the proposed greater height in a wider street would orb a lower angle of light than the present permitted ht of a building in a narrower street.

ut concessions with regard to the height of buildings ld only be of qualified value so long as the development ondon is held back by the Law of Ancient Lights.

he Law of Ancient Lights is founded upon the old scription Act of 1832, which, shortly, gives the right a window being regarded as an ancient light if it has nterruptedly enjoyed the access of light for a period of nty years.

ne advantage which the Prescription Act offered was ixing the period which constituted the right, because, re that Act, the definition was that the light should e been enjoyed "during the time whereof the memory nan runneth not to the contrary," which period was at time fixed as the year 1189, on the first day of the reign King Richard I.

he oppressive application of this Act has, over a long od of years, been largely covered by Case Law, and up he time of the famous Colls case, in 1904, an angle of leg. was generally regarded as the measure of ancient t to which a window was entitled.

he Colls case modified the position by its being defined he judgment that a man was only entitled to a certain unt of light "sufficient for the ordinary purposes of kind," but, as this description was not defined by the es in angles, it has been the general practice, since the s case, to make the definition an angle of 50 deg.; but this definition has been materially overruled by the recent case to which I have already referred, and, therefore, the position with regard to this subject is still in a very fluid state.

It has been contended that if 1 per cent. of the total light reaching a given window-sill, from an unobstructed horizon, penetrates to the darkest part of the room behind same, a sufficient amount of light remains. I believe the credit for this method of calculation belongs to Mr. P. J. Waldram.

Beyond this, injunctions have been granted in cases where the plaintiff only fears prospective damage, even before the buildings in question have been either demolished or re-erected. These are known as *quia timet* actions.

The only practical attempt which has so far been made to deal with this matter, by procedure outside the Law Courts, has been the work carried out by the Dean of Guild Court in Scotland, before which body all plans of proposed new buildings are placed to enable it to decide, as between the respective ownerships, what would be the proper height of frontages and the height and width of areas, so as to afford mutual lighting facilities to adjoining and opposite buildings.

The present Council of the Institute have recognized the urgency of this question of Ancient Lights, and have requested the Practice Standing Committee to investigate the matter, with a view of drafting a Bill.

The Practice Standing Committee have appointed a sub-committee, who have been giving close study to the subject, and this sub-committee will, doubtless, in due course, present the draft of a proposed Bill, the effect of which would be to place the procedure with regard to ancient lights very much on the lines of the procedure at present adopted with regard to party walls under the London Building Act of 1894, a suggestion which emanated from Mr. Sydney Perks.

The position with regard to party walls is this :—

When a building owner proposes to erect a new building next an existing party wall, and desires to underpin that wall or to thickness it, or to cut into it, or to raise upon it, he has to serve a notice upon the adjoining owner. The building owner and the adjoining owner each appoint an architect to represent them, the two architects then appoint a third architect, and any two of the three architects, after conference and inspection of drawings and buildings, prepare and issue an award, stating the nature of the work to be done, the manner in which it should be carried out, and at whose cost, and this award is binding upon all parties. Thus the rights of each party are clearly defined.

I think it will be found that the proposals of the ancient lights sub-committee, which they will submit to the Council, will therefore probably take some such form as follows :—

Two months before commencing to build or pull down or alter his premises, the building owner must serve upon the adjacent and surrounding owners who may be affected by the height of the new buildings, notices of his intention to build, and he must exhibit to them the drawings showing his proposals.

The adjoining or surrounding owner having the enjoyment of ancient lights will appoint an architect to represent his interests to meet the architect of the building owner. The two architects will then appoint a third architect as arbitrator. If the parties are unable to agree upon the arbitrator, the arbitrator is to be appointed by the president of the Royal Institute of British Architects.

The arbitrator will examine the plans, the site, and the surrounding premises and the ancient lights alleged to be affected. He will then issue an award in which he will first define the line within which the new buildings may be erected, and which will not, in his opinion, affect the ancient lights which the surrounding owners possess, and he will further define that, if this light is affected, by raising above the defined line, what compensation shall be paid to the surrounding owners.

The building owner will, therefore, have the option either to keep his building within the line defined by the arbitrator, or to pay the awarded compensation for encroachment.

As it very often happens that a small alteration in a surrounding owner's building by the enlargement of a window may give him some measure of increased light to compensate for some of the loss, in such cases the arbitrator will have power to direct that the building owner shall, at his own cost, execute these works of improvement on the adjoining premises.

Now here is a practical scheme which, if adopted by the Council, will completely protect owners of bona fide ancient lights, and which will enable the building owner, before he starts his work, to know precisely what he may do, and what he will have to pay in order to do it.

He will, therefore, be able to proceed with his work, with his mind free from the constant fear of writs for injunctions, and his architect will be able to sit down to his design with an untroubled mind.

I have associated the subject of building heights with ancient lights, because they are so largely allied to one another, and interact so materially one upon the other.

It is not sufficient to ask for a waiving of the present administration with regard to building heights, so long as the application of the law of ancient lights is administered as at present, and it is futile to pursue the question of building heights without at the same time attacking, in a common-sense way, the question of ancient lights.

Both these matters stand together. Both these antique laws offer a continual obstruction to the adequate development of this great city, and are the cause of the frustration of many important operations. Both are subjects of so immediate and practical a character as to be worthy of close study and constructive reform by the members of this Institute, and it is for these reasons that I have ventured to place before you, at some length, the urgent need for these reforms, and to suggest the lines along which these reforms should be pursued.

I submit that this question of restraint on development is not a local question, but a national question, because, unless facilities are given for the adequate development of the business area of the heart of the Empire, the consequent scarcity of accommodation must necessarily react against the growth of national prosperity.

### *Discussion.*

The Rt. Hon. Sir William Bull, Bart., moved a vote of thanks to Mr. Delissa Joseph, and Sir Sydney M. Skinner seconded. Letters regretting their inability to attend were read from Lord Ashfield, Lord Waring, and others. The honorary secretary (Mr. Arthur Keen), also read a memorandum received from Mr. Raymond Unwin, as follows :—

The conclusive reason why London should avoid high buildings is that there is nothing to be gained by it. Any advantage which an individual owner of a building plot or a building can derive from increasing the height of his building is directly obtained at the expense of the public, who must suffer all the inconvenience and delay of the increased congestion of traffic, and must find the money to widen the streets to mitigate that increased congestion. The London streets are barely wide enough—in many places they are not nearly wide enough—to accommodate the traffic due to the present height of buildings. If that average height in any area is doubled, it is certain that the traffic will be at least doubled, and probably increased more. Hence, to maintain no greater traffic congestion, the width of the streets ought to be doubled concurrently with the doubling of the height of the buildings. If this were carried out, the reduction of the area of the building blocks would be so great that any advantage in the total volume of the building owing to the increased height would be largely offset by the fact that the total area on which to build would be very greatly reduced. In England, so far, we have only had to meet the outer fringe of the motor-car problem. In America the number of motor cars to population is now more than one to every ten people in the whole country. There are twelve million motor cars in the United States. In this country there are only about 500,000. It is clear, therefore, that we must expect an enormous increase in the number of motor cars in this country. America has not even reached its saturation point, and is making cars at the rate of 500,000 per month. Owing to the great average height of the buildings, not only in New York, but in many other cities, combined with the number of motor cars per 100 persons, street area that would be required to give reasonable facilities for the owners of cars is quite impossible to provide, and the advantages of owning a car in New York are rapidly diminishing. It is only necessary to take such an example as the Woolworth Building. It is occupied by 14,000 people in the daytime, and if we were to take the normal proportion of cars, the 1,400 car owners might reasonably wish to have their cars waiting to take them home in the evening. This would involve a continuous queue of cars five miles long to serve this one building. Anybody who has seen the traffic conditions in New York, with its enormous street area and many hundred-feet-wide roads, and who has appreciated the extent to which the private motor car may be adopted, cannot but realize that any increase at all on the average height of buildings in London must lead to the most serious congestion and to the necessity for a lavish outlay on road widenings.

People in this country usually imagine that New York consists of Manhattan Island, and that therefore something in the way of area covered by the city is gained by the high buildings. On the contrary, about a quarter only of New York inhabits Manhattan Island, and three-quarters the surrounding area. It is only necessary to take a few journeys to the suburbs of New York, or to inscribe on scale-maps circles at a five and ten miles' radius from the centre, to realize that even in the matter of space covered there appears to be little, if any, gain from the adoption of high buildings.

There are any number of other disadvantages, less ponderable but perhaps really more important. Nevertheless, the conclusive reason which has brought about a curtailment of the height of buildings all over America, and which will put a stop to it if London is foolish enough to attempt to copy America's outworn practice, is that the higher building increases the concentration of traffic, requires wider roads, reduces the area available for the buildings to stand on, and in the end has no substantial advantages of any kind to show.

Professor Beresford Pite said that he thought the old laws respecting ancient lights had preserved for London an amount of light and air which would otherwise have been sacrificed. Mr. Delissa Joseph had recalled the naming of Queen Anne's Mansions, "Hankey's Folly." If Mr. Delissa Joseph had his way, on the other side of Petty France there would be a "Delissa Joseph's Folly." The need for an increase in the height of London was not proved at all, but the desire of landowners to extend their buildings upwards was evident. Mr. Joseph's perseverance on the subject was praiseworthy, but surely he realized by now that although he charmed the world outside, he left those there entirely unstirred by his eloquence.

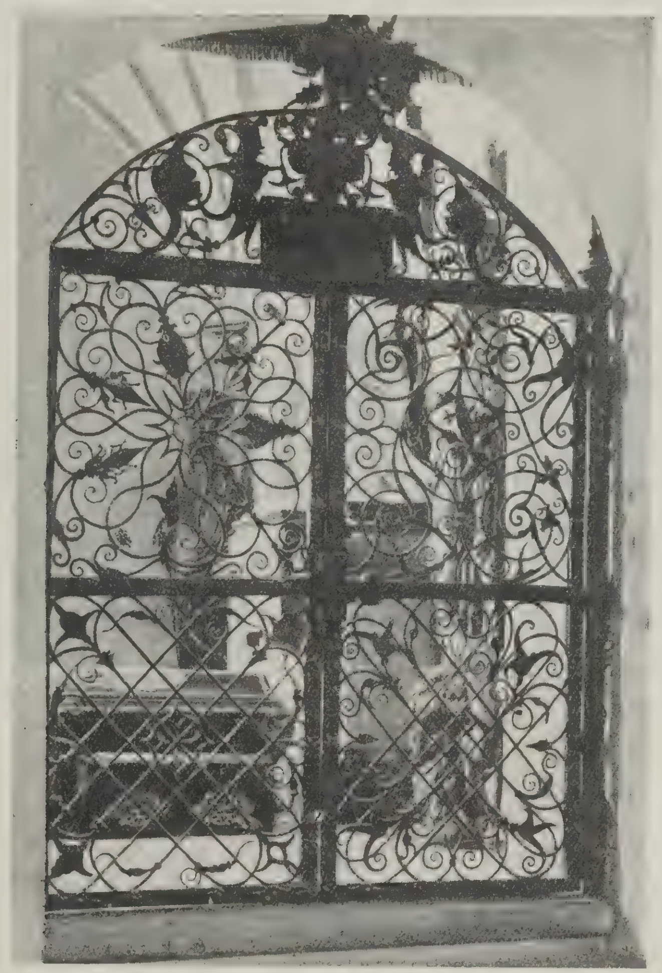
Messrs. W. R. Davidge, W. W. Scott-Moncrieff, and Professor Adshead also expressed themselves as opposed to Mr. Delissa Joseph's proposals.

Mr. A. C. Bossom, of New York, said that in America tall buildings were erected merely for the advertisement.

# Danish Architecture

## Mr. M. L. MARNUS at the A.A.

MR. M. L. MARNUS, a Danish architect, and a former member of the A.A., delivered an interesting lecture on "Danish Architecture" at a meeting of the Architectural Association, d on Wednesday evening last, under the presidency of . Stanley Hamp, F.R.I.B.A. His lecture took the form a delightful lantern-trip through Denmark, in the irse of which he screened many beautiful castles and aces, cathedrals and churches, country seats and halls, vn and other buildings. The lecturer began at Esbjerg, own less than fifty years old, and proceeded by a nd-about route via Copenhagen to Jellingehojini.



A GATE IN ST. KNUD'S CHURCH, ODENSE.

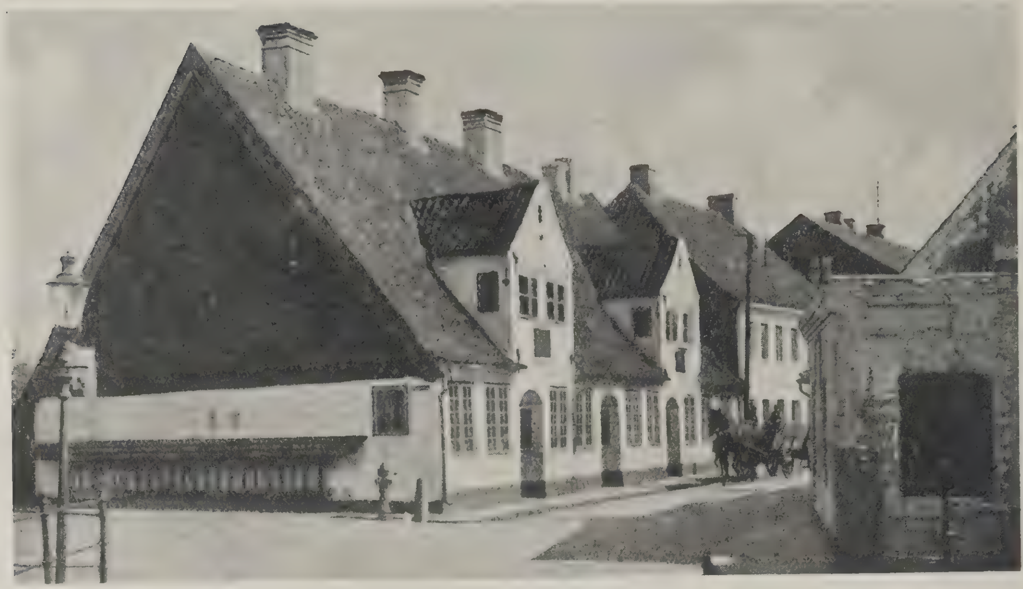
Ribe, he said, was a beautiful old city, and was full of l architecture. Here was Denmark's oldest and, aps, stateliest Romanesque cathedral and some very seventeenth-century half-timber houses. At Graasten, retty little town with many good houses, the chief ure was the palace, a mixture of Baroque and Renais- e, and at Sonderborg a fifteenth-century castle in which stian II was imprisoned for over twenty years. istenborg was a town very similar in taste to Graasten. ossessed a palace dating from the seventeenth century.

the town of Faaborg were a fifteenth-century tower, hat remained of the old church, and a number of city s and quaint old houses. On the road to Svendborg several palaces of interest, and Horne Church, a little nce away, was one of the best of Denmark's round ches, of which, he thought, there were seven.

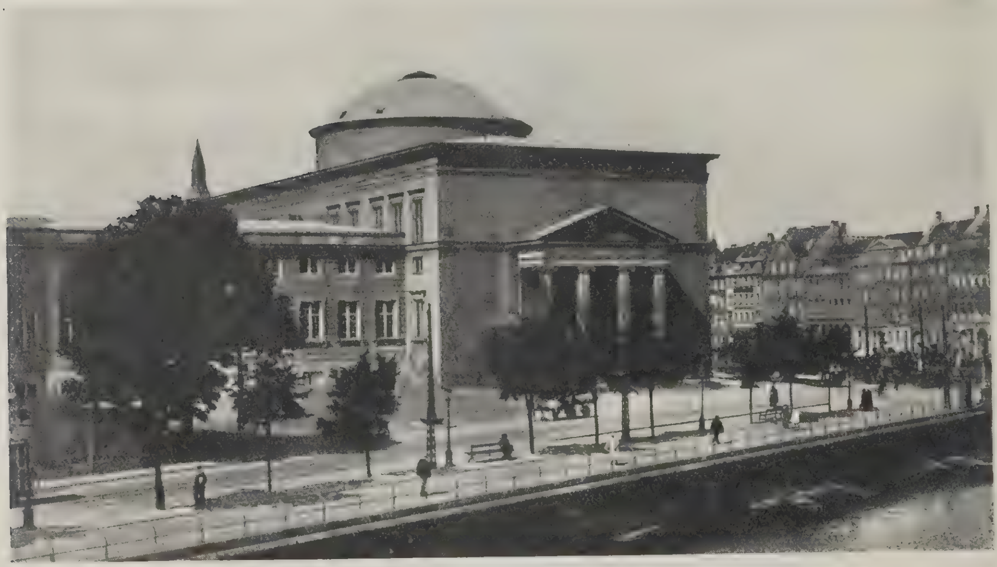
ve miles from Faaborg was Brahetralleborg Castle, which dated from the thirteenth century, and in the district were Stensgaard, one of the few half-timber halls of Denmark, and Egeskav, a remarkable castle built in 1550 on oak piles in the middle of a lake. It was said that the whole of a large forest of oak was used to erect the building.

After referring to other interesting buildings he came to Odense, the third largest town, and the birthplace of H. C. Andersen. It was a town beautifully situated, and it had an eighteenth-century palace and several pretty churches, of which St. Knud's, dating from the thirteenth century, was the most important. From Odense Mr. Marnus proceeded to Korsor, notable for its old fort and an old toll-house; Liselund, for its old farm-houses; Skjelskor; past Booreby and Holsteinborg Palaces, which date from the seventeenth and sixteenth centuries respectively, through Vordingborg, past some more old halls and castles, to Kjoge. Here he referred to Roskildi Cathedral—the Westminster Abbey of Denmark.

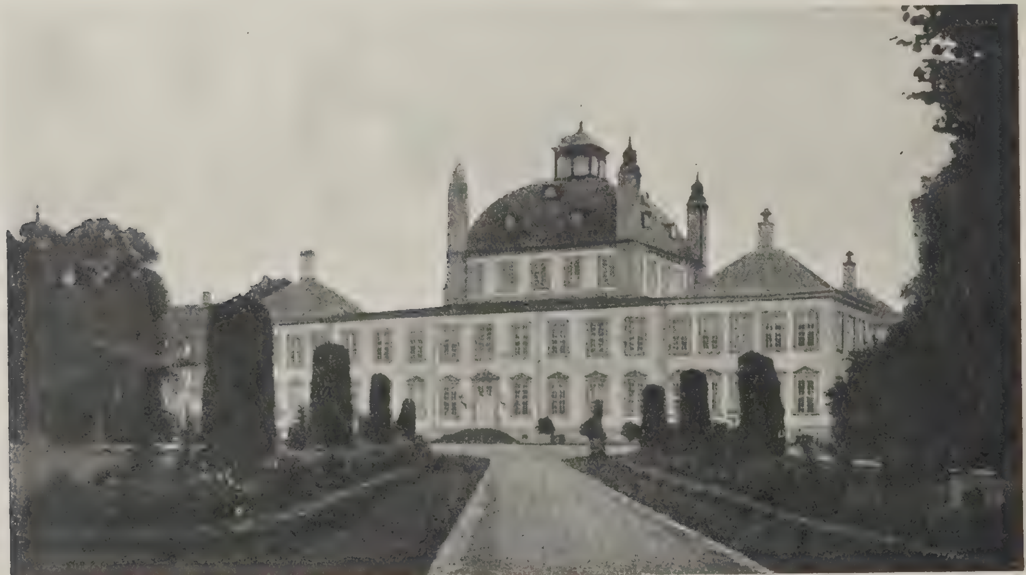
Dealing with Copenhagen the lecturer referred to Amalienborg Palace—the King's Copenhagen home—Rosenborg Castle, Prinsens Palace, the Round and many other buildings. Frue Kirke, Copenhagen's best church, was built originally in 1200, but it had since been rebuilt by C. F. Hanson. The towers of this church and that of Nicholai Church were demolished by Nelson, and the latter church had now a new one. In the district were Frederiksborg Castle and Fredensborg Palace. The latter was begun in 1720, but had been enlarged since.



HOUSES IN AABENRAA.



A BUILDING IN COPENHAGEN.



FREDENSBORG PALACE.

SOME TYPICAL DANISH BUILDINGS.

*(See "Danish Architecture" on previous page.)*

# Protecting Ancient Buildings

## Lord Curzon's "Second Religion"

LORD CURZON OF KEDLESTON presided at the annual meeting of the Society for the Protection of Ancient Buildings, at the Royal Institute of British Architects, Conduit Street, last week, .d gave an interesting address, in which he spoke his regard for the ancient monuments of the past, d urged that the public should try to realize that these cient buildings were part of the spiritual heritage of e nation. "To me the preservation of the ancient ildings of a country has always been in the nature of a cond religion," he said.

Lord Curzon observed at the outset that each man had s own particular hobby. Some people had a harmless ste for collecting stamps, to him a quite incredible form amusement. His own taste had always run in the rection of regard for the ancient monuments of the past a regard which was, perhaps, born in him, because he ppened to have resided in one of the great houses of igland, itself a masterpiece of the Adam style, which, if t already an ancient monument, was in course of becoming . Secondly, in the course of his travels he found that in e countries he visited—particularly the Eastern countries there were only two things of real interest—the people d the ancient buildings. And the ancient buildings istrated the history and the character, and explained e mentality of the people themselves. He had always t that in England we had our own collection of ancient ildings, not inferior to any, and, indeed, in some respects perior to all. In the first place, this country, being an and, had been less exposed to invasion than any Con ental land, and secondly, with us country life and intry institutions had always been developed to an extra-linary pitch. Thirdly, we had always had a number of ople of wealth and taste who had devoted their means beautifying their homes.

Therefore, if one looked at our country one would d in our cathedrals, and equally in our churches—for e village church was the ancient monument of each rish—in our castles, our manor houses—the great dor and Jacobean mansions of the days when wealth d taste began to prevail—in the great palladium mansions the eighteenth century, in our public buildings and nshouses, and even in the cottages of the poor—not the st remarkable among our ancient monuments—in all ese one saw a collection of treasures unique, as he thought, the whole world. What ought to be the interest of these ildings to persons of every class? They were part of e history of the country. Each one of these buildings s a document in brick or timber or stone, and in them e might read the successive changes in the styles and hions, the taste, the dignity, and the wealth of successive nerations as they had come and gone. "If I go down a motor to the country," added Lord Curzon, "I go aight to the church, because in the walls of the church, h its varying styles of architecture, with its monuments resenting the history and traditions of each successive e, with its woodwork and its rood screens, its long tell-tale tory running through the ages—there you find the history the place, there you find all that is valuable and interest- ; and romantic in the past. If you go to Rome, you go the Forum before you go to St. Peter's. If you go to hens, as your first task you climb the Acropolis to see e Parthenon. Why don't you do the same thing in your n country?" But, quite apart from historical value, ere was in these old buildings a beauty, a picturesqueness, l a romance which might be partly the result of the wear l tear of time, but which was quite as often the result the untutored, almost untaught skill of the builders and hitects of olden days.

Lastly, these buildings were part and parcel of the spiritual heritage of the nation. They took us away from the sordid, the squalid, and the material in our everyday lives, and inspired us with the spirit of reverence; they taught us that we had a great past; they made us proud of our country; they infused a spirit of peacefulness in everybody who visited them. The treatment of these priceless treasures had gone through various phases during the last century or more. First there was a complete, callous, and ignorant indifference, displayed quite as often by the owners themselves as by anybody else. He knew of a magnificent mansion, one of the triumphs of British architecture, which had been allowed to fall into irretrievable ruin because its owner swept off the leaden roof in order to sell it in the market. From many of these old buildings stones had been carted to provide material for cottages, and perhaps this applied more particularly to our castles. Yet we possessed as fine a collection of mediæval castles as any country in the world.

Then came the period of hasty, ignorant, and disastrous restoration, when people began to think that these places were worth preserving, but had not the slightest idea how to do it. One might paraphrase the famous saying of Madame Roland, and say, "O Restoration, what crimes are committed in thy name!" Afterwards came the period of intelligent, reverent, and scientific repair. "But still," proceeded his lordship, "there is immense need for vigilance. The Philistines are not extinct in this country. There are not merely vandals who destroy, but vandals who build up and repair, and when these people collect they rage furiously together and imagine many vain things. Sometimes they want to pull down a church—it may even be a Wren church—because there are not enough worshippers to fill it. You might as well begin to pull down Versailles because France has chosen to dispense with kings. Sometimes they destroy a building in order to widen a roadway or to provide facilities for a rush of motor-cars. Sometimes they destroy them simply because they are inconvenient and out of date. There is a terrible modern ideal, which is called 'city improvement,' which has been responsible for more horrors and more crimes than even the professional criminal class itself. This society is the watchdog to prevent the repetition of these atrocities in the future."

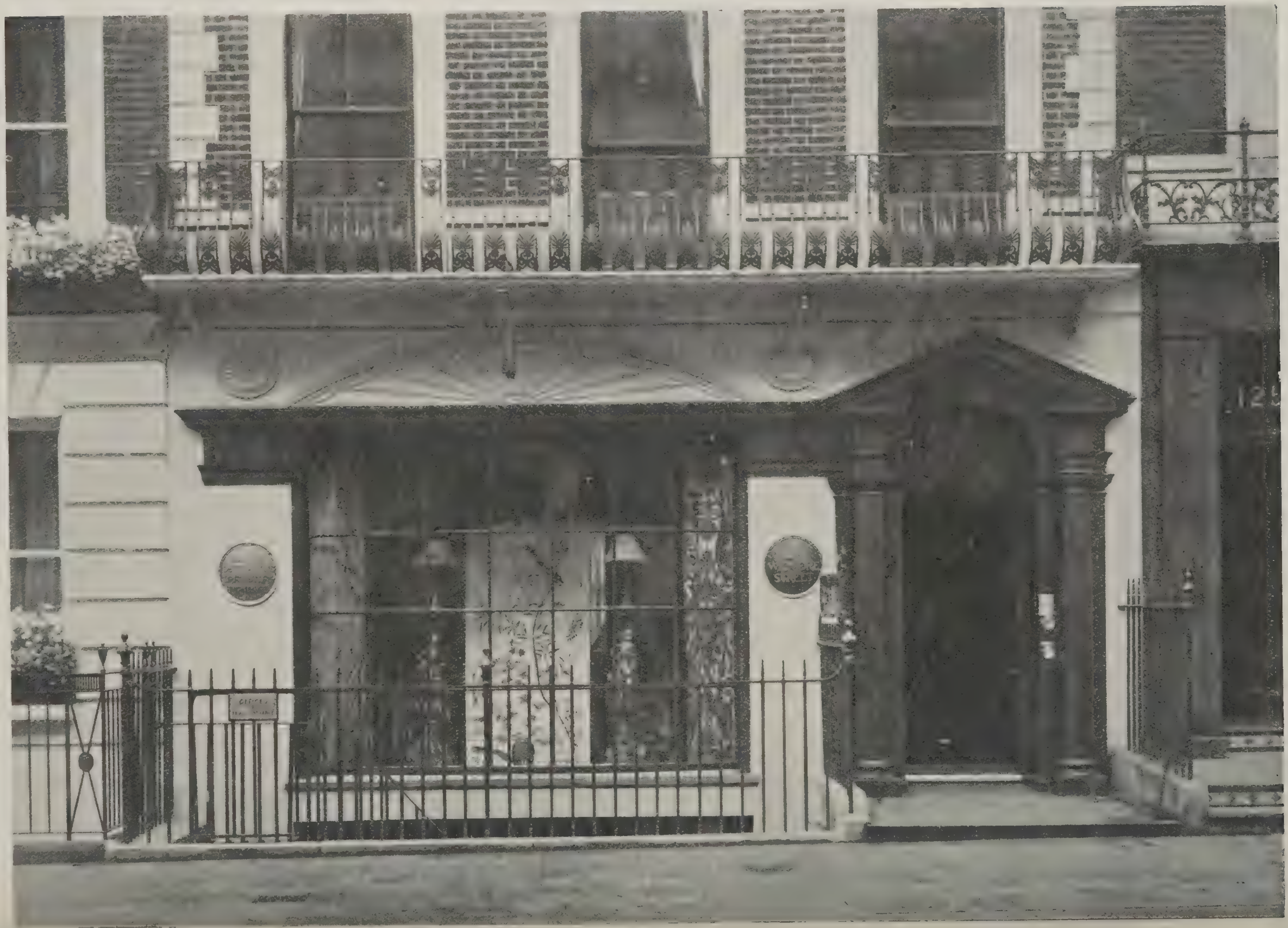
Mr. J. C. Squire said the subject of his paper—"Ancient Buildings in Literature"—had been set for him. What was wanted, he had been told, was a series of extracts, and as little padding (that meant his own writing!) as possible.

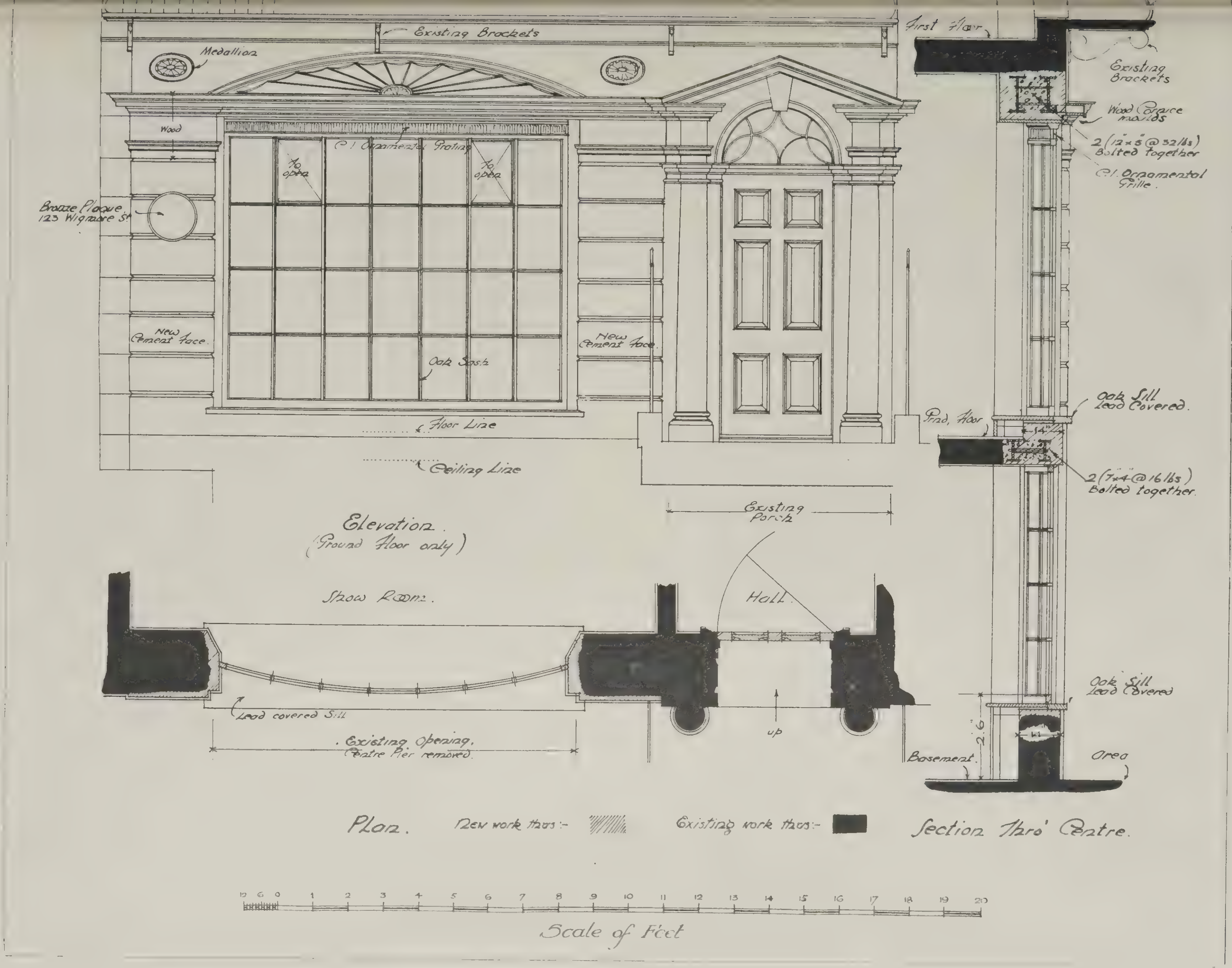
In ancient literature he had found practically no indication of love for old buildings. There was a line in Virgil's "Georgics," but it was very slight. When, however, he came to more modern literature he found himself overwhelmed. Spenser, Shakespeare, Chaucer, Milton—all had lines which indicated that interest in what was ancient had wakened, and later one came across books which had old buildings for their background—Walpole's "Castle of Otranto" and Trollope's "The Warden" and "Barchester Towers." Jane Austen's "Northanger Abbey" was a gentle tilt at the writers who loved to invest their old houses with ghosts, murders, and clanking chains.

Mr. Squire read many of the extracts he had made, but obviously his subject was too big for a short paper, and many had to be put aside. One writer for whom Mr. Squire expressed admiration—and one very much neglected—was Robert Curzon. In concluding, the speaker did not omit to pay tribute to the many references to ancient buildings in the works of Mr. Thomas Hardy.

Shop Fronts. 13.—No. 123 Wigmore Street, London

T. P. Bennett and Hossack, F. and A.R.I.B.A., Architects





This building was formerly a private residence, and the old doorway and door have been retained. The shop front has been designed to harmonize with this door, and to present the appearance of an 18th-century shop, while giving the maximum lighting area and a substantial amount of space for the display of fabrics, Chinese wall-papers, and antiques which are associated with the name of Messrs. Green and Abbott, Ltd.

# The American and the Home

ALTHOUGH life in America might be said to have much more "sparkle" than in England, the American home offers more solid comfort. This is the impression gained by Mr. Moritz Kahn during a visit to America. Writing in "Kahncrete Engineering," he says: In his desire for excitement, in truth, in his imaginary need of it, one finds a trait in the American which is not commendable. The people in large American cities are wont to purchase their amusements and pleasures, whilst the Englishman, to a great extent, creates his. The people here flock to the open country on bright Sunday afternoons and revel in long walks amongst the beauties of Nature.

The American must step into his motor car and travel miles through country at a speed which affords him but little pleasure. The Englishman delights in playing golf on a naturally picturesque course. He puts up with the inconveniences of an inadequate club house and patiently sits down to a cold luncheon or warm meal of mediocre food.

The American, on the other hand, will spend vast sums on the rapid development of an artificial course and will be satisfied with nothing less than a palatial club house.

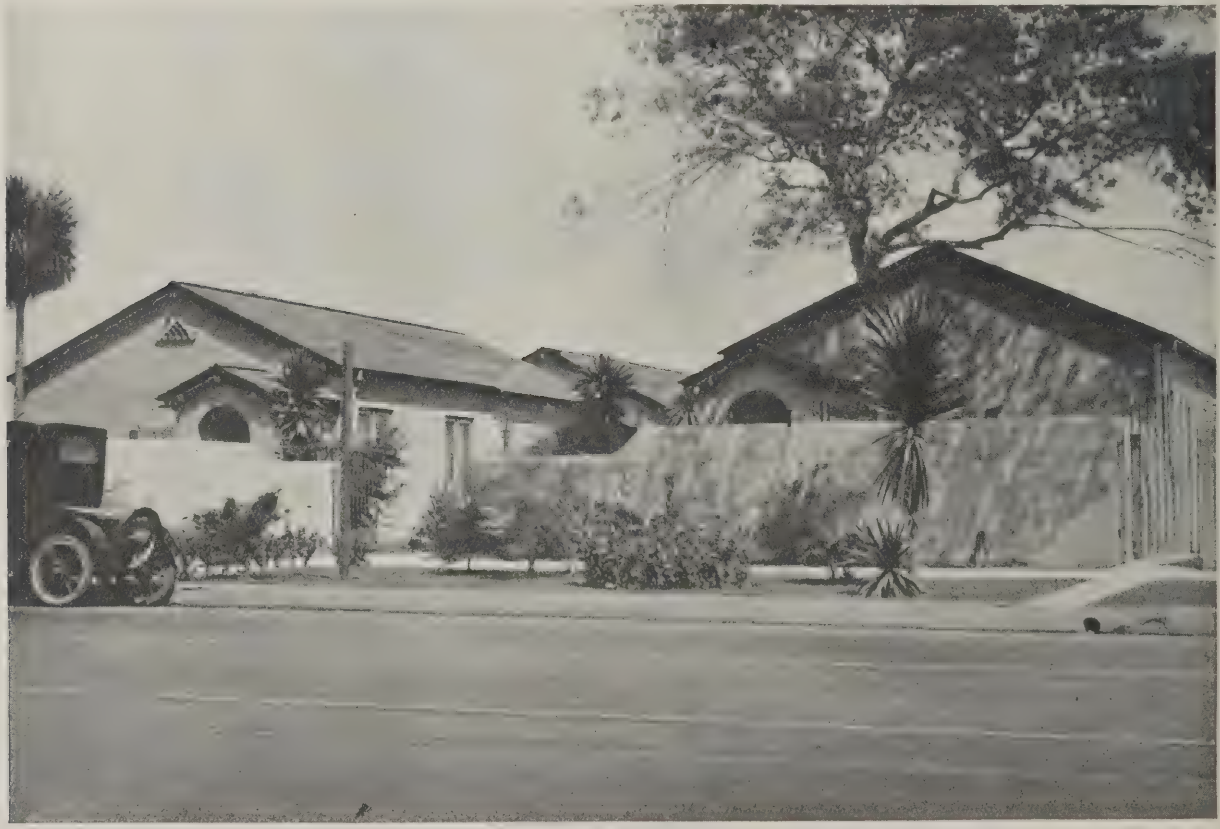
Many of his evenings are spent at the opera, the theatre or the lecture hall; he is unaccustomed to the quietness and peaceful atmosphere of an English club where occasionally a man will be spoken to, providing he gives his neighbour sufficient encouragement.

Strange as it may seem, home life in America offers more solid comforts than in England. Fewer servants will be employed because their wages are three or four times as high as they are in this country, and because they are much more difficult to obtain; but the American house will have better arrangements for keeping it cool in the summer and warm in the winter. Light is used most plentifully. The food is of a better quality and more diversified. It is cooked with greater care and is served in a much more pleasing style. As a result of the servant problem, the American house is replete with every labour-saving device. The open fireplace gives way to the central heating system; the dark, dreary washhouse with its uninviting copper gives way to the bright, airy laundry room with its white glazed tubs, its electric washing and ironing machines; the poorly ventilated larder is replaced by the spacious and scientifically ventilated refrigerator; the broom and dustbin, by the centralized electric vacuum system. It is not unusual to find an American house fitted up with its electric dish-washing machine, its electric vegetable cutters and its electric brass-polishing machines.

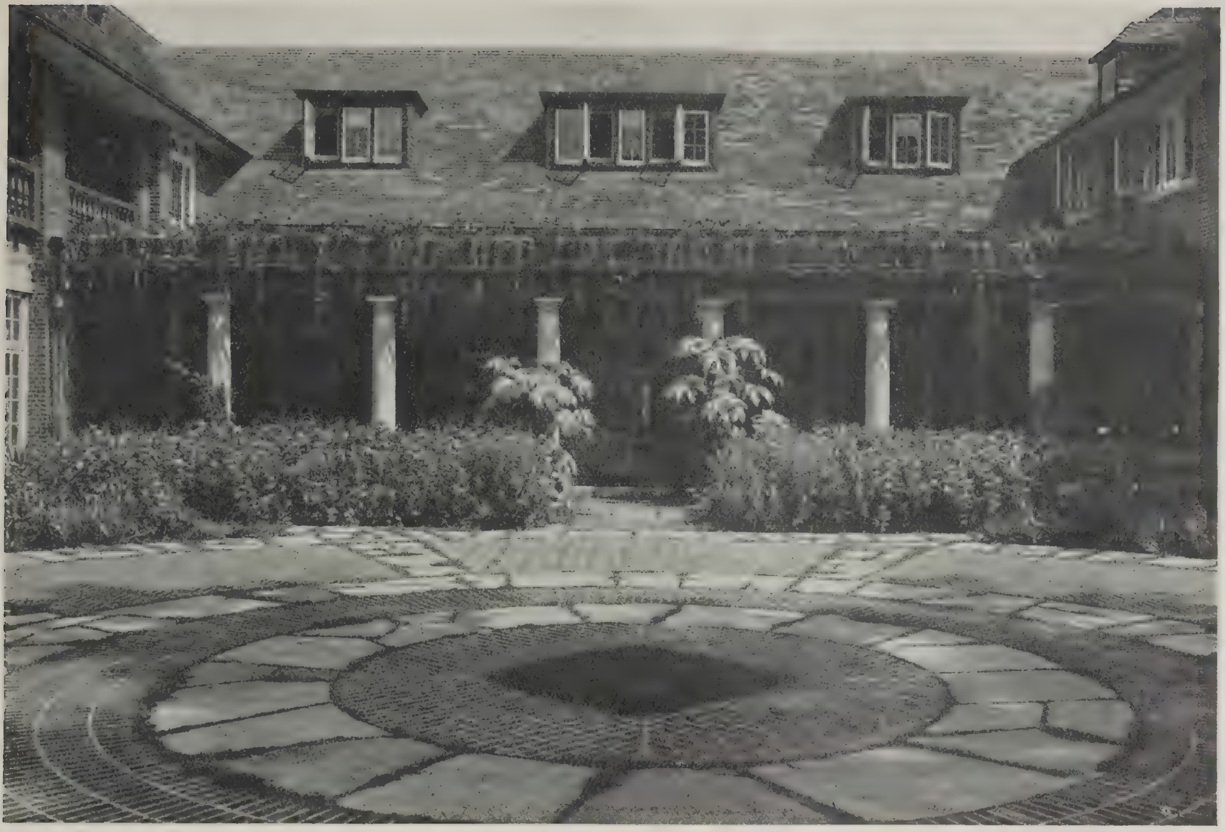
The American domestic architect, who derives much pleasure and assistance from the study of English elevations, does not sacrifice the practical planning of the interiors to the decorative treatment of the exteriors. In the preparation of his plans, he carefully studies the question of economy of labour, another result of the servant problem.

As a matter of interest, I give some illustrations of typical houses I saw in Los Angeles, a modern city. I have intentionally shown some which cover the range between a working-man's dwelling and the home of a man of moderate wealth. Lack of space makes it necessary to let the illustrations speak for themselves.

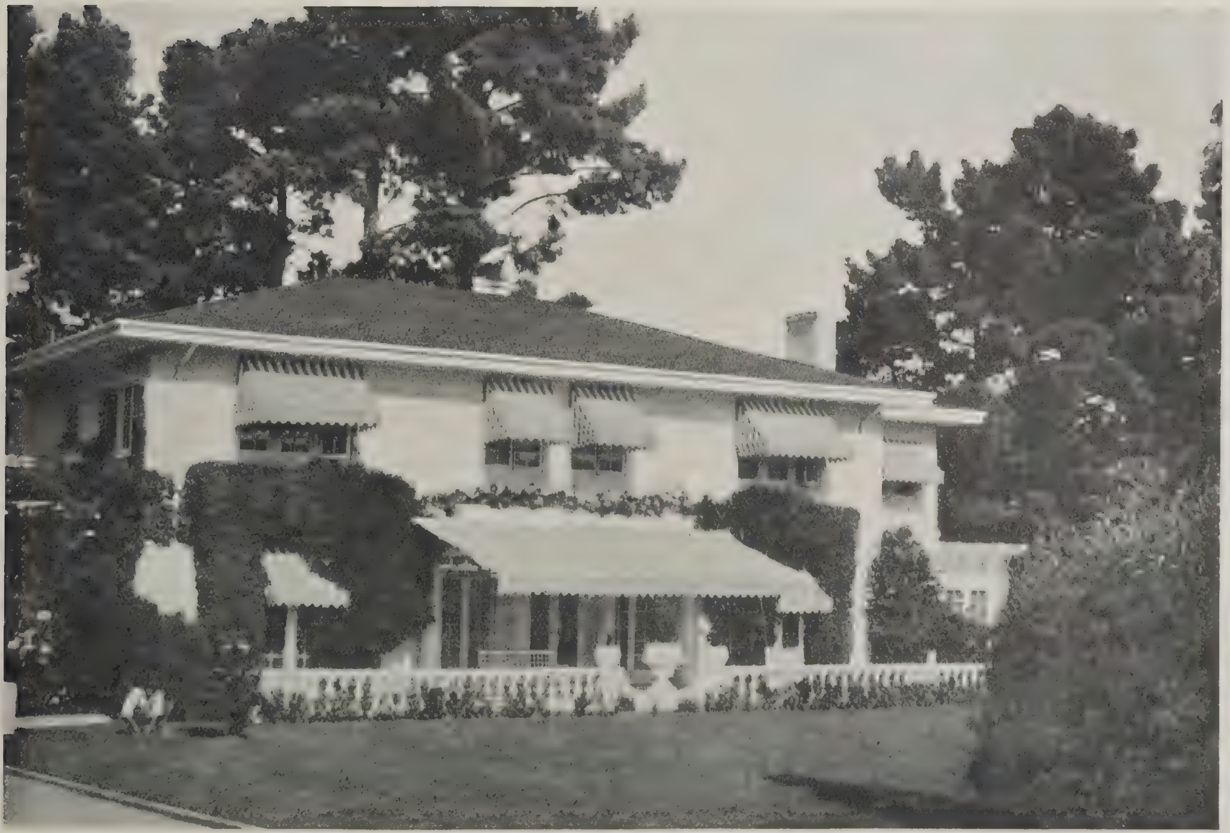
I should like, if possible, to contribute to the question whether life is more enjoyable in America or England. My answer to such a question would greatly depend upon the age of the inquirer. In general, I should say that America is the land to work in—that England is the land to live in. The foreigner after spending two or more years in England becomes greatly attached to it. He delights in returning home for a temporary visit, but there is something which makes him happy to come back to England. Perhaps the cause may be found in her multitude of quaint villages; her miles upon miles of evergreen hedges; her small, picturesque churches; her sooty buildings enveloped in a hazy atmosphere; and the traditions of her grand history.



WORKMEN'S COTTAGES IN LOS ANGELES, CALIFORNIA.



DETROIT GOLF CLUB, MICHIGAN: THE INTERIOR COURT.
ALBERT KAHN, ARCHITECT.



A TYPICAL HOME IN LOS ANGELES, CALIFORNIA.

## Contemporary Art

*The Burlington Fine Arts Club.*

There have been many tides in the affairs of the ivory carver since the first sculptor incised the first picture on a mammoth tusk, and the most important ebbs and flows are illustrated in the latest of the beautiful and instructive exhibitions of the Burlington Fine Arts Club. Most periods are illustrated whether as good or bad. The earliest pieces came from Archaic Egypt, from Minoan Crete and from Mesopotamia, but it is only from the beginning of the Christian era that the historical series can with any surety be intimated. The variations in quality and in quantity are considerable, the former due to the rise and fall of artistic ingenuity, the latter to fluctuations in commerce with ivory- and bone- and horn-producing countries. This latter, I remember, is well illustrated in recent years in Belgium, where ivory began to arrive in quantity from the Belgian Congo, a revival of the art speedily ensued.

The real gem of the whole collection is probably French of the eighteenth century: it is only 3¾ in. high on its mount of metal. It is a Head of Pau carved with such finesse as is seldom seen and yet broadly and naturalistically. A few eastern and west African items are incongruously included, but are exceedingly welcome for their intrinsic beauty.

*Walker Art Gallery.*

The water-colours of Agnes M. Ellis are pleasantly drawn scenes of pleasant places, mostly in the English Midlands: landscapes, little architectural things, such as Sulgrave Manor and some details of it; river scenes like "Shakespeare's River" and the "Banks of the Avon."

Frank Galsworthy paints flowers remarkably well. He is a realist and does not pretend to great artistry, like Fantin-Latour's, but contents himself with drawing flowers in masses, either growing in gardens or lingering in vases. He has, however, achieved an ambitious scheme which has its interest, both in its drawing and in its natural history. He has painted a vase of mixed flowers and fruits representing the eight months of the year, from April to November, which is offered at an inclusive price as a series.

*The Goupil Gallery.*

Never have the upper galleries at the Goupil been so gay. There are four painters represented, and each one rejoices in his work, and shows that he does. There is Orlando Greenwood in "Autobiography," bubbling over with evening gaiety; his "Muffin Man" is full of afternoon glee; his "Epris" full of morning glory. A gem of portraiture, called "Eric," a boy's head, is painted with a richness that is entirely pleasant, while the still-life studies that are now becoming so well known continue to increase in brilliance and in the humorous presentation of ceramic and other pieces of sculpture. The flower pieces, needless to say, are painted with a corresponding felicity.

There are two sets of water-colours shown, one spottesque, those of Alfred C. Bailey; the other blottesque, those of H. F. Williams-Lyouns. Both are good, both are vivid in colour, and assail the eye violently with their remarkably high tone.

A new personality is made known to London in William Conor, and a new kind of painting. The artist is a native of Belfast, and he has studied the types of his native city to the greatest advantage, for he makes them live and breathe and have their being in his remarkably vital drawings. Furthermore, he has invented a new sort of drawing technique in oil-paint, or is it a new sort of painting technique in line? It is new and strange and original, anyhow, and all there is to say against it is that the oils look like strong water-colour drawings, and the water-colour drawings are almost strong enough for oils. Apart from the actual technique of these many small works, there is their character: it is here that Conor makes himself felt as an original power. Irish humour we know, and Irish persuasiveness: these things are in all these drawings. It is not that deep analysis, the secret of which Rembrandt knew; it is just that clever apprehension of character that is the Irishman's basic trouble, and by which he is sometimes led astray. But it is enormously clever all the same.

*The Goupil Summer Exhibition.*

It would be difficult to arrange a more satisfying show with so few works in so little space than this, for there is great variety with a great display of talent and even some obvious genius. Never before has P. Wilson Steer's "Mrs. Hammersley" been seen to advantage, and this may explain somewhat why so fine a work has not been even more extolled. In it there is lovely portraiture and lovely painting; beautiful landscape; style, quality, and distinction. The eighteenth - century mannerism has been vindicated, and adjusted to the twentieth by an artist whose taste is impeccable and whose brush is sure. William Nicholson's "Cupids Fighting for a Real Rose" seems at first sight to be the next most distinguished picture in the show—it is, I think—but hesitancy over the affectation of the title succeeds in concentrating the attention on the perfunctorily painted rose, and the impression is squandered. There is a simpler quality in H. Davis-Richter's "Fruit Piece": it is remarkably skilful; it is quite unaffected; the painting is less cultured; the effect is less artificial; there is a remarkable diversity in the painting of still-life! Two interesting portraits in the exhibition are Charles Conder's "Sir William Orpen," a rich satisfying work, and Mark Gertler's "Servant Girl," in which the head is well and truthfully made. Walter Russell has a satisfying picture of "Boats at Shoreham," and there are two or three very pleasing landscapes of Buxton Knight's. In the collection of drawings none is more interesting than those of J. D. Innes, four early things that display remarkable talent, and none more accomplished than the delicious Cotswold drawing of P. Wilson Steer.

KINETON PARKES.

## A New Scholarship for Glasgow

Mr. John Keppie, F.R.I.B.A., of Glasgow, past-president of the Glasgow Institute of Architects, and formerly a member of the Council of the R.I.B.A., has made a gift of £3,000 to provide a scholarship to be held in alternate years by the most distinguished student of the Glasgow School of Art and the Glasgow School of Architecture.

## Industrial Lighting

Mr. L. Gaster, in reading a paper before the Royal Society of Arts, referred to several of the recent advances which had been made with regard to natural and artificial lighting in factories, and in particular to the study that had been devoted to the predetermination of natural lighting. The early part of his paper was devoted mainly to a consideration of how accidents may be caused by inadequate lighting, special reference being made to the effects of such lighting in causing "industrial fatigue." Statistics were available showing that accidents were most frequent in the dark winter months. The accidents rate in some industries due to "persons falling" was 100 per cent. higher by artificial light than by daylight. A series of researches made by the Industrial Fatigue Research Board had shown that in the fine linen and silk-weaving industries output was in general 10 per cent. less by artificial light than by natural light.

Mr. Gaster summarized the main essentials of good lighting, which comprised absence of "glare," sufficiency of illumination, and avoidance of troublesome shadows. He quoted the recommendations of the Home Office Departmental Committee on Lighting in Factories and Workshops on these points, and remarked that they could readily be fulfilled in practice. This was illustrated by a series of lantern slides, including a series of views showing the natural and artificial lighting conditions in the L.G.O.C. repair shops at Chiswick. It was mentioned that a number of American States possessed detailed codes on industrial lighting, that the subject was receiving attention by the Department of Industrial Hygiene of the League of Nations in Geneva, and that the French Ministry of Labour had appointed a committee to enquire into industrial lighting.

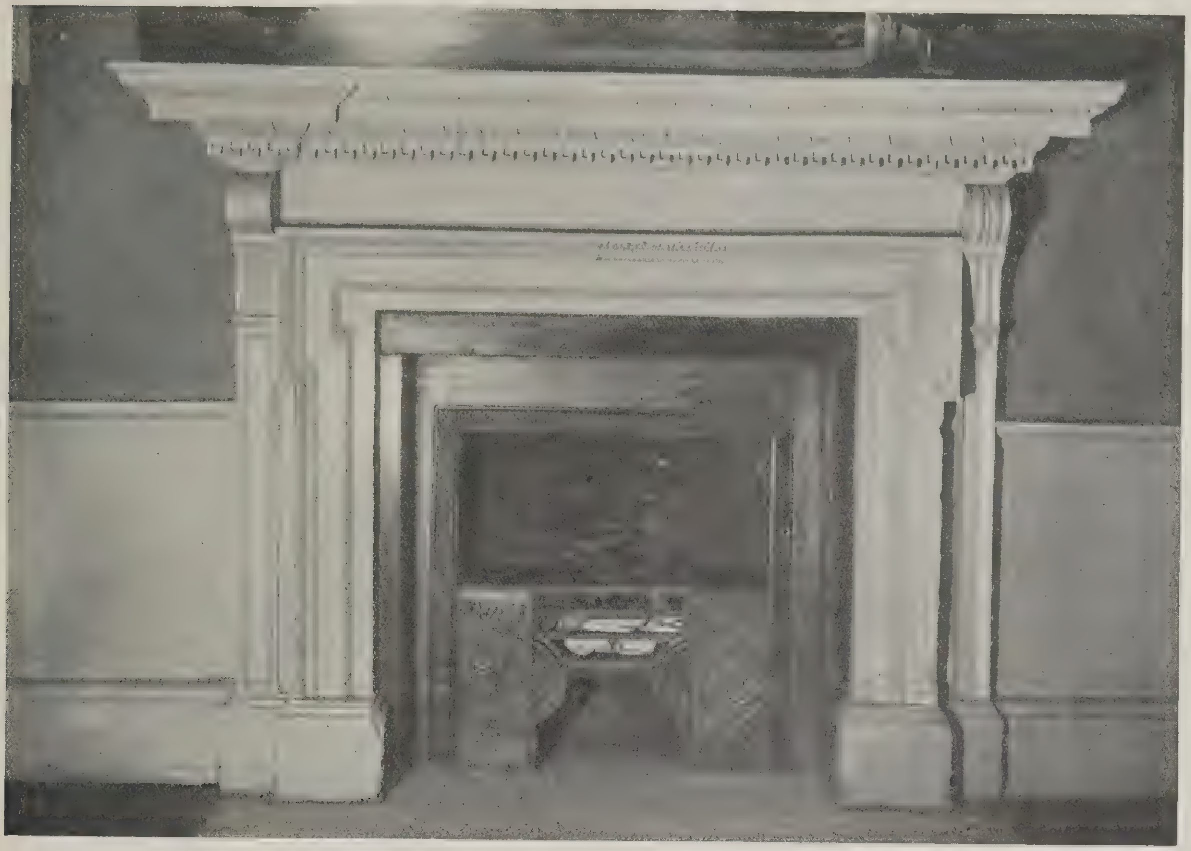
Mr. Gaster expressed the hope that in the near future the recommendations of the Home Office Committee would be included in the Factory Acts of this country, so that good lighting would be regarded, jointly with heating and ventilation, as essential elements in the equipment of the modern factory.

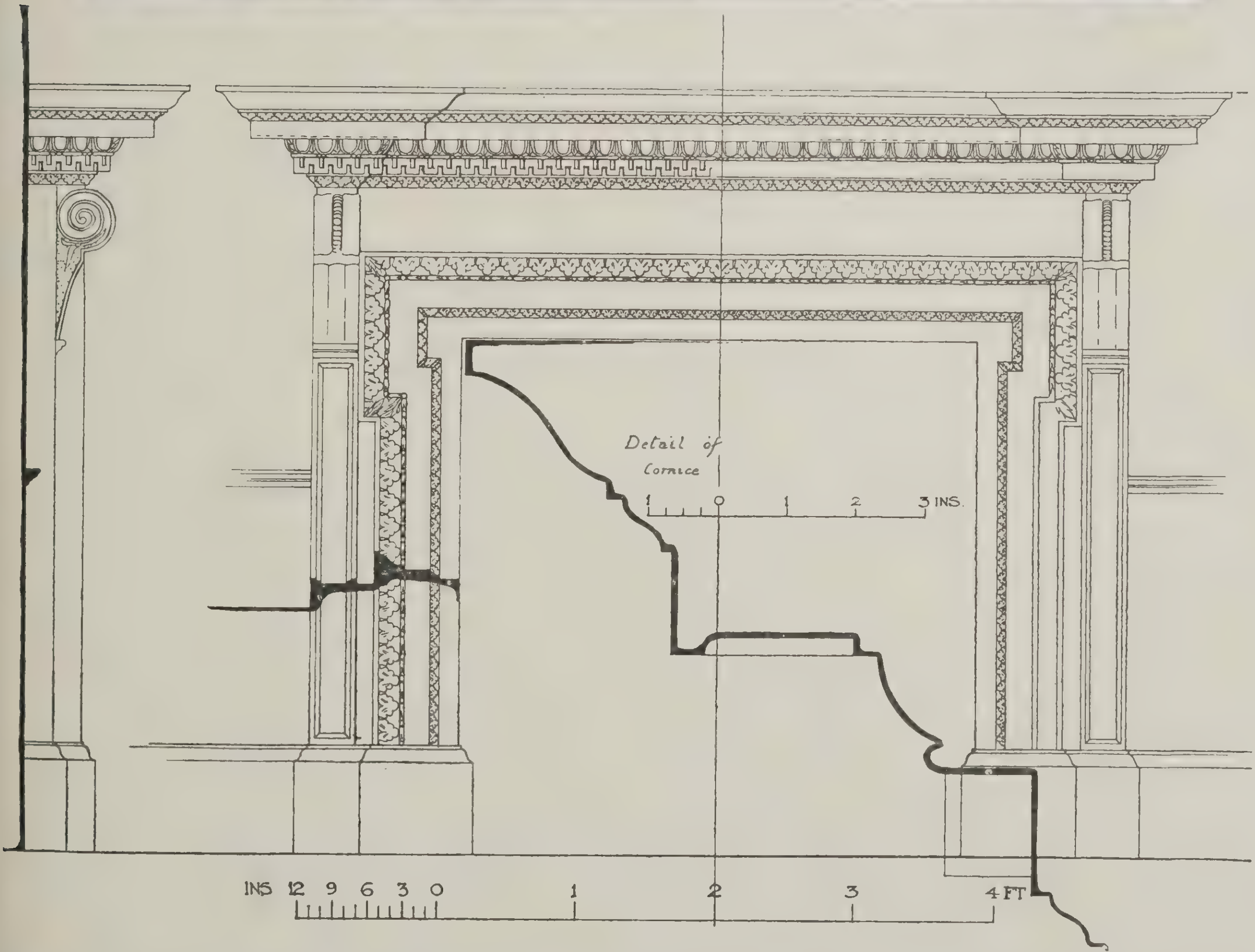
Sir Malcolm Delevingne, Assistant Under-Secretary of State, Home Office, who presided, remarked that it was no secret that the next Factory Acts would contain a provision requiring adequate and suitable lighting. He quoted the experience of the Home Office in approaching Joint Industrial Councils for their co-operation in dealing with lighting of their respective industries, and emphasized the need for propaganda and educational work in order that the importance of the subject might be generally appreciated.

Miss R. E. Squire, of the Home Office Factory Dept., gave some account of her experience in approaching factory managers with regard to industrial lighting. Other speakers mentioned instances in which very considerable improvements in output had been secured as a result of improved lighting.

# Measured Drawings. 33.—Eighteenth-Century Wood Mantelpiece, the Assembly Rooms, York

Measured and Drawn by D. O. Robinson





This wood mantelpiece is one of many fine mantels in the Assembly Rooms designed by the famous amateur architect the Earl of Burlington in the early eighteenth-century, when York, London, and Bath were the three social centres of England.

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# Law Reports

## ovenant to Repair—Important Point

*J. Harris & Co., Ltd.*, v. *Arthur A. Hathway.*

May 7. Chancery Division.
Before Mr. Justice Romer.

This case turned upon the construction be placed upon a covenant to repair tain premises at Dominic Road, Peckm. The plaintiffs, as lessors, sought ssession as against the lessee of the d and buildings, known as the Nelson rks, alleging a breach of a covenant the lease, which had ten years to run, ereby the lessee covenanted at his own t during the term of the lease to well substantially repair, uphold, mainn, amend, glaze, paint, pave, cleanse, keep the premises, together with lls, fences, gutters, sewers, drains, rs, ceilings, floors, etc., *in esse*, and do the necessary reparations, when, ere, and so often as required. It eared that in May, last year, the intiffs served the defendants with a ice in writing in pursuance of section of the Conveyancing Act, 1881, cifying the work which they required be carried out and gave the defendant ee months in which to do it. They imed that the schedule of repairs a reasonable one, and that the time it was reasonable, and said that the endant had only executed a small tion of the work.

he defendant contended that the mises were at all material times, and e now, in good and substantial state repair, and in every respect in conmance with the repair covenant in lease, and that the plaintiffs' schedule wholly unreasonable.

or the plaintiffs, Mr. James Watts Mr. Henry Watts, of Messrs. Watts Watts, auctioneers, etc., of St. rge's Circus, and Mr. Bernard Beres- Baddeley, of Messrs. Edwin Fox, mett and Baddeley, surveyors and tioneers, Fenchurch Street, stated t they applied a reasonable standard leciding what should be done.

n behalf of the defendant evidence given by Mr. C. Fuller-Hall, of ssrs. Fuller, Horsey, Sons and Cassell, iter Square, who stated that the mises were a workshop where rough k was done and were in a better conon than ninety-nine out of every dred factories he visited. It was not uilding in Berkeley Square, and the ntiffs were not entitled to have prees of this sort put into a state of olutely new repair. Ordinary fair r and tear should not be required to be laced except where something was ped. Plaintiff's schedule was unsonable.

r. Frederick Atkinson Powell, archi- and surveyor, Kennington Road, ough, S.E., agreed with this evidence.

n giving judgment, his Lordship said t although the plaintiff had estabed a breach of the general covenants repair, the defendant asked to be eved of his liability. The only two stions for him to decide were, first, t he was to do with the costs and on t terms the lessee should be relieved. He thought the plaintiff was as much to blame as the defendant, and there should be no order as to costs in the action. As to the terms of forfeiture he decided that the lessee should only be relieved when he had done so much of the work in Mr. Baddeley's report as Mr. Baddeley required on behalf of the lessor. He allowed two months for this to be carried out.

## Expiry of Lease—Far-reaching Decision on Tenantable Repair

*Gough-Calthorpe* v. *McOscar and another.*

May 10. King's Bench Division.
Before Mr. Justice McCardie.

This was an action by the Hon. A. Gough-Calthorpe against the two defendants, McOscar and Fordham, with regard to dilapidations to be made good at Nos. 17, 19, and 21 Calthorpe Street, Gray's Inn Road, on the expiration of the lease.

The matter came before the Court in the form of a special case stated by Mr. A. F. Brown, of Little College Street, Westminster, as arbitrator, and he stated that the lease expired in June 1919, having been granted in June 1824 for ninety-five years. It was not disputed that the measure of damages to be recovered by plaintiff for breaches of the covenant to repair was the cost of the repairs rendered necessary when the term ended by reason of defendants not having performed the covenant, but the parties differed as to the nature and extent of the repairs necessary for the due performance of the covenant. Defendants' submission was that their obligation was limited to carrying out only such repairs as, having regard to the age, character, and locality of the premises, would make them reasonably fit to satisfy the requirements of reasonably minded tenants of the class that would be likely to occupy the premises, and that the cost of the work necessary for that purpose was the measure of damages. Plaintiff's contention was that the true effect of the covenant was to render defendants responsible to do all needful and necessary acts well and sufficiently to repair the premises in the words of the covenant without limitation of such repairs as would satisfy the requirements of reasonably minded persons of the class likely to become occupiers of the premises. The arbitrator found that the tenants likely to occupy the premises would only take part of a house for short terms and would not accept any repairing obligations, and that the requirements of reasonably minded tenants of such class would not include many repairs which in his opinion were needful and necessary for the repair of the property. If plaintiff's contention were correct he estimated the cost of the repairs needful at £586, while if defendants' contention were right he estimated the cost of repairs at £220.

Mr. F. Hinde argued the case for the plaintiff, and Mr. Banks on behalf of the defendants.

In a reserved judgment his Lordship said the point at issue was the true measure of damages. Here the landlord said the true effect of the covenants was to make the tenant liable for all needful and necessary acts required to well and sufficiently repair the premises, which were the words in the lease. The tenants, on the other hand, said the covenant only threw upon them the burden of such repairs as, having regard to the age, character, and locality of the premises, would make them reasonably fit for the occupation of reasonably minded persons of the class likely to take the premises. The difference between the landlord's and the tenants' view was shown in most vivid fashion by the divergence between the amounts of £586 and £220. The lease was not unusual in its wording. After referring to the arbitrator's finding regarding the kind of tenants who would now take the premises, his Lordship said, in 1825, when the houses were built, they were in a semi-rural area and were dwelt in by people high up in the social scale, but with the growth of population the neighbourhood had changed, and it was now in the central part of a great city. The houses had become old. A century of time had done its work. The movement of events had brought many changes, and in the circumstances which of the two contentions put before him was right? The question was a difficult one, but after considering all the legal decisions bearing on the point he came to the conclusion that the contention of Mr. Banks, for the tenants, was right. His Lordship could see no distinction between tenantable repair and the words in the covenant now before him. "Repair" denoted or connoted that which was indicated by the words "well and proper," or "substantial," or "efficient," or "good," or "necessary." "Tenantable repair" was substantially the same thing as "good repair." Under those circumstances he gave judgment for the £220 only.

Judgment for plaintiff for £220, defendants to have the costs of the present hearing.

## Parliamentary Notes

[BY OUR SPECIAL REPRESENTATIVE.]

### *Unemployed Building Operatives.*

Replying to Mr. T. Thomson, Mr. Betterton, Parliamentary Secretary to the Ministry of Labour, said the total number of unemployed in the various branches of the building trades for each of the last three months was :—

| Occupation. | Numbers Registered as Unemployed at— Feb. 26 1923. | March 26 1923. | April 23 1923. |
|---|---|---|---|
| Carpenters | 14,166 | 12,122 | 11,185 |
| Bricklayers | 7,305 | 5,504 | 4,653 |
| Masons .. | 2,191 | 1,832 | 1,618 |
| Slaters .. | 772 | 709 | 628 |
| Plasterers .. | 2,644 | 2,486 | 2,305 |
| Painters .. | 27,748 | 16,687 | 11,253 |
| Plumbers .. | 4,780 | 4,354 | 4,317 |
| Labourers of above occupations .. | 60,237 | 53,595 | 50,111 |
| All other occupations | 18,380 | 16,215 | 15,646 |
|  | 138,223 | 113,504 | 101,716 |

(*Continued on next page.*)

*The D.B.M.S.*

Lord Eustace Percy informed Sir A. Holbrook that the department of the Director of Building Materials Supply had been abolished, and none of the officials of that department were retained. The work of clearing up the accounts of that department was being carried out by the staff of the Accountant General's Department of the Ministry. The cost of the staff at present engaged was £1,200 a month, which amount was being gradually reduced as the work diminished.

*The Price of Materials.*

Mr. Charles Roberts asked the Minister of Health whether the committee on the price of building materials had taken any action as regards the recent increase of prices quoted for various kinds of building materials by the firms included in the National Light Castings Association.

Mr. N. Chamberlain said the committee had asked for an explanation of the 10 per cent. increase, and a sub-committee was shortly going to Scotland to investigate the matter.

Mr. N. Chamberlain informed Mr. Hardie that the price of light castings had varied considerably since working-class houses were erected at a cost of £800 and £1,000 each. The price of light castings required for an average non-parlour house prior to the 10 per cent. increase by the trade would, however, vary between £20 and £25 per house.

*Smoke Abatement.*

Mr. Penny asked the Minister of Health whether, seeing that the local authorities in London did not appear to be prepared to initiate any action in regard to the question of smoke abatement, he had any intention of taking steps to alleviate the smoke nuisance, in view of the report of the departmental committee which had recently enquired into the subject?

Mr. N. Chamberlain said the Government proposed to introduce a Bill on the subject this session.

# Correspondence

## The R.I.B.A. Elections

*To the Editor of* THE ARCHITECTS' JOURNAL.

SIR,—There is an old Greek saying that "the looker-on sees most of life," and yet for one who has been a mere looker-on in architectural politics it is, perhaps, a little unkind to be critical of voluntary effort and service expended doubtless with sincerity of purpose.

The late Professor Donaldson had two architectural design maxims :—

(1) "Unity without variety produces insipidity."

(2) "Variety without unity produces confusion and distraction."

Will the Institute be allowed to reach the latter state?

The component parts of different variety once admitted into any design, under known regulations, after careful examination and placing to obtain unity in design, can only have additional parts admitted in so far as these comply, after examination, with the regulations of unity which obtained on admission of the other components.

To introduce extraneous forms, except under established regulation and careful examination, always results in a lack of unity. If there is already a partial lack of unity, one part fighting, shouting against another, the introduction of a whole army of parts violating the very principles on which the other components were admitted can only end in confusion and distraction.

Are the Unificationists, these men skilled in design, contemplating violating the principles of unity within the Institute?

To transfer the more predominant components to a higher position, even to symbolize inter-allied unity in design, will not assist the whole nor the inferior components left behind uncared for amidst crowded confusion and distraction.

Of course, one has yet to learn that the assumption of a mediæval shaft and cap would sufficiently tempt the pseudo-classicism of the extraneous forms, or perhaps it was intended to frighten them away. Forms are called to mind for which one would like to make such assumption compulsory.

Possibly there may be some, even though still doubtful whether the Institute is the proper authority for either Unification or Registration, who yet will feel that the safe course is to secure the election of a good proportion of the Council's House List.

NORMAN CULLEY.

*To the Editor of* THE ARCHITECTS' JOURNAL.

SIR,—Mr. Perks continues to pursue his policy of interminable wrangle mainly over details which really do not matter, and I am sure do not in the least degree interest the general body of members. His remarks, however, cannot at this stage be allowed to pass. That the *present* Practice Committee recommended the *present* Council to adopt a revised Code, as stated in my last letter, is now conceded by Mr. Perks, reluctantly it is true, and he adds "according to my note made at the meeting the majority was three." What matters it whether the majority was three or thirty-three?—the recommendation stands. Really this is wasting time and exhausting the patience of your readers.

I need not quote the next reference of Mr. Perks; it is on the same lines, and the above fact is not disputed. Mr. Perks desires me "to discuss facts"—a desire I shall not depart from—and then himself proceeds to discuss individuals! It is surely more in the interests of the profession to restrict ourselves to facts and principles. The general body must have had more than sufficient of the personal element.

Let us assume that the Royal College of Surveyors, the Society of the Bar Council, and the other learned societies quoted by Mr. Perks do not, in fact, desire for their respective societies a code. Very well, that is their affair and has nothing to do with us. Surely that is not an implied reason why the Council should delete from our Kalendar a Code which has been published for years—in various forms, but in substance the same—as a guide to the members of our profession. Instead of quoting these learned societies, Mr. Perks would, I suggest, be more to the point if he could state that there is within our Institute a substantial body of opinion against a Code. Of this I think there is no evidence.

After this, Mr. Perks states that his opponents are hard up for a case against the present Council! It is not for me to judge, but the remark is not without humour.

HERBERT A. WELCH.

## "Ready-made Houses"

*To the Editor of* THE ARCHITECTS' JOURNAL.

SIR,—I can conjure up a picture of the Editor of THE ARCHITECTS' JOURNAL writing, for his issue of May 30, his leading article headed "Ready-made Houses." I would picture his brow furrowed as he realizes that 1,200 words will fill his page, though the limitation may impose necessity of omission of more than one reasoned and weighty argument against the spread of the evil to which his pen is poised to point. He selects lack-of-individuality-in-design and discomfort-to-the-occupant as his avenues of advance attack. His main cohorts are brought up by the way of lack-of-permanence and non-solidity. Though too circumscribed as to space to allow of dealing with the vital factor of exterior-appearance, his pen cannot avoid indirect mention of that all-important subject. The ready-made house will not "harmonize with its natural surroundings." It will not do to let it go at that. The point merits your further attention, Mr. Editor!

Is beauty of exterior of the home no permanent asset to its habitants? Who is blind to the value of colour? What would we have the world become? Because we of this generation must struggle under an overwhelming burden that often blinds us to all but material needs, must we condemn our progeny to the sordid outlook and viewpoint of an era of trial and worry? Is the artistic, the beautiful, the æsthetic, to be definitely shelved?

The Editor asks, "Why build a house like a dug-out?" I ask in supplement, "Why finish the exterior of a house like a block-house in the Flanders of 1917?"

FREDERIC COLEMAN.

[The leading article to which our correspondent refers set out to attack the principle of ready-made houses only. It was not concerned to recommend any particular kind of finish for permanent exteriors.—ED. A.J.]

## Coming Events

*Thursday, June 7.*

British Museum.—"Dynamic Symmetry." By Miss Claire Gaudet. 3.15 p.m.

*Friday, June 8.*

Town Planning Institute. — Annual Meeting. 6 p.m.

# Book Reviews

## ,eryday Life in the New Stone Age

Ir. and Mrs. Quennell follow up the lication of their first volume in ssrs. Batsford's "Everyday Life es" by a second dealing with the r stages of the prehistoric era.

t is a far cry back to the New Stone , and in the ensuing six thousand rs we have been busy finding out many ess new things and forgetting many ul old. If one could exercise the ched judgment of a god, we should bably find that art had advanced not ll. Or else our opinion is influenced he clever and beautiful sketches of the ors, which perhaps make things of new stone age appear more delightful they really were. For instance, it ld be difficult to beat the late Celtic erns of the Early Iron Age illustrated igure 89, or the enamelled harness ment in figure 85, and the wattle-daub buildings must have been in-ely more picturesque than many of Government housing schemes of to- Mr. and Mrs. Quennell must either ede the point or accept the compli-t.

e authors probably found the writing is little volume as pleasant as was reading, and we hope that they will eep us waiting long for the continua- of this fascinating story.

veryday Life in the New Stone, Bronze, and Early ges." Written and illustrated by Marjorie and . B. Quennell. London: B. T. Batsford, Ltd. 5s.

## Municipal Directory and Year Book

e Empire Municipal Directory and Book, 1923–24, which covers the al year of local authorities (April 1, , to March 31, 1924), sums up oritatively the position with regard uch prominent subjects as road ruction, sewage disposal, water sup- lighting, concrete, public health, and rotection. This directory and year is now in the forty-first year of cation, and is an encyclopædia of cipal, highway engineering, and c health work. As far as we are e it is the only publication of its which contains complete and re- lists of all corporations, county, and rural district councils in Great in, Ireland, and all our Overseas inions, and the classification is made lete by a list of names (officially cted to date) of county and munici- ficials and a list of local undertakings d by each council.

the articles have been written by lists. The new features include lists niversities and colleges granting es or diplomas in public health and eering, labour-aiding appliances for ay work, and the principal systems nstructing hard tennis courts. By g also as a diary the book commends as an indispensable desk companion l concerned in municipal work, er as officials or firms, who do or to do business with local authorities.

Empire Municipal Directory and Year Book." s. post free. 8 Bream's Buildings, Chancery .C.4.

## Structural Design

This book is descriptive of the abstract pre-war structural theory and practice which relied more upon printed authorities than upon the results of basic proofs of the accuracy of theory and of tests of destruction. War-time experiences have enforced a very critical outlook. Tests of destruction in the field and, later, the increasing demand for economy caused by the scarcity and cost of materials and labour, taught many architects much of the real nature and limits of the forces to which structures are exposed, and enjoined a healthy spirit of doubt as to the real necessity for many of those mistaken and extravagant rules which they had been taught to revere.

The search for economical methods of building small houses has revealed the fact that many practices which would in 1914 have been condemned without hesitation as jerry building, were really perfectly safe and reliable, being, in fact, survivals of the fine old structural craft which at one time flourished in this country when men worked more to models and full-size tests than to drawings and mathematics; a craft which was almost completely barred under the shower of printed rules and gathered sciences which followed the Renaissance.

The designer could examine and, if necessary, criticize some of the basic principles of pre-war practice with the aid of this volume. A title which would more accurately have described the scope of the work could, perhaps, have been selected; but no one would expect to find the theory and practice of structural design compressed into one volume of moderate size, and no reasonable purchaser should therefore be disappointed to find it leaves a great deal of ordinary theory unexplained.

There is no doubt that the views which the author puts forward are pre-eminently safe and have behind them a considerable value.

"Structural Design in Theory and Practice." By Henry Adams, M.I.Mech.E., F.S.I., F.R.San.I., F.S.Arc., etc. 248 pages, 375 illustrations. Constable & Co.

## The Components of a House

When the opposite processes of analysis and synthesis can be made complementary to each other the most effective method of instruction is attained. It is the most effective method because it is the most natural method. It is the way of a child with a dissecting picture or building blocks; and this reference is by no means derogatory—quite the contrary, for the method by which a child is fascinated, and by which he willingly acquires knowledge, is presumptively an effectual method. Analysis and synthesis—in plain English, pulling a thing to pieces and putting it together again—is an exercise that is at once enlightening and delightful. Many and various are the models that have been designed to accommodate this natural proclivity; nor is building construction excluded from the list. In classes where architecture and building construction are studied it is a common practice to exhibit dissecting models (in three dimensions) of which the components can be taken apart and examined separately, so that the student can be, alternately and at short intervals, both house-breaker and re-builder.

Rather less efficient are the models in flat cardboard, which, in the nature of the case, can be at best but little more than graphic, yet are still stimulative. While the method of presentment adopted by Mr. Gourlay, in his book on "The Construction of a House," suffers but little in comparison with the other two aids to study, and, indeed, offers certain compensatory advantages, it is more compact, and there are no loose pieces to get lost or mislaid, as loose pieces always will. Besides, architects must necessarily acquire the habit of reading into three dimensions what is presented to them in two, and they cannot begin the practice too early. Not the least of the virtues of Mr. Gourlay's book, which we welcome in a new and revised edition, is that it certainly fosters this habit, giving the young architect abundant material for gradually "learning to read" in the architectural sense. Beyond that, he may also learn from this book all the details of building that can be comprised in a single comprehensive structure. The book begins with the foundations and finishes with the roof, and, in a series of forty large plates of excellently legible drawings, describes in full detail every item on which the architect and the builder may be required to exercise knowledge and skill, "The Construction of a House" being interpreted by its author in the fullest sense possible, so that the architectural student may "read off" every detail of arrangement and construction. Emphatically a useful book for the practising architect, as well as the student in training.

"The Construction of a House." Being the Study of Building Construction presented by means of a set of forty Plates containing Plans and Detail Drawings, with Letterpress, of a Design for a Country House, including Motor House and Chauffeur's Lodge. By Charles Gourlay, B.Sc. (Glasgow University), F.R.I.B.A., Architect, Professor of Architecture and Building in the Royal Technical College, Glasgow. Second Edition, Revised. London: B. T. Batsford, Ltd., 94 High Holborn, W.C.1.

## Publications Received

"House and Cottage Construction" by Harry Bryant Newbold, M.S.A. (Past Member of the Council); Organizing and Editorial Secretary of the National Federation of Building Trades Employers of Great Britain and Ireland; Editor of "The National Builder." With special chapters by Guy Cadogan Rothery, part author of "The Modern Painter and Decorator," etc., etc.; Paul Willoughby, F.S.Arc.; E. W. King, Past-President, South Wales Federation of Building Trades Employers; E. J. Strange, Past-President, Institute of Builders, M.R.San.I.; and A. C. Martin, A.R.San.I. Price £2 18s. 6d. the set of three volumes. The Caxton Publishing Company, Limited, Clun House, Surrey Street, W.C.2.

"The Prevention of Vibration and Noise." By Alec B. Eason, M.A., Assoc.M.Inst.C.E., A.M.I.E.E. Price 15s. net. Oxford Technical Publications, 1 and 2 Bedford Street, W.C.2.

# Competition News

## Prestwich Shops Design Competition

Mr. A. Brocklehurst, of Manchester, the assessor in the competition, promoted by the Prestwich Co-operative and Industrial Society, Limited, for designs for five shops, has made his awards as follows :—

First.—Mr. John B. Thornley, of Darwen and London, who will be appointed to carry out the work.

Second (Fifty Guineas).—Mr. William Bradley, Acresfield, Bolton.

Third (Twenty-five Guineas).—Mr. A. Schofield, 30 Houghton Street, Southport.

The site of the shops is at the junction of the Bury New Road and Fairfax Road, Prestwich, and on the main road to Manchester. The winning design is shown on the accompanying illustration. On the ground floor are the drapery and millinery, boot and shoe, outfitting, tailoring, and confectionery departments, work rooms, unpacking and store rooms, and lavatory accommodation; and on the upper floors the café, ante-rooms, kitchens, etc., which communicate with the café and have a separate entrance from Bury New Road, drapery and millinery and furnishing departments, and workrooms. The building will be of brickwork, faced with light terra cotta, roofed with slates, and generally constructed of steel frame and fireproof materials. Heating, lighting, and ventilation will be on modern lines.

## Yeovil Burial Ground

Members of the Society of Architects are notified that the conditions of this competition are not in accordance with the regulations, and they are requested not to take part in the competition without first ascertaining from the secretary that the conditions have been approved by the Council.

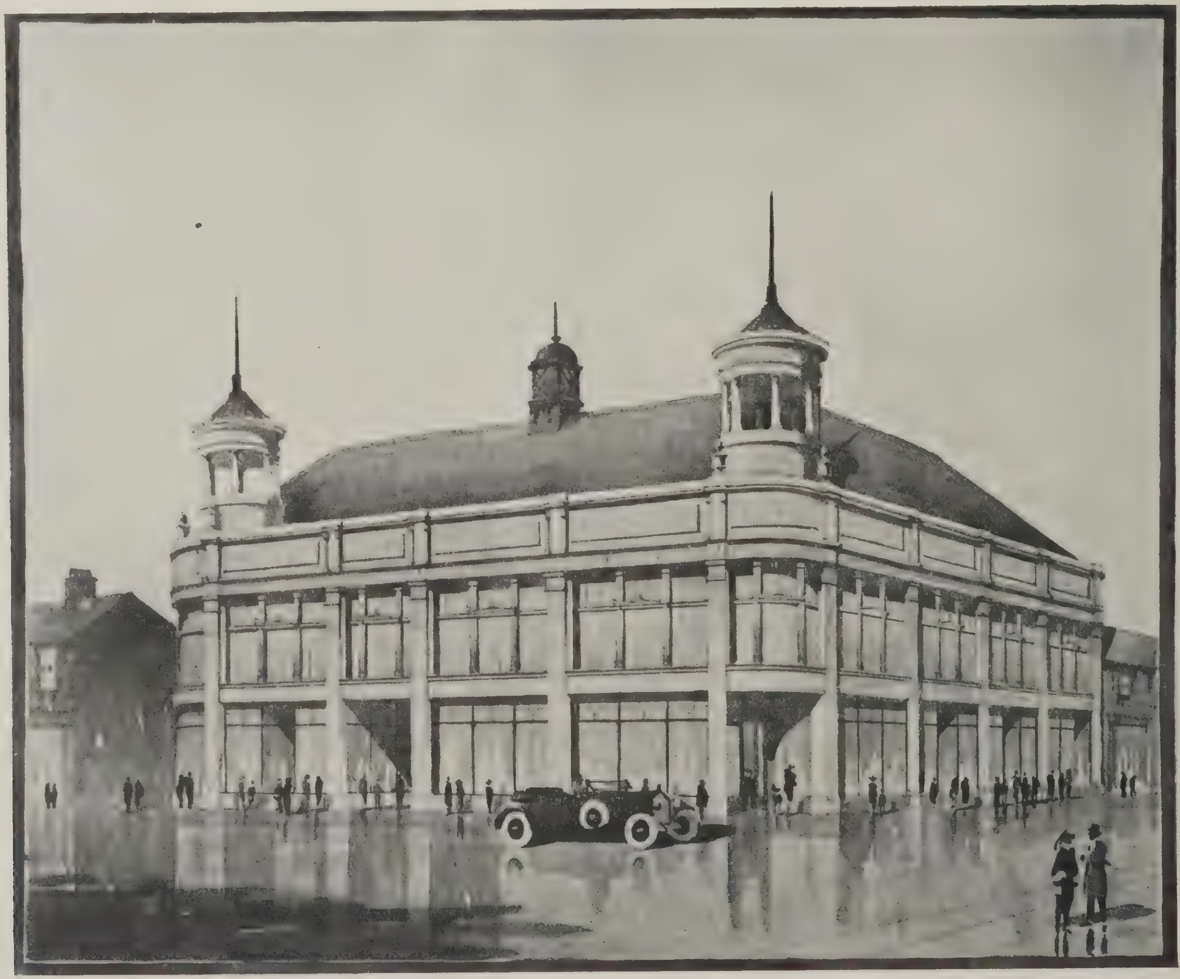
## Leigh-on-Sea Baptist Church

The following notice has been issued by the R.I.B.A. :—"The Competitions Committee desire to call the attention of members and Licentiates to the fact that the conditions of the above competition are not in accordance with the regulations of the R.I.B.A. The Competitions Committee are in negotiation with the promoters in the hope of securing an amendment. In the meantime members and Licentiates are advised to take no part in the competition."

With reference to the above competition the Society of Architects have also notified their members as follows : Members of the Society of Architects are notified that the conditions of this competition are not in accordance with the regulations and they are requested not to take part in the competition without first ascertaining from the secretary that the conditions have been approved by the Council.

## List of Competitions Oper

| Date of Delivery. | COMPETITION. |
|---|---|
| June 12 | Concert Pavilion, Bournemouth, to seat 2,000 Estimated cost £100,000. Assessor, Si Edwin Cooper, F.R.I.B.A. Premiums: £300 £200, and £100. Apply Town Clerk, Municipal Offices, Bournemouth. Deposit £2 2s (cheque). |
| June 30 | National War Memorial at Melbourne t cost £250,000. Competition, in two stages Apply Agent-General in London, Victori House, Melbourne Place, Strand. Deposit £2 2s. |
| June 30 | Pavilion to serve as Public Hall at Largs Premium £25. Apply Mr. Peter Morris Town Clerk, Largs. |
| July 3 | Pavilion in Calverley Gardens, Tunbridg Wells. Assessor Mr. E. Guy Dawber, F.S.A. F.R.I.B.A. Premiums £150, £100, and £50 Apply Town Clerk. |
| Aug. 25 | Public Swimming Baths and Washhouses East Greenwich. Assessor, Mr Henry V Ashley, F.R.I.B.A. Premiums: £300, £20 £100. Apply Mr. Frederick J. Simpson Town Clerk, Town Hall, Greenwich. |
| Sept. 30 | Designs for a series of plaquettes in bronz illustrative of London as the capital city o the Empire, or of one or more of her mai architectural features. Designs should b submitted in the form of models in plaste The following prizes are offered:—On prize of 100 guineas, two prizes of 50 guineas three prizes of 25 guineas. Apply Deput Master of the Royal Mint, London, E.C.1. |
| Nov. 5 | Art Gallery for Hull. Assessor, Mr. John W Simpson, PP.R.I.B.A. Apply (with chequ for £2 2s.) to Mr. H. A. Learoyd, Tow Clerk, Guildhall, Hull. |
| No date | Designs for lay-out of about three acres c land as burial ground at Yeovil. Premiu £20. Apply Mr. H. C. Batten, Clerk to th Burial Committee, Yeovil. |



PRESTWICH SHOPS DESIGN COMPETITION: THE WINNING DESIGN. JOHN B. THORNLEY, ARCHITECT.

# Obituary

*The late Sir Ambrose Poynter.*

It is with great regret that we record
e death of Sir Ambrose Poynter, Bt., at
e age of fifty-five. He had a serious
eakdown from overwork last year, and
.d to go abroad for a complete rest, but
was evident when he returned about six
eeks ago that there was no permanent
provement. "The Times," in reporting
s death, says: The elder son of Sir
lward Poynter, first baronet, and
esident of the Royal Academy, Am-
ose Macdonald Poynter was born on
ptember 26, 1867. His mother was
nes, daughter of the Rev. G. B.
acdonald, Wesleyan minister; her three
ters married respectively Mr. Alfred
ldwin, Mr. Lockwood Kipling, and
E. Burne-Jones. Sir Ambrose was,
erefore, first cousin of the Prime
nister and of Mr. Rudyard Kipling.
. C. F. Bell, of the Ashmolean at Oxford,
s also a first cousin, his mother having
en a sister of Sir Edward Poynter. Sir
nbrose inherited from his grandfather
th his name and his profession. The
er Ambrose is chiefly remembered as
designer of St. Katherine's Hospital,
gent's Park. From his more illustrious
her it may, perhaps, be said that he
rived that discriminatory scholarliness
ich formed such a conspicuous part
his artistic personality. From Eton,
went on to South Kensington and the
yal Academy Schools, and was articled
G. Aitchison. He began practice as
architect in 1893, and produced
signs as various as they were dis-
guished, but it is to be regretted that
ring an unusually busy career it was
er his good fortune to carry out a single
rk on such a scale as to leave perma-
it proof of his undoubted genius. More
n once did he come within tantalizing
tance of a signal achievement, as when
was awarded the second premium in
Stepney Town Hall competition. To
se who have seen his designs for a
tinguished American diplomat's resi-
ice on Long Island, it must be a matter
sincere regret that more of his work
s never translated into bricks and
ne. Yet such was the knowledge, the
te, and the frank enthusiasm with
ch he approached every task that
n the smallest product of his hand
ealed an exceptional mastery of his art.
he opening of his career was aus-
ous; in a great international compe-
on for a clock-tower at Buenos Aires
was placed first, with a design which
father is reported to have described
the finest structure of that kind con-
ed since the fifteenth century. Among
other work carried out by him before
entrance into partnership with Mr.
nyon in 1913, are Vernon House, now
premises of the Over-Seas Club, which
remodelled for the late Lord Hilling-
; Polesden Lacey, where the Duke and
hess of York spent their honeymoon,
the balustrade outside the Athen-
a, executed in white and green mar-
, which he designed in collaboration
n Sir Lawrence Alma-Tadema. Since
3 a considerable body of smaller work
ery great merit came from his office.
exquisite mausoleum was erected by
for Sir Charles Walston in the latter's
inds in Cambridgeshire; and for
srs. Jardine, Matheson & Co. he
gned an impressive war memorial, with Mr. F. W. Pomeroy, A.R.A., as sculptor. The war memorial of the Society of Architects is also his work. Among his smaller memorials, perhaps the most delightful is one for Paisley Abbey, incised in slate with coloured bearings and lettering of great beauty. The memory of the late Sir Gerard Lowther was fitly perpetuated by him with mural tablets in St. Paul's Cathedral and in the Lowther Chapel in Cumberland.

Poynter was also a writer of a vivacious erudition, and at the time of his death was engaged on a large work dealing with the Italian Renaissance. During the war, in which he did good service as a lieutenant in the R.N.V.R., he published "The Coming War," in which he described the larger conflicts that would, he predicted, succeed the upheaval which was then convulsing Europe.

*The Late Mr. E. Keynes Purchase.*

The death of Mr. E. Keynes Purchase, F.R.I.B.A., F.S.I., senior partner in the firm of E. Keynes Purchase and Roland Welch, has occurred at the age of fifty-one. He was educated at Christ's College, Brecon, and Amersham Hall, Reading. On leaving school he became articled to Mr. T. Nicholson, F.R.I.B.A., a diocesan architect in Reading. He started in practice in London on his own account in 1886, and became a Fellow of the R.I.B.A. in 1906. His commissions included many business premises, factories, and residential houses in London and the country. Among the more prominent were Aldine House, Bedford Street, Strand; the Palm Courts in the Cecil Hotel, Strand; the Regent Carriage Co.'s factory, Fulham Road; the Baryta factory, Watford; a block of flats at 51A South Street, Mayfair, and Hay Green, Kingston Hill. He was joint architect with Messrs. Mewès and Davis for the Royal Automobile Club in Pall Mall.

# The A.A. New Council

At a meeting of the A.A. held on Wednesday evening last, the president, Mr. Stanley Hamp, F.R.I.B.A., announced that the result of the election for the officers and council for the ensuing session was as follows :—

President, E. Stanley Hall, M.A., F.R.I.B.A.; vice-presidents, Gilbert H. Jenkins, L.R.I.B.A., H. S. Goodhart-Rendel; hon. treasurer, L. S. Sullivan, A.R.I.B.A.

Hon. editor "Architectural Association Journal," Manning Robertson, A.R.I.B.A.

Hon. librarian, J. Alan Slater, M.A., A.R.I.B.A.

Hon. secretary, M. T. Waterhouse, A.R.I.B.A.

Past president, Stanley Hamp, F.R.I.B.A.

Ordinary members of Council: W. H. Ansell, A.R.I.B.A., F. C. Eden, M.A., C. L. Gill, F.R.I.B.A., P. D. Hepworth, A.R.I.B.A., E. J. T. Lutyens, A.R.I.B.A., A. H. Moberley, F.R.I.B.A., T. S. Tait, A.R.I.B.A., M. J. Tapper, A.R.I.B.A., Philip Tilden, C. Cowles Voysey, A.R.I.B.A.

After proposing a vote of thanks to the retiring members of the Council—Major Barnes, Messrs. W. G. Newton and H. I. Merriman—the president announced that a new magazine to be called "Harlequinade" was being launched by the school. The annual excursion, he said, would be held at Avignon and district for ten days, commencing September 6. He hoped that a large number of members would take part in the trip.

THE LATE MR. E. KEYNES PURCHASE, F.R.I.B.A.

## Modern Swedish Architecture

The old architecture of Sweden is richer and more diversified in character, but has less unity than that of Denmark, with which it is generally compared. This, says Mr. August Brunius, in an article in "The Times" Swedish Supplement, is due to both material and spiritual causes. On the one hand to the way in which Sweden stretches out northwards and southwards and to the dissimilarities in scenery and in climatic conditions resulting therefrom; and to its wealth in building materials, whether of wood or stone or brick. On the other hand, to the multiform influences exercised at different ages by other countries—by England and Germany in Gothic times, by Italy during the Renaissance, by Holland during the Baroque period, and by France during the eighteenth century.

He says: The nature of the inhabitants and their ways of life have had much to say to the types and peculiarities of Swedish buildings, and one sees the effect upon them of the great differences (more pronounced than in Norway) between townsfolk and countryfolk and between the upper classes and the lower classes. Take, for instance, the most primitive form of architecture. You will obtain a strong impression of the almost personal distinctiveness both of Swedish buildings and of Swedish landscapes from the contrast between the typical home of the humble worker in Skåne, a cosy little cottage with thatched roof and whitewashed walls, and the big, two-storied many-roomed, brown-painted, timbered dwelling of the northern farmer. One may note similarly immense differences, both as regards exteriors and interiors, in homes of a higher order, from the wooden houses of the small towns painted red or yellow, and the little country homes, scarcely more pretentious than farmhouses, up to the Royal palace in Stockholm or the old castles dotted about the country, many of which by their beauty and distinction will stand comparison with the most famous examples of such architecture to be seen anywhere in the world. Modern Swedish architecture may be traced back to the period of Gustavus Vasa's sons, men of culture and lovers of the beautiful.

Both modern and old buildings in Sweden have a strongly marked cubic effect, with ornamental designs grouped for the most part round the entrances. Westman's Law Courts in Stockholm and Ostberg's Stadshus (Town Hall) in Stockholm—the latter building to be formally opened next midsummer—are impressive examples of this new feeling for the old Swedish qualities, simple and monumental. With Westman this national type has taken on a severer, barer form; with Östberg it has developed into a certain magnificence, "a grand manner," in which, in a veritably Swedish way, the North is made to blend with the South. Ever since the sixteenth century Sweden has sought in many fields of activity to assimilate southern forms of culture, Italian and French. Östberg's Stadshus stands by the side of the water—water always playing a very characteristic part in the composition of Swedish cities. It faces the sun and the sea with a splendid massive colonnade somewhat reminiscent of the portico of the Doge's Palace at Venice. But in the variety of treatment of the great edifice, its central court and galleries and tower, the architect has had in mind the ancient castle of "Tre Kronor" ("Three Crowns"), details of the exterior of which are to be seen in old plans and engravings.

The work of both these architects is, so to speak, bound up with the creation of a new and very well-organized brick manufactory, one branch of which is in Skåne, the other in Mälar, close to Stockholm. This industry has provided them with a dark-toned brick, finished by hand, available for the façades of their buildings. These bricks give a romantic touch to their work which helps to single them out still further from among their contemporaries. Entire new quarters of Stockholm and Gothenberg have acquired their special character from the use of this new species of coloured brick.

Other monumental buildings belonging to the same period are Grut's Stockholm Stadium, a practical and very remarkable solution of modern architectural problems, and Lallerstedt's Technical High School, also in the Swedish capital.

The younger generation of architects have shown a manifest dislike for this kind of rich-hued, stately style, with its reminiscences of mediæval Sweden, and they have turned with more sympathy to the eighteenth century with its yellow-surfaced burgher houses and its French symmetry and simplicity. Classicism appears to have come back to Sweden just now—to the whole of Northern Europe indeed, and with renewed strength; and this because of the more rational methods now in use as compared with those of the academical and theoretical architects of earlier periods.

Typical of this new turn towards the classical are some buildings by Ivar Tengbom, Carl Bergsten, and E. G. Asplund. Tengbom for his Enskilda Bank in Stockholm made use of Swedish granite and different kinds of limestone (in the interior also) and has displayed a mastery similar to that of Östberg in his use of brick. Bergsten also has allowed polished surfaces to come to their own again. Generally speaking, Stockholm is a city of neutral-toned buildings, grey or brown, with polished surfaces. The latest architectural style is inclined to discard colour. It borrows its formula from the monumental styles of Egypt and Rome.

The architecture of the Gothenburg Exhibition buildings, designed by Arvid Bjerke and Sigfrid Ericson, of that city, also displays a new and fresh feeling for the classical—large, unornamented wall-spaces, slender colonnades, low cupolas, etc. It is all in a brighter, livelier, and more fanciful style, however, than the academical Classicals ever dreamt of. On the other hand, the old slavish, entirely imitative, Classicism also is coming in. So it happens with all new movements—they are always accompanied by tendencies to caricature or vulgarization.

The younger Swedish architects have not the same scope for monumental achievements as their predecessors. They find their most important tasks in standardization; in the construction of small practical apartment houses, small villas, and the modern farmhouse. It is noteworthy, as marking yet another step away from individualistic Romanticism, that since the war the Swedish architect should have had to devote his attention to this standardization of types. The individual and the aristocrat have become rarities as home-owners, and the architect has now to cater for the average requirements of whole communities; a state of things existing equally in England. Indeed, it looks as though the modern engineer might presently enter the field as rival to the architect, and there is even reason to fear lest some of the finer qualities of architecture may not have to be sacrificed to utility. But at least much trumpery ornamentation and misplaced fantasy will disappear at the same time.

In Sweden this tendency of the times is counterbalanced by an increase in technical efficiency, a systematic co-operation between all the elements of the building trade and an artistic enthusiasm and resourcefulness which bid well for the future. In spite of everything, therefore, one is justified in believing in the importance of the forces of the mind even in an age which is putting forth all its efforts to cope with material depression.

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## The Surveyors' Institution

The year dealt with in the fifty-fifth annual report just issued by the Council must always stand in a somewhat exceptional position in the annals of the Surveyors' Institution. During it the first real steps were taken to secure by legislation that persons practising in the profession should possess certain definite qualifications for their work. The Landed Property Practitioners (Registration) Bill was prepared by a Joint Committee of the Institution, the Auctioneers' and Estate Agents' Institute, and the Land Agents' Society. It was submitted in its draft form to the members of those bodies, and received substantial and general approval. The support of a number of members of Parliament was obtained, and several put down their names for the ballot for Private Members' Bills at the opening of the present Parliamentary Session with the object of introducing the Bill if a favourable place were obtained. Of these Sir Edgar Chatfeild Clarke, M.P., a brother of the late President of the Institution, drew the best place in the ballot.

The Bill was introduced on February 16, and was then printed and circulated by order of the House. It was put down in the Orders of the Day for Second Reading on April 27, but unfortunately was preceded by the Prevention of Unemployment Bill, the discussion on which proved so prolonged as to occupy the whole of the available time. In the circumstances further progress is not likely to be made with the Bill during the present Session. Its introduction, however, has served a useful purpose, and has enabled the promoting bodies to ascertain the quarters from which opposition might be anticipated, and to what extent, if any, such opposition might be removed by the acceptance of reasonable amendments.

A good start has, however, been made, and the Council are greatly indebted to Sir Edgar Chatfeild Clarke and the other supporters of the Bill for their services.

The statistics of membership of the Institute continue to show an increase, the total being 5,894 compared with 5,728 at the same date in 1922.

# hysical Properties of Clay

Mr. A. S. E. Ackermann has been at rk for nearly six years on "The ysical Properties of Clay," and has ently sent us a copy of his fifth paper the subject to the Society of Engineers c.). This one includes a section on the namics of pile-driving. There are ny matters of interest to architects l engineers in these papers, and we ght mention especially the phenomenon ich the author has called the "pressure luidity" of clay, as this is of direct and ctical importance in the case of ndations.

He has found that, if a disc is placed clay, and suitable increments of load put on the disc, a certain critical load inally reached which causes the disc penetrate into the clay (apparently efinitely) without any further incre- nt of load. This phenomenon has e been confirmed by two or three er experimenters. The pressure of dity depends entirely on the per- tage of water in the clay. It has also n found that plastic metals exhibit same phenomenon, but, of course, critical loads in their cases are very ch greater. An hypothesis has been en by the author to explain the nomenon, and though the reasoning arrive at this is somewhat complex final result is remarkably simple, for embodied in the equation :

$$p=3{\cdot}68c+5{\cdot}21f,$$

re,

=the pressure of fluidity;

=the cohesion or tensile strength of material;

$f$=the shearing strength of the material, all the stresses being in kilos. per sq. cm.

One of the most important commercial properties of clay is its plasticity, but, though those skilled in the pottery trade know so well what is generally understood by this term, no satisfactory definition or measurement of it has yet been devised. This property almost certainly involves the properties of tenacity and shearing strength, consequently Mr. Ackermann has suggested that the pressure of fluidity, which involves both of these quantities, should be used as a measure of the plasticity of clay, especially as the pressure of fluidity is a quantity which is so easily and simply determined.

The work on piles and pile-driving is also of interest to architects and engineers, and for the first time it has been determined exactly, in given circumstances, what proportion of the load on a pile is supported by the friction of the clay on its sides, and what proportion by the vertical reaction of the soil on the end of the pile. In a particular case it may be mentioned that about 80 per cent. of the load was found to be supported by the sides, and only 20 per cent. by the end, the pile being in London clay, to which all Mr. Ackermann's work refers.

An autographic pile-set gauge was designed, made, and tested. This gauge draws an autographic curve of the movement of the head of a pile during the extremely short period (about one hundredth of a second) during which the pile is subject to the effect of the blow of the hammer. From this autographic diagram it is easy to determine the duration of the blow, and the elastic compression of the pile and of the clay, which elastic compressions are not permanent, but recover almost instantaneously after the hammer has come to rest. The diagram also records the permanent set, i.e., amount by which the pile has been driven into the solid by the blow. These quantities enable the forces acting on the pile, due to the blow, to be obtained with a much greater accuracy than has heretofore been possible, for no pile-driving formula up to the present has taken into account the duration of the blow, and without this for a particular blow these forces cannot be arrived at satisfactorily.

Again, in a particular case, it may be mentioned that it was found that only 44 per cent. of the available energy of the hammer was usefully utilized in causing the pile to penetrate the soil. This percentage would vary greatly according to circumstances, being small in the case when the pile was nearly driven home, and much larger in the earlier stages, when the set might be 2 in. per blow. As an illustration of the practical application to the author's method of calculating the forces on a pile, it may be mentioned that by a very commonly applied rule the maximum force thus given was 684 tons per sq. ft. in the case of some large pitch pine piles, but, as pitch pine crushes with a stress of 350 tons per sq. ft. it is obvious that 684 tons must be wrong, for many pitch pine piles were driven without crushing. The earth resistance calculated by means of the autographic pile-set gauge was only 200 tons instead of 684 tons.

In the second of the five papers the method is given of determining the horizontal resistance offered by clay. This is not the same thing as the active pressure exerted by clay on a vertical surface, though probably after a retaining wall has been in position for several years, the pressure gradually increases until it is equal to the resistance of the clay, which might have been determined before the retaining wall was constructed.

The contraction of clay on drying has been determined for clay containing various percentages of water, and in some cases as much as 10 per cent. contraction was measured.

# Wages in the Building Trade

he National Wages and Conditions Council for the Building Industry, at its meet- on May 24, considered the award of the arbitrator in respect of the recent applica- by the employers for reductions in the rates of wages payable throughout the ustry, and resolved—

That the hourly rates of wages payable to Craftsmen and Labourers engaged in the Building Industry shall be reduced to the extent set out in the Schedule appended, the reductions to take effect on and from Saturday, May 26, 1923.

*Craftsmen's Rates from June 1, 1922.*

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 1/8 | 1/7½ | 1/7 | 1/6½ | 1/6 | 1/5½ | 1/5 | 1/4½ | 1/4 | 1/3½ | 1/3 |
| *Grade Classifications.* | | | | | | | | | | |
| A | A1 | A2 | A3 | B | B1 | B2 | B3 | C | C1 | C2 |
| *Labourers' Rates from June 1, 1922.* | | | | | | | | | | |
| 1/3 | 1/2¾ | 1/2¼ | 1/2 | 1/1½ | 1/1¼ | 1/0¾ | 1/0½ | 1/- | -/11¾ | -/11¼ |

*Craftsmen's Rates on and from May 26, 1923.*

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 7½ | 1/7 | 1/6½ | 1/6 | 1/5½ | 1/5 | 1/4½ | 1/4 | 1/3½ | 1/3½ | 1/3 | 1/2½ |
| *Grade Classifications.* | | | | | | | | | | | |
| don rict | A | A1 | A2 | A3 | B | B1 | B2 | B3 | C | C1 | C2 |
| *Labourers' Rates on and from May 26, 1923.* | | | | | | | | | | | |
| 2¾ | 1/2¼ | 1/2 | 1/1½ | 1/1¼ | 1/0¾ | 1/0½ | 1/- | -/11¾ | -/11¾ | -/11¼ | -/11 |

he foregoing reductions do not apply to the following towns which, the Council decided, are to be re-graded as opportunity occurs without actually increasing existing rates, and the alterations (if any) in the Craftsmen's rates now current be as follows :—

No reduction (existing rates maintained).

| | | |
|---|---|---|
| Southampton | Portsmouth | Southend-on-Sea. |

One half-penny per hour reduction (Labourers in proportion).

| | | |
|---|---|---|
| Norwich | Kettering | Wellingborough |
| Reading | Bournemouth | Brighton |

A. G. WHITE,
*Employers' Secretary.*

A. J. LLOYD,
*Clerk to the Council.*

R. COPPOCK,
*Operatives' Secretary.*

# Great Britain's Largest Generator

A 40,000 h.p. generator, the largest power-generating unit in the United Kingdom, was started on May 28 by the Prince of Wales at the electricity works of the Rotherham Corporation. This generating set comprises a 40,000 h.p. turbine, running at 1,500 r.p.m. and driving a very large electrical generator. The turbine is capable of developing power equal to the united energy of 280,000 men, and the electrical generator will give an alternating current supply of 30,000 kilowatts at 6,600 volts, sufficient for all the electrical requirements of a large town. The steam turbine and the electrical generator were designed and built at the Rugby works of the British Thomson-Houston Co., Ltd. The combined unit weighs nearly 300 tons. The power station in which this generating unit is installed supplies, in addition to other consumers, the large modern steel works in the district, which are operated entirely by electricity.

# The Week's News

### *Carnarvon Housing Problem.*

At least 100 new houses are wanted at Carnarvon.

### *Brighton Housing Problem.*

There is an urgent need in Brighton and Hove for over a hundred new houses.

### *Chertsey Bathing Pavilion.*

Chertsey Urban District Council are providing a bathing pavilion on Chertsey Meads.

### *Workmen's Cottages for Leatherhead.*

The Leatherhead Urban District Council is to spend £5,250 on workmen's cottages.

### *Slum Clearance at Leeds.*

The Leeds City Council propose to demolish between 200 and 300 slum dwellings in the West Street district.

### *York Minster Windows.*

Over £25,000 of the £50,000 required for the preservation of the Minster's ancient glass has been either raised or promised.

### *Hampstead Builder's Estate.*

Mr. Richard Drury Low, of Babbacombe, Devon, formerly a builder at Hampstead, left property worth £80,421. He was ninety-eight when he died.

### *First Concrete Bridge over the Seine.*

A new Pont de la Tournelle of reinforced concrete is to be built to replace the present wooden structure between the Ile St. Louis and the left bank of the Seine.

### *More Houses for Skipton.*

The Skipton Urban District Council have decided to ask for the approval of the Ministry of Health to their proposal to erect an additional fifty houses on the Carleton Road site.

### *Repaving at Eastbourne.*

The picturesque brick pavements of Eastbourne will shortly be replaced by slabs. The bricks, when removed, will be numerous enough to solve the housing problem.

### *The Condition of a Cheshire Church.*

The old Parish Church of Marple, Cheshire, is in a dangerous condition. The tower is unsafe, and the pinnacles and parts of the roof are in danger of falling. The church has been a prominent landmark for centuries.

### *Durham's New University Buildings.*

The Earl of Durham, Lord-Lieutenant of the County and Chancellor of the University of Durham, placed a commemoration tablet in the new science buildings in connection with the university, which are in course of erection at the junction of the Darlington and Stockton roads, Durham. The buildings will comprise twenty-nine rooms, and provide accommodation for instruction, practice in chemistry, physics, geology, and botany, as well as private rooms for professors and staff and common rooms for students. The buildings form part of a larger scheme, and it is hoped to extend them as the school of science develops. Mr. F. T. Walker, of Gosforth, is the architect.

### *Eastbourne's New Art Gallery.*

The Marquis of Hartington opened the Manor House and grounds which have been acquired by the Corporation for public purposes at a cost of £19,000. The house is being converted into an art gallery.

### *Carnarvon's Housing Problem.*

The Carnarvon Town Council, who have been considering various housing schemes for years, have resolved to sell the land which they purchased some years ago at Bethel Road for the erection of houses thereon by private enterprise.

### *Gift of Shakespeare Statue.*

A statue of Shakespeare, said to have once stood in the vestibule of Drury Lane Theatre, has been presented to West Ham Council by one of the members. The Council propose to erect it on a grass plot near the main entrance of the Central Library.

### *New Baths for Rawmarsh.*

The Rawmarsh Urban District Council have decided, in view of the definite offer from the Miners' Welfare Fund to contribute £8,000, to apply for a loan not exceeding £14,000 as their quota to a scheme (not exceeding £22,000) of public baths for the district.

### *Bexhill and a Pavilion.*

The Council are considering the question of acquiring from the Admiralty land on the sea front as a site for the erection of a pavilion at a cost not exceeding £25,000. A two-story building is proposed, with a concert hall to seat 1,000 people, a lecture hall, balconies facing the sea, and café.

### *Sheffield Town Hall Extension.*

The Prince of Wales, on May 28, opened the new extension to the Sheffield Town Hall. It was begun in 1914, suspended in 1916 on account of the war, was resumed in 1919, and is now practically completed. The building, which has been erected from the designs of Mr. F. E. P. Edwards, F.R.I.B.A., has cost about £120,000.

### *U.S.A. Manufacturing Standards.*

Uniform standards of colours, shades, and containers have been adopted at a conference of representatives of the paint industry with the United States Department of Commerce, states the Commercial Counsellor at Washington. The conference adopted a proposal that half-gallon cans of all varieties be discontinued and that all sizes smaller than half-pints be eliminated except for stains, gold and aluminium paints, and household enamels 2 lb. and 3 lb. cans are to be eliminated, while pints of house paints, flat wall paints and porch paints are to be scrapped. All sizes less than gallons for barn and roof paints and shingle stains are to go. Oblong or square varnish cans are to be entirely eliminated in sizes running smaller than gallons. It was announced that floor paints would be limited to eight shades and tints, while among other limits fixed were thirty-two for house paints, ten for enamels, eight for carriage paints and varnish stains, all exclusive of black and white. The theory of standardized production through the simplification of varieties of manufacture is meeting with approval throughout the country.

### *More Houses for Leicester.*

The Housing Committee propose to erect 116 houses on the Saffron Lane site in addition to the ninety-six sanctioned at the last meeting of the City Council, and 215 houses on the Knighton Fields (Kirby) estate. Negotiations are also in progress for the acquisition of an estate at North Evington upon which to erect 110 houses.

### *Exhibition Building for Middlesbrough.*

The Plans Committee of the Middlesbrough Corporation have approved a scheme for the erection of a large exhibition building in Union Street, with accommodation for 4,500 people. Other plans passed at the same meeting included one for the erection of a new Baptist chapel in Southfield Road, another for a baker's large premises, and fourteen plans for new houses.

### *Chesterfield's Twisted Spire.*

Funds are still urgently needed for the preservation of the twisted spire o Chesterfield Parish Church; £3,000 was originally required, and subscriptions to a total of £1,780 have been received. Of this latter sum £1,080 has been spent on repairs, leaving £700 in hand. It is believed that if the necessary funds are forthcoming the spire can be made safe for 100 years.

### *New Tunnel for Bradford.*

In 1913 the Bradford Corporation began boring a tunnel 2¾ miles long under Idle Moor, between Frizinghall and Esholt, in connection with their sewage scheme. The work was stopped by the war, but resumed in 1919, and lately the working parties on each side met and a hole was bored through. The tunnel, which will cost about £300,000 will not be completed for two years.

### *The Lighting of Railway Stations.*

Apparently the adequate lighting o railway stations need not be an expensiv matter. The current issue of "A Thousand and One Uses for Gas" (No. 111) contain reproductions of some attractive nigh photographs taken of stations which ar really well illuminated. In the majorit of these stations use is being made of th new low-pressure super-heated cluste incandescent gas lamp. Copies of th publication can be obtained by engineer and others interested from the Britis Commercial Gas Association, 30 Grosvenor Gardens, S.W.1.

### *Stockton-on-Tees War Memorial.*

ıe unveiling of the Stockton-on-Tees Memorial took place on Thursday Messrs. Lanchester, Lucas, and ge, FF.R.I.B.A., were the architects.

### *The Adelphi.*

ı interesting book on the Adelphi, ten by Francis C. Prevot, of the dle Temple, barrister-at-law, will be ished early in June by the Chelsea lishing Co. The original illustrations by William Farrow. The paper per has an attractive picture of an ortant feature of the district.

### *ig Development for Newton Abbot.*

syndicate has completed negotiations the Earl of Devon for the acquisition he whole of his lordship's land at er, Newton Abbot. It is hoped to l 270 houses on the site and to equip district with shops, public gardens, is courts, and golf links. The Urban rict Council are considering an offer he same syndicate to take over the ilt portion of the Council's housing and erect fifty working-class houses.

### *York Minster Memorial.*

is proposed to form in the western of the north transept, York Minster, emorial chapel to the King's Own shire Light Infantry. The proposal enclose the aisle with ornamental between the columns, and to erect ltar inside the chapel. The cost is ıated at about £5,000. Subscriptions be sent to Brigadier-General Sir y Johnson, 60 Lexham Gardens,

## he Rome Scholarship

plication to compete in the preary competition for the Rome larship must be made on the ribed form to the Honorary General tary, British School at Rome, wther Gardens, Exhibition Road, lon, S.W.7, not later than October 15. The applicant must deliver to Honorary General Secretary, c/o 3.A., 9 Conduit Street, London, W.1, een October 1 and 15, a portfolio, xceeding double elephant size, conıg specimens of his work. Due e will be given to approved candi- of the time and place of the preary competition, which will extend a period not exceeding thirty-one The first twelve hours of the etition will be held *en loge* at oved centres, and during this time andidate will be required to make tch design of the subject which will nnounced at the opening of the etition. He will keep a tracing of ketch design which he will deliver t the end of the first twelve hours. aculty may at their discretion make ınt towards expenses incurred by a etitor in attending an "*en loge*" e at a distance from his place of ence or study. The candidate may e his own time and place for the ıtion of the finished designs, which adhere substantially to the sketch n done on the first day. The finished ns, together with the sketch designs, be examined by the Faculty of tecture, who will make a selection andidates to compete in the final etition.

## The Newer Methods of Advertising

A recent issue of "The Advertisers' Weekly" contained the small reproduction of one of Messrs. Kerner-Greenwood's "Pudlo" advertisements which we give below, together with some interesting comment upon it. The advertisement was taken from the pages of this JOURNAL, and we reproduce it here, together with our contemporary's observations, because it draws attention to an interesting development in modern technical advertising.

It is not so very long ago that the advertisement pages of architectural newspapers were very unlovely to look upon; the reader was frequently confronted with aimless wording, ugly type, and bad display. To-day a great improvement is generally apparent—both in content and presentation; and Messrs. Kerner-Greenwood's advertisement is an interesting example of the newer and more attractive methods which are now adopted to interest the readers of professional journals. Our contemporary's comment upon the advertisement is as follows :—

### HOW READER-ATTENTION IS SECURED.

### Linking up Historical Personages with Modern Products.

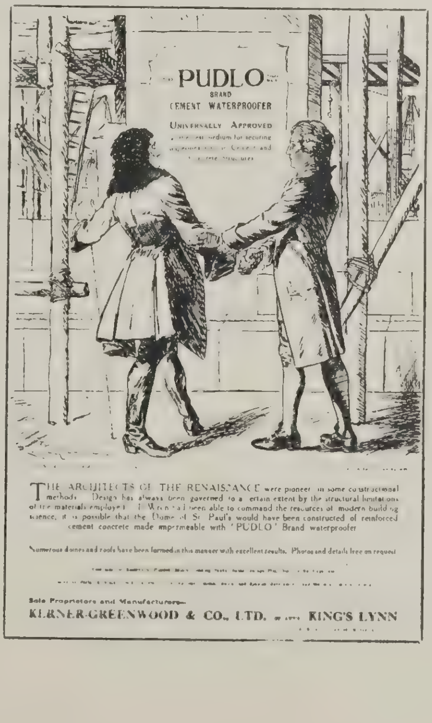
The adaptation of subjects of topical interest, even though historical, to advertising is a certain draw to readers who necessarily know something of the history of the art they work in, as do architects.

This is clearly and cleverly illustrated in the current advertisements of Pudlo Cement—a thing not easy to make attractive in ad. copy. The advertisers seize on Wren, whose bi-centenary is being celebrated, and on Robert Adam, another famous architect, whose style is now enjoying a vogue. By picturing these two men shaking hands by a building under construction bearing a poster of the Pudlo Brand, the attention of every architect who sees it is inevitably drawn to the matter of the advertisement.

The copy-writer, of course, points the moral that if Wren and Adam had only known of the Pudlo cement waterproofer it would probably have been used for the dome of St. Paul's and for the roofs of the houses, etc., built by Adam.

The sketch of the two great architects, joined in friendship if not in period, occupies three-quarters of the page advertisement now appearing in the building trade weeklies, and the composition as well as the apposition make a striking appeal.

F. W. R.



THE ARCHITECTS OF THE RENAISSANCE were pioneers in some constructional methods. Design has always been governed to a certain extent by the structural limitations of the materials employed. If Wren had been able to command the resources of modern building science, it is possible that the Dome of St. Paul's would have been constructed of reinforced cement concrete made impermeable with 'PUDLO' Brand waterproofer.

Numerous domes and roofs have been formed in this manner with excellent results. Photos and details free on request.

Sole Proprietors and Manufacturers—
KERNER-GREENWOOD & CO., LTD. [illegible] KING'S LYNN

## New Inventions

### *Latest Patent Applications.*

13301.—Bannister, D.—Brick for fireplaces. May 18.

12811.—Gibbon, E.—Lead light substitute. May 14.

13318.—Price, F. G.—Roofing-tiles, etc. May 18.

13018.—Roofing Research and Engineering Corporation. Roofing element. May 15.

### *Specifications Published.*

196956.—Hodsoll, F. W., Hodsoll, C. A. M., Hodsoll, F. P. M., and Hodsoll, F. C.—Binding-means or cramps for scaffolds, timbers, and the like.

196955.—Lancaster, P. N.—Apparatus for use in the construction of concrete piles.

196970.—Beach, O. W.—Machines for levelling or excavating land, moving piles of material, and like purposes.

197005.—Corrugated Bar Co., Inc.—Reinforced-concrete columns.

197228.—Ferguson, J. J.—Heating systems for buildings.

### *Abstract Published.*

195485.—Floors, walls.—Pearson Bros. and Campbell, Ltd., and Pearson, R. S., of 56 South Castle Street, Liverpool.—In floors, stairs, and walls formed of beams composed of blocks and laid side by side, the blocks are secured together in rows by rods, which are held by end plates out of contact with the recessed sides of the blocks so that the grouting may entirely surround them. During the assembling of the blocks in rows, a template is fitted over the end block of a row and receives a plate against which the clamping nuts on the bars are tightened. Bars cast in the blocks, or lugs on the sides may further ensure the position of the bars; or the rods may have washers threaded on them, or be provided with projections.

The above particulars are specially prepared by Messrs. Rayner & Co., registered patent agents, of 5 Chancery Lane, London, W.C.2, from whom readers of the JOURNAL may obtain all information free relating to patents, trade marks, and designs. Messrs. Rayner & Co. will obtain printed copies of the published specifications and abstract only, and forward on post free at the price of 1/6 each.

## Building Operatives and Longer Hours

By an overwhelming majority of 106,400 the building trades operatives have rejected the proposal to extend the working hours from forty-four to forty-seven a week. 118,000 voted against and 11,600 for the proposal. The result is to be considered by the Joint Wages and Conditions Council.

# Rates of Wages in the Building Trades

The following table, which is published in the first issue of THE JOURNAL for each month, shows the rates of wages of craftsmen (bricklayers, masons, carpenters and joiners, woodcutting machinists, slaters, plumbers,* plasterers, painters †) and labourers in the building industry. The labour rates for London are given in the Table of Current Prices on pages xix and xx.

| District. | Grade A. | | Grade B. | | Grade C. | | Grade D. | |
|---|---|---|---|---|---|---|---|---|
| | Craftsmen. | Labourers. | Craftsmen. | Labourers. | Craftsmen. | Labourers. | Craftsmen. | Labourers. |
| | s. d. | s. d. | s. d. | s. d. | s. d. | s. d. | s. d. | s. d. |
| North East Coast | 1 7 | 1 2¼ | — | — | — | — | — | — |
| Yorkshire | 1 7 | 1 2¼ | 1 5½ | 1 1¼ | 1 3½ | 0 11¾ | — | — |
| North Western Counties‡ | 1 7 | 1 2¼ | 1 5½ | 1 1¼ | 1 3½ | 0 11¾ | — | |
| Midland Counties | 1 7 | 1 2¼ | 1 5½ | 1 1¼ | 1 4 | 1 0 | — | |
| Eastern Counties | 1 3½ | 0 11¾ | 1 3½ | 0 11¾ | 1 2½ | 0 11 | — | — |
| Southern Counties | 1 4 | 1 0 | 1 3½ | 0 11¾ | 1 2½ | 0 11 | — | — |
| South Western Counties | 1 7 | 1 2¼ | 1 5 | 1 0¾ | 1 3½ | 0 11¾ | — | — |
| South Wales | 1 7 | 1 2¼ | 1 3½ | 0 11¾ | — | — | — | — |
| Scotland§ | 1 8 | —¶ | 1 7 | —¶ | 1 6 | —¶ | — | — |

* In the case of towns printed in *italic type* below, the rates shown in the Table for craftsmen do not apply to plumbers.
† In Scotland, painters, 1s. 6½d.
‡ Excluding Liverpool and Birkenhead, where the rates are 1s. 10d. for plumbers, 1s. 9½d. for mason's fixers, 1s. 9d. for other craftsmen, 1s. 5d. for scaffolders, and 1s. 4d. and 1s. 4½d. respectively, for labourers.
§ Excluding Aberdeen, where the rates remain unaltered at 1s. 7d. for masons, joiners, and plasterers, 1s. 8d. for slaters, and 1s. 8½d. for plumbers.
¶ In Scotland, labourers are not included in the general grading scheme.

## Grading of Towns.

The localities in which the above rates have been reported to be in operation are as follows. In the case of localities printed in *italic type*, the rates shown in the above Table for craftsmen do not apply to plumbers.

NORTH EAST COAST :—
*Annfield Plain*, *Birtley*, Bishop Auckland, *Blackhill*, *Blyth*, *Chester-le-Street*, *Consett*, Darlington, Durham, *Ebchester*, *Gateshead*, Hartlepools, *Hebburn*, *Hexham*, *Jarr* *Lanchester*, *Leadgate*, Medomsley, Middlesbrough, *Morpeth*, Newcastle, North and South Shields, *Seaham Harbour*, *Stanley*, Stockton, Sunderland, *Thornaby*, *Tynem* *Wallsend*, *Whitburn*, and *Whitley Bay*.

YORKSHIRE :—
*Grade A.*—*Altofts*, Barnsley, *Batley*, *Bingley*, *Birstall*, Bradford, *Brighouse*, Calder Valley, Castleford, *Cleckheaton*, *Colne Valley*, *Crosshills*, *Dewsbury*, Doncaster, *Gomersal*, Grimsby, *Guiseley*, *Halifax*, *Harrogate*, *Hebden Bridge*, *Heckmondwike*, Holmfirth, *Horbury*, *Hoyland*, Huddersfield, Hull, *Ilkley*, Immingham, *Keighley*, *Knottingley*, Leeds, *Liversedge*, *Mexborough*, *Mirfield*, *Morley*, *Normanton*, *Ossett*, *Penistone*, Pontefract, Pudsey, *Rawdon*, *Rotherham*, Scunthorpe, *Selby*, Sheffield, *Shipley*, *Sowerby Bridge*, *Stocksbridge*, Wakefield, *Wombwell*, and *Yeadon*.
*Grade B.*—Barnoldswick, Beverley, Bridlington, Goole, Hornsea, Scarborough, Skipton, *Whitby*, and York.
*Grade C.*—Driffield, Kirby Moorside, Malton, Norton, Pickering, and Wetherby.

NORTH WESTERN COUNTIES :—
*Grade A.*—Accrington, Adlington, *Alderley Edge*, Altrincham, Ashton-under-Lyne, *Atherton*, *Bacup*, Barrow, Birkdale, Bispham, Blackburn, Blackpool, Blackrod, Bolton, Broughton (Flints), Burnley, Bury, Carlisle, Chester, Chorley, *Church*, Cleveleys, *Clitheroe*, *Colne*, Connahs Quay, Dalton-in-Furness, *Darwen*, *Denton*, *Droylesden*, *Eccles*, *Farnworth*, Fleetwood, Frodsham, *Glossop*, *Great Harwood*, *Haslingden*, Hawarden, Helsby, *Heywood*, Higher Kinnerton, *Horwich*, *Hyde*, Lancaster, *Leigh*, Leyland, *Littleborough*, Longridge, Lymm, Lytham, Manchester, *Middleton*, Morecambe, *Mossley*, *Nelson*, *Ormskirk*, *Oswaldtwistle*, Oldham, *Padiham*, *Pendlebury*, Poulton, Preston, *Prestwich*, Queensferry, *Radcliffe*, *Ramsbottom*, *Rawtenstall*, *Rishton*, Rochdale, Runcorn, St. Anne's-on-the-Sea, St. Helens, *Saddleworth*, *Sale*, *Salford*, *Shaw*, Shotton, Southport, *Stalybridge*, Stockport, *Swinton*, Thornton, *Todmorden*, *Tyldesley*, *Walkden*, Warrington, Westhoughton, *Whalley*, *Whitefield*, Widnes, Wigan, and *Wilmslow*.
*Grade B.*—Askam, Broughton, Buxton, Cleator Moor, Congleton, Coniston, Crewe, Distington, Egremont, Grange-over-Sands, Harrington, Knutsford, *Macclesfield*, Maryport, Market Drayton, Middlewich, Millom, Mold, Nantwich, *New Mills*, Northwich, Sandbach, Tarporley, Ulverston, Winsford and Over, Whitehaven, Workington, and Wrexham.
*Grade C.*—Ambleside, Bala, Bangor, Bowness-on-Windermere, Carnarvon, Colwyn Bay, Conway, Grasmere, Holyhead, Holywell, Kendal, Langdale, Llandudno, Llandudno Junction, Mostyn, Penrith, Prestatyn, Rhos, Rhyl, and Windermere.

MIDLAND COUNTIES :—
*Grade A.*—Alfreton, *Belper*, Bilston, Birmingham, *Blackheath*, *Burslem*, *Cheadle*, Chesterfield, Coalville, Coventry, Derby, *Hanley*, Heanor, Hinckley, *Ilkeston*, Kenilworth, Leicester, Lincoln, *Long Eaton*, Loughborough, Mansfield, Newcastle-under-Lyme, Nottingham, *Nuneaton*, Oldbury, Ripley, Stoke-on-Trent, *Sutton Coldfield*, *Sutton-in-Ashfield*, West Bromwich, Willenhall, and Wolverhampton.
*Grade B.*—Atherstone, Bewdley, Boston, Brierley Hill, Bromsgrove, Burton-on-Trent, Cannock, Coseley, *Darlaston*, Dudley, Gainsborough, Gornal, Grantham, Halesowen, Hednesford, Kidderminster, Knowle, Leamington, *Leek*, Lichfield, Louth, Malvern, Market Harborough, *Matlock*, Melton Mowbray, *Newark*, Northampton, Oakengates, Old Hill, Peterborough, Redditch, Retford, Rugby, *Rugeley*, Sedgley, Shifnal, Shrewsbury, Skegness, Sleaford, Solihull, Southwell, *Stafford*, Stamford, Stourbridge, Stourport, Stratford-on-Avon, Swadlincote, Swanwick, Tamworth, *Walsall* (plumbers 1s. 5½d.), Warwick, Wednesbury, Wellington, Worcester, and Worksop.
*Grade C.*—Ashbourne, Bridgnorth, Church Stretton, *Horncastle*, Kettering, Ludlow, Newport, Oakham, Oundle, Raunds, Rushden, Spalding, Thrapston, Uttoxeter, Wellingborough, and Wirksworth.
*Grade D.*—Buckden, Eaton Socon, Huntingdon, St. Ives, and St. Neots.

EASTERN COUNTIES :—
*Grade A.*—Baldock, Bedford, Berkhamsted, Biggleswade, Braintree, Brentwood, Chelmsford, Cambridge, Colchester, Halstead, Hatfield, Harpenden, Hemel Hempstead, Henlow, Hertford, Hitchin, Hoddesdon, Ingatestone, Ipswich, Letchworth, Luton, Norwich, Ongar, St. Albans, Sandy, Sawbridgeworth, Stevenage, Stotfold, Ware, Welwyn, and Witham.
*Grade B.*—Aldeburgh, Ampthill, Attleborough, Aylsham, Braughing, Chatteris, Cromer, Dovercourt, Dunstable, Ely, Fakenham, Felixstowe, Frinton, Gorleston, Halesworth, Harwich, King's Lynn, Leighton Buzzard, Leiston, Lowestoft, March, Much Hadham, Newmarket, North Walsham, Puckeridge, Rentham, Saxmundham, Southwold, Standon, Stowmarket, Walton-on-the-Naze, Wickham Market, Wisbech, Woodbridge, Wymondham, and Yarmouth.
*Grade C.*—Bungay, Coltishall, East Dereham, Royston, Saffron Walden, and Tring.

SOUTHERN COUNTIES :—
*Grade A.*—Abingdon, Addlestone, Amersham, Ascot, Ashford (Middlesex), Banbury, Beaconsfield, Bournemouth, Bracknell, Brighton, Byfleet, Chalfont, Chesham, Christchurch, Cremborne, Eastbourne, Eastleigh, Egham, Eton, Gerrard's Cross, Goring, Gosport, Gravesend, Guildford, Henley, Hove, Laleham, Maidenhead, Marlow, Northfleet, Oxford, Poole, Portsmouth, Reading, Southampton, Staines, Stanwell, Sunningdale, Sunninghill, Tilehurst, Tonbridge, Tunbridge Wells, Wallingford, Windso Winkfield, Woking, Wokingham, and Wycombe.
*Grade B.*—Arundel, Ashford (Kent), Aylesbury, Bagshot, Basingstoke, Bexhill, Bicester, Bletchley, Bognor, Bosham, Broadstairs, Brockenhurst, Buckingham, Burgess Hill, Camberley, Canterbury, Chatham, Chichester, Chipping Norton, Cranleigh, Deal, Dorking, Dover, Fareham, Faringdon, Faversham, Fenn Stratford, Folkestone, Gillingham, Godalming, Hailsham, Haslemere, Hastings, Havant, Herne Bay, Horsham, Hythe, Lambourn, Liphook, Littlehampton, Lymington, Maidstone, Margate, Midhurst, Milford, Milton Regis, Newbury, New Milton, Newport Pagnell, Oxted, Pangbourne, Petworth, Ramsgate, Redhill, Reigate, Rocheste Sandgate, St. Leonards, Sevenoaks, Sittingbourne, Strood, Stony Stratford, Stow-on-the-Wold, Thame, Walmer, Wantage, Wendover, Westerham, Westgat Whitstable, Winchester, Winslow, Witney, Wolverton, Woodstock, and Worthing.
*Grade C.*—Andover, Ardingley, Farnham, Godstone, Hawkhurst, Hartley Wintney,* Haywards Heath, Horley, Isle of Wight, Liss, Petersfield, Rye, Smallfiel Staplehurst, Steep, Turners Hill, and Uckfield.

SOUTH WESTERN COUNTIES :—
*Grade I.*—Bristol.
*Grade II.*—Plymouth* and Devonport.*
*Grade III.*—Dartmouth,* Exeter,* Kingswear,* Newton Abbot, Paignton, Portishead, Stroud,† Taunton, and Torquay.
*Grade IV.*—Barnstaple, Beaminster, Povey Tracey, Bradford-on-Avon,* Bridgwater, Bridport,* Brixham, Bruton, Burnham-on-Sea, Calne,* Castle Cary, Cheddar, Cirencester,* Clevedon, Coleford,* Corsham,* Crewkerne,* Dawlish, Dorchester,* Exmouth, Fairford,* Frome,* Glastonbury, Lydney,* Melksham,* Midsomer Norto Minehead,* Radstock, Shepton Mallet, Street, Swanage,* Teignmouth,* Tetbury,* Thornbury,* Totnes,† Trowbridge,* Wells, Westbury,* Weston-super-Mar Weymouth,* and Yeovil.*

SOUTH WALES AND MONMOUTHSHIRE :—
*Grade A.*—Aberavon, Aberdare, Abergavenny, Ammanford, Barry, Bridgend, Briton Ferry, Brynmawr, Cardiff (plumbers, 1s. 7d.), Chepstow, Duffryn Valley, Ebb Vale, East Glamorganshire and Monmouthshire Valleys, Garw Valley, Gorseinon, Llanelly, Maesteg, Merthyr, Mountain Ash, Neath, Newport, Ogmore Vale, Pontardula Pontypool, Pontypridd, Porthcawl, Port Talbot, Rhondda and Rhymney Valleys, Sirhowy Valley, Swansea, and Tredegar.
*Grade B.*—Haverfordwest, Pembroke and Pembroke Dock.

SCOTLAND :—
*Grade A.*—Airdrie, Alloa, Alva, Armadale, Ayr, Bathgate, Bellshill, Bridge of Weir, Buckhaven, Burntisland, Clydebank, Coatbridge, Dumbarton, Dund Dunfermline, Edinburgh, Falkirk, Glasgow, *Gourock*, Grangemouth, Greenock, Haddington, Hamilton, Harthill, Irvine, Kennoway, *Kilmarnock*, Kirkcaldy, Larber Largs, Leith, Leslie, Leven, Markinch, Methil, Motherwell, Neilston, Newmains, Paisley, Pencaitland, Perth, *Port Glasgow*, Renfrew, Stenhousemuir, Stirling, Uddingsto Uphall, Wemyss, Whitburn, Windygates, and Wishaw.
*Grade B.*—Arbroath, Montrose, and Peebles.
*Grade C.*—*Dumfries*, Galashiels, Hawick, and *Maxwelltown*. (Plumbers at Dumfries, 1s. 8d.; and at Inverness, 1s. 4d.)

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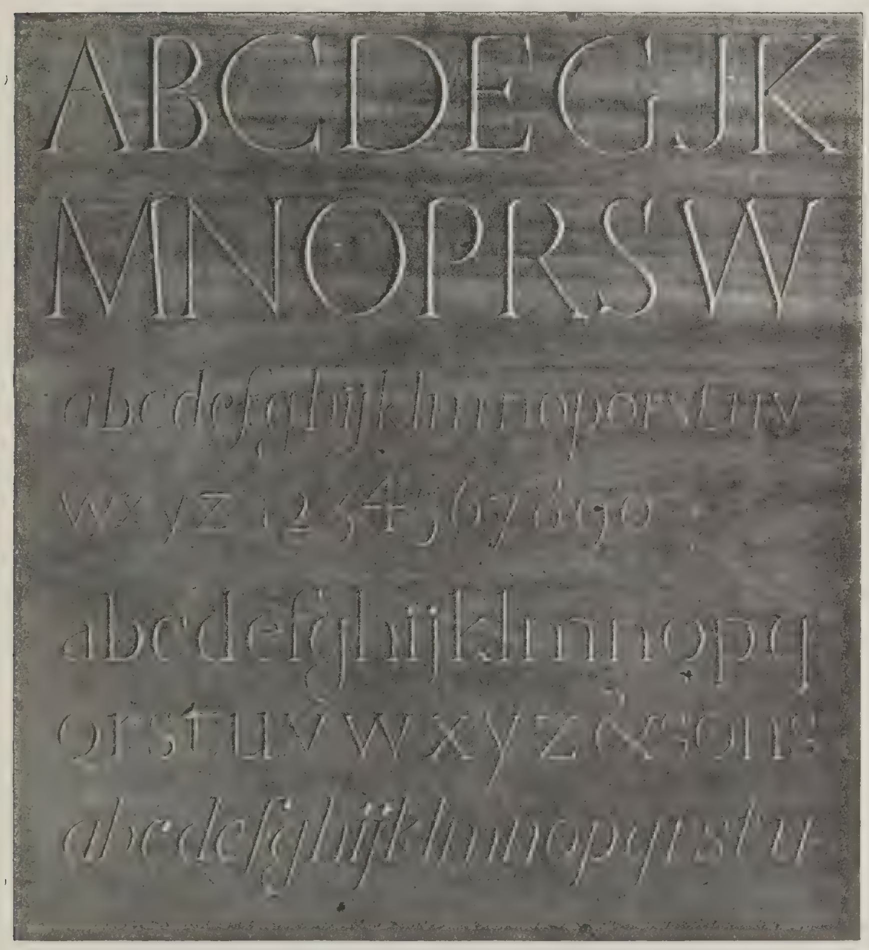
* The rate for painters is 1d. per hour less than that shown for craftsmen in the above table.
† The rate for painters is ½d. per hour less than that shown for craftsmen in the above table.

nesday, June 13, 1923. Vol. LVII. No. 1484

# THE ARCHITECTS' JOURNAL & Architectural Engineer

*With which is incorporated "The Builders' Journal."*



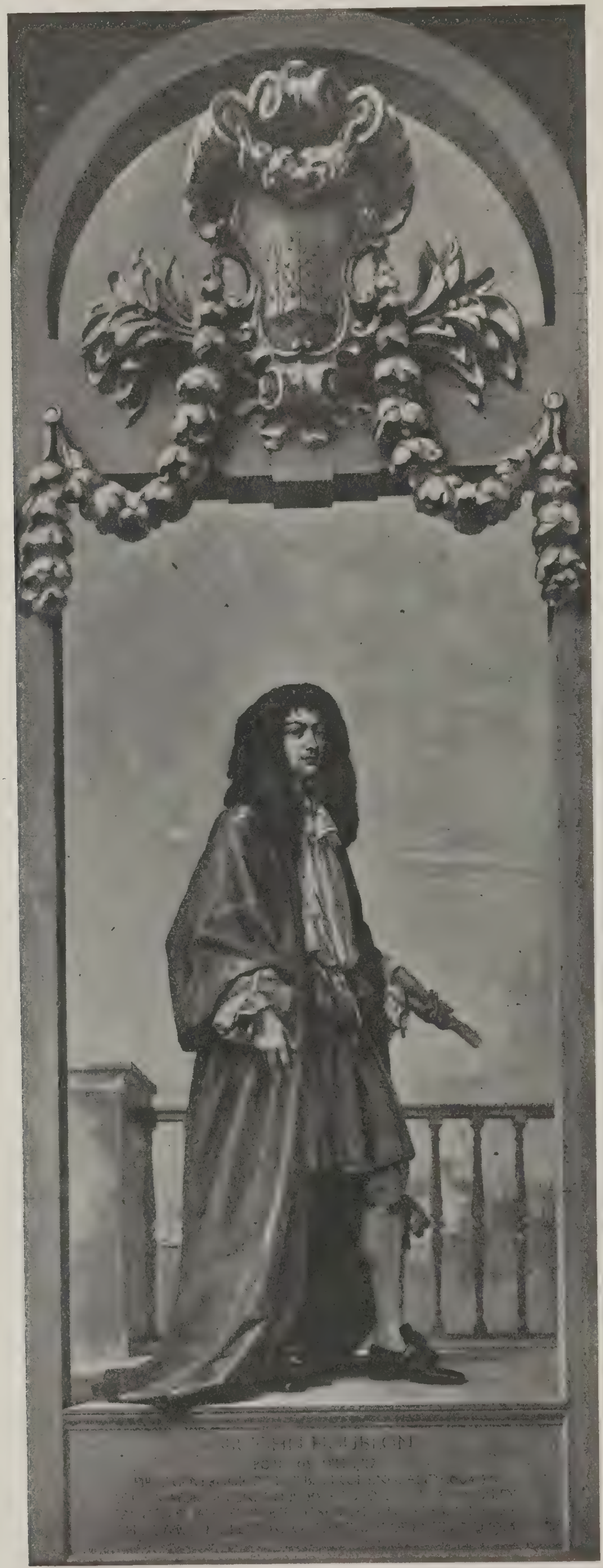
ALPHABETS AND NUMERALS.
Carved in wood by William J. Smith.

27-29 Tothill Street, Westminster, S.W.1.

# Sir John Houblon, First Governor of the Bank of England

## A Decoration for the Colonnade of the Royal Exchange, London

Painted by Alfred Hayward



The decoration of which a reproduction is given above has been presented to the City of London by the Court of Directors of the Bank of England, and will occupy a panel in the Royal Exchange. The panel, which is in a recess 9 in. deep, is 14 ft. 3 in. by 5 ft. 4 in., and is painted in wax medium. The general scheme of colour is grey with notes of blue, the robe being russet brown.

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# he New Housing Bill and the R.I.B.A. Amendments

THE Housing and Town Planning Bill will be through its committee stage by the time these words appear in print. During the committee stage two amendments which originated with e Housing Committee of the Royal Institute of British rchitects were proposed; they were as follows :—

1. To be inserted at the end of sub-section 2, section 1, e following words :—

> "And provided that in the design of the houses regard shall be had to the amenities of the neighbourhood, to convenience of planning, to suitability of aspect, to architectural appearance, and to the provision of adequate space between and about the buildings."

2. The following new sub-section to be inserted after b-section 2, section 1 :—

> "Before being approved by the council of a local authority the designs for the houses shall be publicly exhibited for a period of not less than seven days, and if within a further period of seven days following such public exhibition written objection be made to the Council by not less than ten ratepayers in the area of the local authority, the Council shall take into consideration such objections, and, if they think fit, shall invite the R.I.B.A. to nominate one or more architects to advise them upon the designs."

Neither was accepted by the Minister of Health. I am ot surprised. I did not expect them to be. The truth is at there is such a reaction against the administrative ontrol exercised during the carrying out of the Addison chemes that the tendency is to let houses of any sort be uilt so long as they are built. Anything which seems to npose a check, no matter how useful it may be, is imatiently regarded and will not be endured. The control f the Ministry of Health is looked upon as having caused elay and added expense. The fact that the amendments id not suggest or involve any continuance of such control id not save them from their fate. Local authorities are npatient of any control. It was their volume of complaints gainst the interferences of Whitehall that played a great art in the closing down of the Addison scheme, and they re not willing to accept in its place control by the rateayers, slight and shadowy though it be. I remember well he rising temper of the House on one occasion when Lord obert Cecil recited the stages through which a scheme ust pass before it could gain approval, and I am not urprised that any amendment was refused which suggested hat anyone should have anything to say about the character f the houses that are to be built.

It is unfortunate, but for the present it must be accepted. hat remains is for those in each locality who desire houses he design of which does have regard to amenities to planing, to appearance, and to light and air, to bring their fluence to bear upon the Housing Committees who carry ut the Bill. If it be true that every nation deserves the overnment it gets, it is equally true that every locality eserves the houses it gets. I don't know how far in olden ays people cared about appearance and sought to get it, or how far it is the kindly hand of Time and the association of sentiment that make the old houses of our villages and towns so grateful to us, but for a time at least the cancerous spread of our unlovely towns is not to be stayed.

"In the elder days of Art
Builders wrought with utmost care
Each unseen and hidden part
For the Gods see everywhere."

Well' the "Gods" have it in their own hands now and may build where they like, and how they like, and what they like, and no man or rather no ten men may say them nay.

I don't blame Mr. Neville Chamberlain; he is a man of culture, and as anxious, I am sure, as anyone of us to see pleasant houses, pleasantly built, but he will be judged by quantity not quality. All during this Parliament he will be answering questions as to how many houses have been built under his Bill. Many members of all parties will be asking him that question; few, if any, will ask him what sort of houses they are. He cannot afford to be told that amendments he accepted have held up schemes, that in a hundred Puddleton-cum-Puddletons ten æsthetic men were found who for fourteen days delayed the erection of brick boxes because they did not like the proportions of the windows or the pitch of the roof; because they thought the stairs were inconveniently placed or wanted sunlight in every room. No, it must be, one-two-three-four, blank-two-three-four—faster, faster, faster—get on with it. Those who will build ugly, ill-planned, ill-placed houses must build them—and there's an end on it.

It is no use blaming a particular member or even a particular government; the truth is that æsthetic, and even, though to a less extent, hygienic requirements not of a palpably necessary character do not weigh very much with us as a whole.

We still have the task of educating our masters to complete. But let us not be too discouraged; out of evil good may come. I don't know that the results of the administrative control of the last Housing programme have been altogether satisfactory. It may be that in house building, as in other things, freedom may bring responsibility, and even variety. If there are some authorities who will be regardless of those things that could not be set down in the Bill, it may be that others will show their regard in their own way and with an individuality and character that even the kindest friends of the Addison schemes must admit is often lacking in them. There are no evils which are unmitigated. And I cannot believe that the influence and ideals of the last few years will cease to be of any effect because certain words have not been put down in this Bill. The attempt to get them in was worth making; and if the Institute has failed in getting a national standard set in the Bill, the allied societies must now take the matter up in their localities and see to it that if the local authorities sin, they at least sin against the light. Cannot we architects teach our lay brothers and sisters what it is that makes one aggregation of bricks and slate and timber pleasant and grateful to the eye, and another aggregation of the same materials an offence? These must be simple things; they must be capable of being pointed out. I don't know whether I am not slipping into dangerous heresies, but would it be impossible, or improper, or impolitic to endeavour to get some idea of the principles of design into the mind of the man in the street, or the woman in the house?

Doctors don't seem to shirk telling people how to keep out of their hands; I am not so sure about lawyers; but I wonder if it would be a bad thing if the speculative builder acquired some ideas about the use of material, the proportion and position of openings, the contour and contrasts of mouldings. The surest way for him to get it would be for those who live in his houses to have some idea of it themselves. It is the simple ailments the doctors are willing to leave to an instructed laity. I wonder if the simple structures might not be safer if some tuition were available.

How were those charming cottages in the Cotswolds and in Sussex, and indeed in every hamlet of the country, built?

Couldn't it be made impossible, not by Act of Parliament, but by the action of architects, to get foolishly designed doors, hideously proportioned windows, clumsy mouldings, silly and offensive fittings? I wonder. But also I wander. I started with the amendments to the Housing Bill, and I don't quite know what point I have reached. Let me recall myself and conclude with the opinion that the action of the Institute should only mark the beginning of a continued effort in Parliament and out of Parliament to influence public opinion in the direction of building only those buildings which shall be a joy to the beholder and a glory to those whose buildings they are.

HARRY BARNES.

## The R.I.B.A. Election Result

As we go to press we learn of the complete success of the Emergency Committee's candidates in the R.I.B.A. Election. Not a single "Defence League" candidate has been returned. It was common knowledge that the misguided policy of the old Council had created widespread dissatisfaction; but so complete an overthrow of its reactionaries could hardly have been anticipated, even by the most optimistic supporters of the Emergency Committee. The new Council must be enormously strengthened for legislative action by the knowledge that it has the united support of members behind it; that the great power which has come into its hands will be used wisely and well we may rest assured. The first concern of the new Council must obviously be with the political aspect of professional affairs; and all who have the best interests of the profession at heart will wish them well in their task of finding a solution of the long-drawn-out problem of Registration. Not until this is satisfactorily and finally dealt with will the Institute be free to devote itself to the basic purpose of its existence, which is the advancement of the art of architecture.

## Architects and Speculative Housing

We note with satisfaction that the R.I.B.A. have arranged, in conjunction with the National Federation of House-Builders, the London House-Builders' Association, and the National Federation of Building Trades Employers, a scale of fees for private enterprise housing work. The scale applies to those cases in which the architect is asked to supply drawings only, hence the very moderate rate of remuneration stipulated. To those who are disposed to criticize the scale on the ground that it is unduly moderate, we would point out that the work to which it refers does not commonly come within the scope of the architect; it is done by the builder himself without any architectural supervision. Hence there is no real loss to architects, but actually some gain. Apart, however, from all question of fees, it is distinctly encouraging to find that builders who engage in speculative work are willing to take advantage of the services of the architect. They have at last realized that good architecture is a sound financial investment, for a well-designed house must always command a better price than one that is not. We hope to see a good proportion of speculative work carried out under this arrangement.

## The Edinburgh Conference

We give elsewhere in this issue the programme of the Conference of British Architects which opens to-day in Edinburgh. It is of the fullest and most varied description, including not only the discussion of topics of architectural moment, but organized tours of the city, visits to various outlying places of interest, besides numerous other forms of entertainment, including a smoking concert, and, finally, a banquet. Our Scottish friends are fully maintaining their reputation for generous hospitality, for it is obvious that everything that possibly can be done is being done for the comfort and enjoyment of visitors to the Conference. In this issue we publish an illustrated article on Edinburgh which gives a broad outline account of the principal architectural features of the Scottish capital, and should be of some value as a general guide to the city. Next week we shall publish a full report of the Conference proceedings.

## "Technical Terms"

Still those technical terms continue to be the bugbear of the general public, including (perhaps one should say "especially") our popular novelists, and other writers. Still we read of people sliding down "banisters," receiving "coping stones" upon their unsuspecting heads, and in other extraordinary ways outraging the decencies of technical phraseology. "Banisters" for "balusters" is an offence of long standing; we imagine it is ineradicable. It has become one of those inexactitudes that time and usage sanctify and make more expressive than the correct word. "Coping stone" is rather more difficult to understand, though its literal meaning is intelligible enough. But it is surely unfair to a harmless necessary term that the pedestrian upon whom some part of a building falls should always be injured by the "coping stone." Why not the balustrade or the corona of the cornice? These technicalities should be used cautiously, or unknowingly the layman may find himself performing impossibilities. Only the other day we heard of a gentleman who, a victim of odd habits (like Dr. Johnson, who made a point of touching every street post he passed), confessed that he always trod on the "lintel" of the doorway as he passed into a house. He was astonished to find that to do this he would have to turn a high somersault in the air!

## The City Churches

The exchange of opinion on the subject of the City Churches that has lately taken place between Sir Banister Fletcher and Lord Knutsford in the columns of "The Times" is a forcible reminder of the dangers that lurk in the Union of Benefices Measure. Protection for the churches is only provided for by an appeal to the Judicial Committee of the Privy Council, which, Lord Knutsford declares, is "a generally accepted and adequate protection." Sir Banister Fletcher points out the distinction between recognized rights held in peaceable possession and threatened rights "precariously protected by a possible appeal to any authority." In any case it is surely rather disingenuous in the anti-City Church party to talk of "rights of appeal" when it is perfectly well known that the deliberate intention is to destroy a large number of these buildings. Sir Banister Fletcher puts the case in a nutshell when he says that the amalgamation of benefices is a matter of church economy, but the demolition of City Churches is one o public interest. The public, being warned in time, must see to it that the threat of demolition is finally removed. It is not enough that the fate of our national possessions (and such the City Churches are, in essence if not in actua fact) should hang precariously upon a "right of appeal."

# The R.I.B.A. Council Election Result

## The Emergency Committee's Candidates Elected *en bloc*

*The result of the R.I.B.A. Council Election was announced as under at a General Meeting of the Institute, held at 9 Conduit Street, on Monday evening last. The Emergency Committee's candidates have been elected en bloc. For the purpose of comparison we give below the names of members of the old Council and the official nominations issued for the current election. Mr. P. D. Hepworth subsequently withdrew his name from the official House List.*

## The New Council

*President.*

J. Alfred Gotch.

*Vice-Presidents.*

E. Guy Dawber.
W. Curtis Green, A.R.A.
Major Harry Barnes.
Herbert T. Buckland.

*Hon. Secretary.*

Arthur Keen.

*Ordinary Members of Council.*

Sir John J. Burnet, A.R.A.
Sir Edwin L. Lutyens, R.A.
Henry V. Ashley.
Sir Banister Fletcher.
Edward P. Warren.
Percy E. Thomas.
Robert Atkinson.
G. Gilbert Scott, R.A.
Major H. C. Corlette.
Maurice E. Webb.
Sir Alfred Brumwell Thomas.
John Keppie.
Sir Edwin Cooper.
Walter Cave.
Walter Tapper.
Thomas R. Milburn.
Gilbert Fraser.
Henry M. Fletcher.

*Associate Members of Council.*

W. G. Newton.
Herbert A. Welch.
J. Hubert Worthington.
G. C. Lawrence.
Michael Waterhouse.
H. Chalton Bradshaw.

*Past Presidents.*

John W. Simpson.
Paul Waterhouse, M.A. (Oxon), F.S.A.

*Representatives of Allied Societies.*

S. F. Harris (Northampton).
James Lochhead (Glasgow).
Stephen Wilkinson (York).
Francis Jones (Manchester).
Eric Morley (Leeds).
W. S. Skinner (Bristol).
R. G. Wilson, Junr. (Aberdeen).
W. T. Jones (Northern).
C. G. Soutar (Dundee).

*Representative of the Architectural Association.*

Edwin Stanley Hall.

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## The Old Council

*President.*

1921 Paul Waterhouse, M.A.(Oxon.), F.S.A.

*Vice-Presidents.*

19 A. W. S. Cross, M.A.
(Cantab.)
21 H. D. Searles-Wood.
1922 Chas. H. Heathcote.
1922 George Hubbard, F.S.A.

*Honorary Secretary.*

Arthur Keen.

*Members of Council.*

ajor Harry Barnes.
ax Clarke.
O. Collard.
eaton Comyn.
B. Flockton.
Topham Forrest, F.G.S.
rcival M. Fraser.
Lovett Gill.
Alfred Gotch, F.S.A.
William G Hunt.
Delissa Joseph.
Sir Edwin Lutyens, R.A.
Sydney Perks, F.S.A.
W. E. Riley. R.B.A.
W. Gillbee Scott.
W.W.Scott-Moncrieff, M.C.
Herbert Shepherd.
James A. Swan.

*Associate Members of Council.*

illiam H. Ashford.
onard A. Culliford.
G. Fisher.
Digby L. Solomon, B.Sc.(Lond.)
Arthur Welford.
Frank Woodward.

*Past-Presidents.*

Sir Reginald Blomfield, R.A., Litt.D., F.S.A.
hn W. Simpson, Croix de la Légion d'Honneur, Membre Corr. de l'Institut de France.

## The Old Council's Nominations

*President.*

Alfred William Stephens Cross, M.A.(Cantab.)

*Vice-Presidents.*

Charles Henry Heathcote (Manchester).
Sydney Perks, F.S.A.
William Edward Riley, R.B.A.
Herbert Duncan Searles-Wood.

*Honorary Secretary.*

Keen, Arthur.

*Members of Council.*

Henry John Chetwood.
Max Clarke.
Allan Ovenden Collard.
Heaton Comyn.
Frederick Ernest Pearce Edwards (Sheffield).
Charles Burrows Flockton (Sheffield).
George Topham Forrest, F.R.S.E.
Percival Maurice Fraser.
Charles Lovett Gill.
John Alfred Gotch, F.S.A. (Kettering).
Frederick Robert Hiorns.
George Hubbard, F.S.A.
William George Hunt.
Delissa Joseph.
Albert Walter Moore.
William Gillbee Scott.
William Walter Scott-Moncrieff,, M.C.
Herbert Shepherd.
Digby Lewis Solomon, B.Sc. (London.)
James Alfred Swan (Birmingham).
Herbert Winkler Wills.

*Associate Members of Council.*

William Henry Ashford (Birmingham).
Ernest Bates.
Leonard Arthur Culliford.
Philip Dalton Hepworth.
John Douglas Scott.
Joseph Seddon.
Arthur Welford.
Frank Woodward.

# Architectural Travel

### Edited by F. R. Yerbury, Secretary of the Architectural Association

## 2.—EDINBURGH

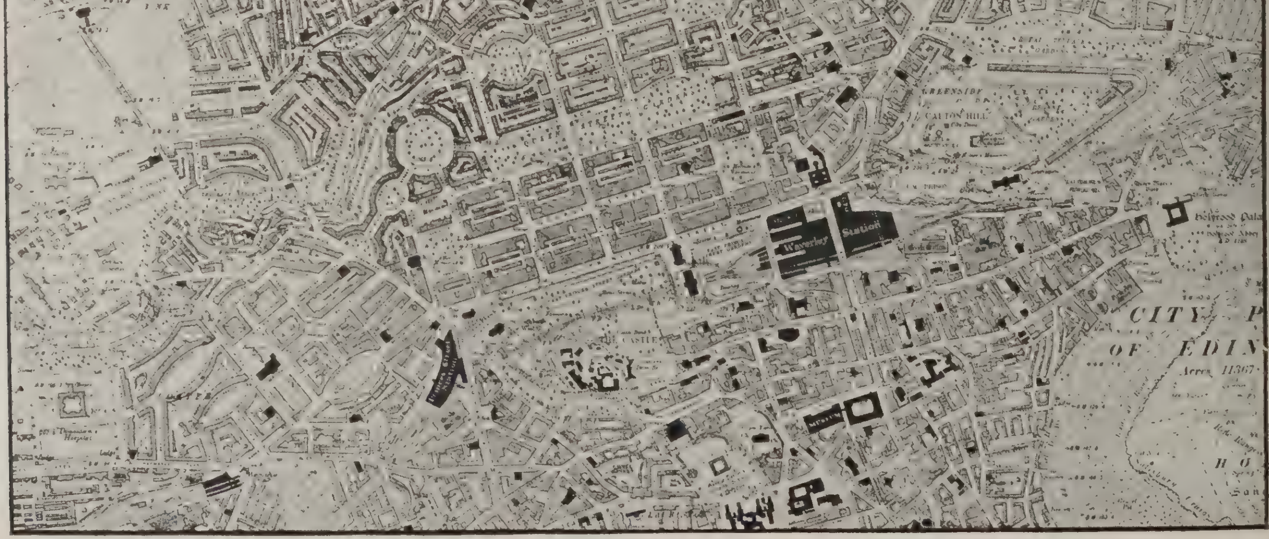
### By J. M. Easton, A.R.I.B.A.

*Apropos of the Conference of British Architects which opens in Edinburgh to-day, we give below, as the second of our "Architectural Travel" series, an illustrated article on the Scottish Capital. Describing briefly but informatively the principal architectural features of the city, this article should have a special interest for those attending the Conference.*

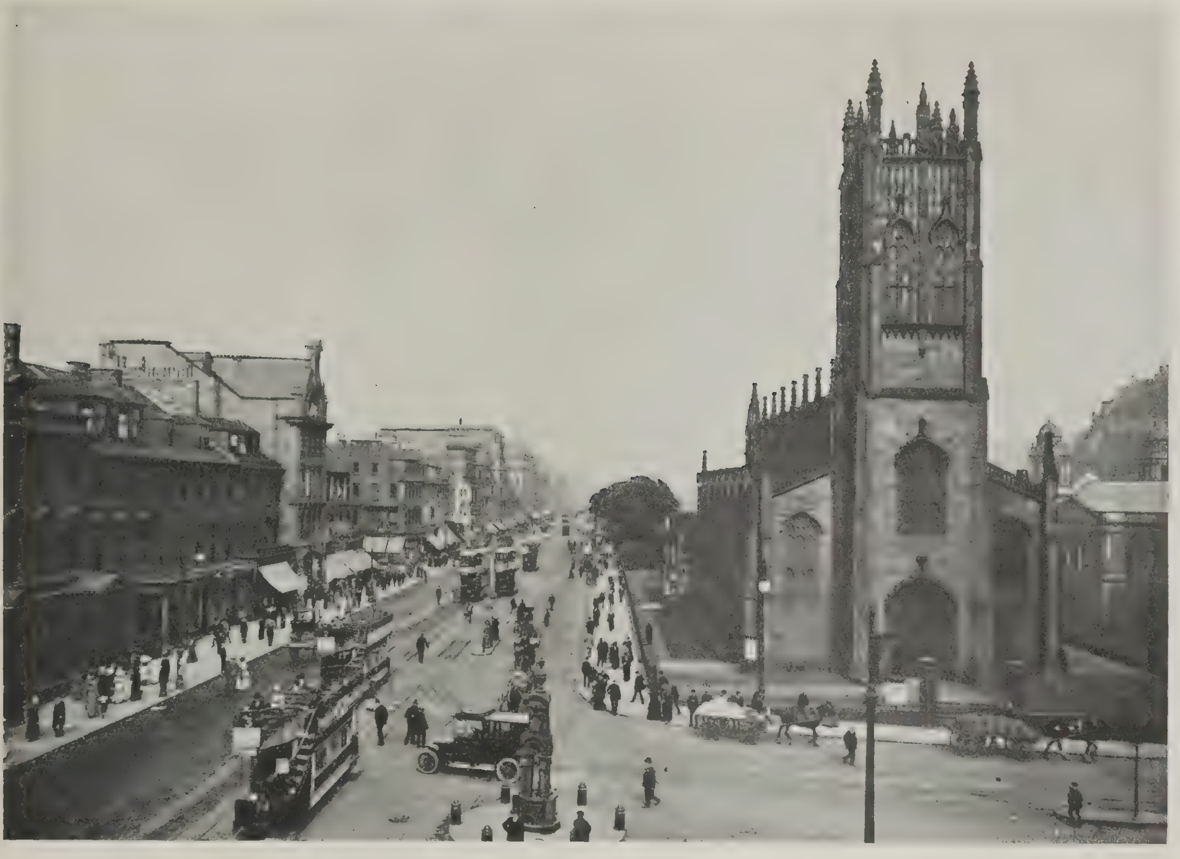
EDINBURGH, neither the most ancient nor the largest of the cities in Scotland, holds an unchallenged pre-eminence among them for architectural interest. While she has suffered from invasion, poverty, puritanism, and parsimony, yet it may be said that since the middle of the eighteenth century no other city in these islands has so clearly kept before it the civic ideal. The ascendancy of a large cultured class is everywhere reflected in her buildings; not less so the special character of that culture—intellectual, a little cold and devoid of emotion, yet tinged with humour. The pride of the people in their possessions, whether remarkable or not, did not escape Dr. Johnson's observation in Scotland, and this quality is not extinct. Yet the visitor to Edinburgh, forewarned, as he cannot fail to be, of the attractions of Princes Street, must feel a thrill of surprise as he emerges from the Waverley Station.

Here is the centre—nearly all the best things at the first glance. Princes Street, a broad terrace in front of its line of buildings, gives on gardens sloping to a ravine, on the other side of which towers the Castle rock with the tall houses of the old High Street climbing up to it. Eastward the vista is closed by the sudden slope of the Calton Hill with its monuments, and westward the eye travels along the street to distant spires with, in the foreground, the Royal Scottish Academy and the National Gallery standing astride the ravine. Both are by Playfair; excellently designed, though perhaps rather too small in scale. Grecian Doric is the order used in the building nearest to Princes Street. It is one of many to be found in the city, and if the fragment on the Calton Hill which was to have been a replica of the Parthenon had no other merit it has this, that its order instantly and always satisfies. By it one perceives that this order cannot greatly increase or decrease without loss in its relationship to the human scale—that the columns at Euston smack of gigantism and those of the High School near by of lack of grandeur, admirable as is the relation of parts in that building.

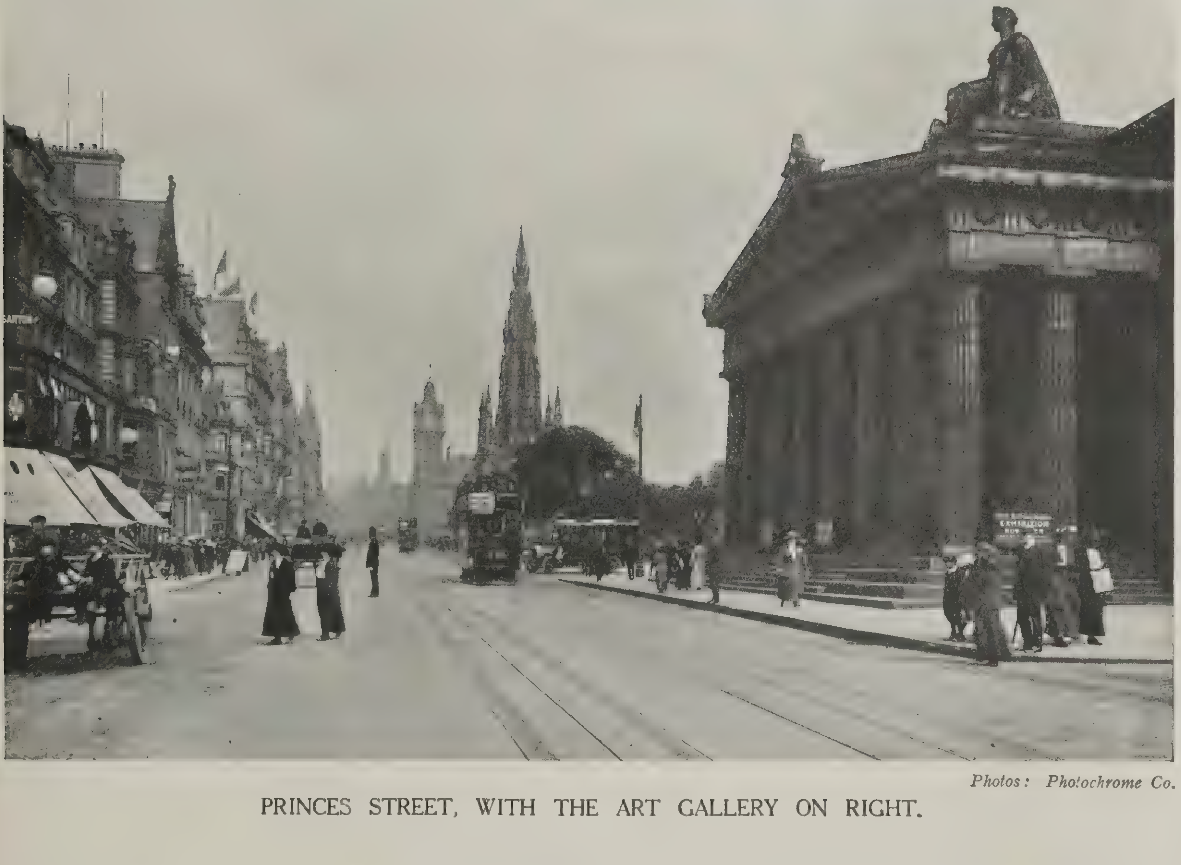
The central portion of Edinburgh is particularly interesting as a plan. On one hand is the old town grouped round the Castle and not straying north of the ravine which was formerly a loch. On the other is the new town, dating from the latter half of the eighteenth century. This is, in many respects, the finest civic area in the kingdom, both in respect of the spacious and dignified lay-out and of the sustained excellence of the buildings, plain to the point of baldness though many of these are. The lay-out, however, is no stroke of genius, and has practical as well as æsthetic defects. The main avenues, George Street and Queen Street, occupy a ridge which runs parallel to Princes Street, and



PLAN OF EDINBURGH.



PRINCES STREET, FROM THE WEST.



*Photos: Photochrome Co.*

PRINCES STREET, WITH THE ART GALLERY ON RIGHT.

Photo: Photochrome Co.

A GENERAL VIEW OF EDINBURGH FROM CALTON HILL.

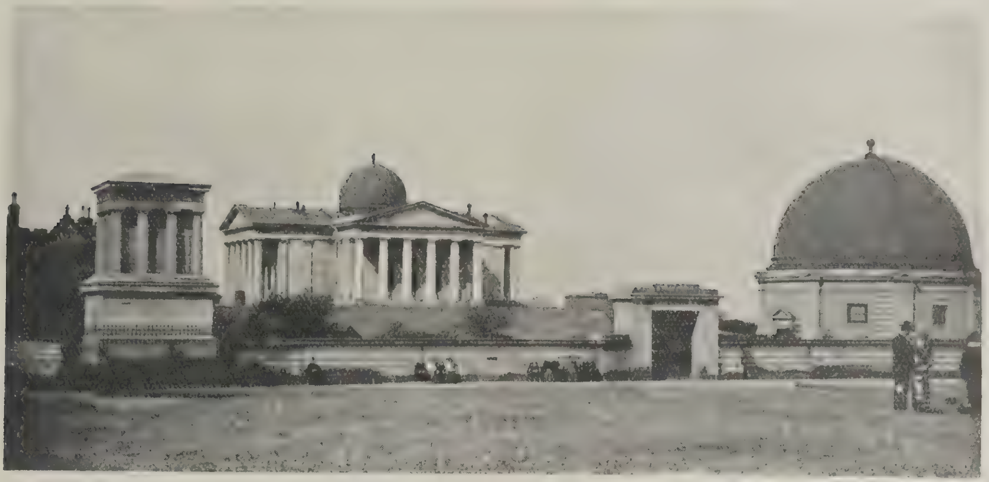
the connecting streets discharge their traffic at right angles and down steep slopes into that thoroughfare. Looked at from these they appear to end nowhere and in nothing, the statues in George Street silhouetted against the sky being quite inadequate as climaxes.

Those who have read the chapter in which Mr. Bolton in his monumental book deals with the work of the Brothers Adam in Edinburgh will be forewarned against anticipating their skill everywhere. Charlotte Square, fine though it be, would have been finer if its central feature, St. George's Church, had been built according to the Adams' designs. Nevertheless, from some viewpoints the cupola is impressive. The corresponding *place* at the other end, St. Andrew Square, has a company of handsome buildings, notably the Royal Bank, by Chambers, once a private mansion, and the British Union Company's Bank, by David Bryce, unexpectedly ornate, but not quite happy with its statues crowning the heavy cornice returned round each column. The whole district is one in which to wander. Queen Street, Moray Place, and the Royal Circus, all incite to admiration and criticism, and in the first mentioned Thomas Hamilton's beautiful Royal College of Physicians challenges comparison with Cockerell's work.

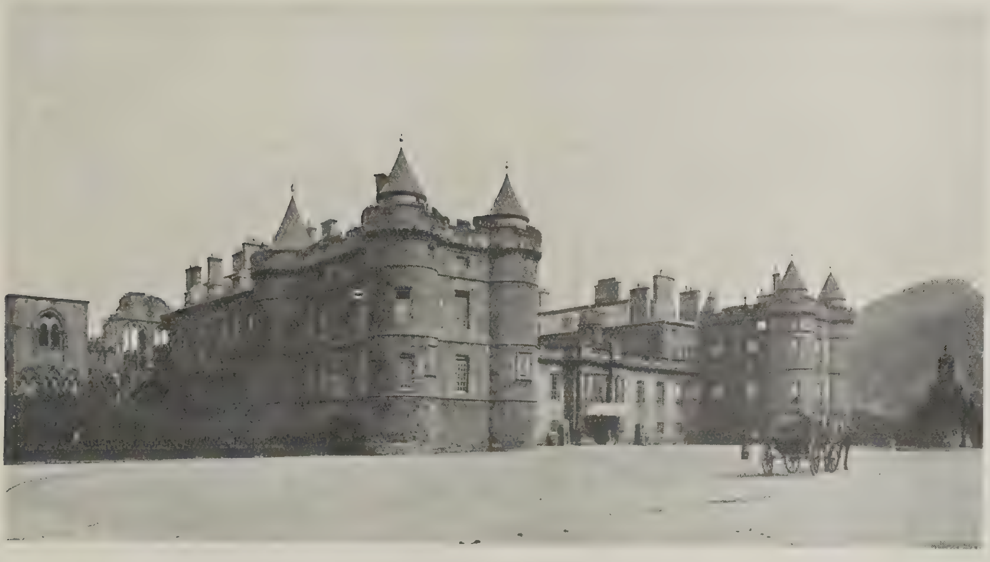
Edinburgh Castle is not a building that can be missed, nor is there any lack of information about it. It stands at the summit of a hill down which runs, under several names, the central street of old Edinburgh till it debouches in the open space in front of Holyrood Palace. Here are the street fronts of those ancient skyscrapers which cut such a figure when seen from Princes Street. Ten or eleven stories is no uncommon height, and nothing more foreign to English notions could be imagined than their case in, say, the seventeenth century when each of these "lands," as they were called, was a complete microcosm of society—the "zoning" vertical. A laird or a judge might have his *pied-à-terre* on the best floor, and the higher up the stairs the lower in the social scale, always excepting the submerged tenth who had the cellars. Many of the finer houses have been pulled down. Where the palace of Mary of Guise once stood, there, by the irony of events, stands the Free Church Hall and College, whose quadrangle holds a large statue of John Knox. Notwithstanding the cutting away of their bases to form shops and, in many instances, their squalor, these tall houses standing shoulder to shoulder produce a powerful effect on the imagination. With few architectural features and almost no horizontal lines they climb the steep incline without any feeling of uneasiness. The small gables and stone dormers help in this; the number of short vertical lines close together overcoming that jerkiness which is produced, in Bath, for example, by cornices breaking upwards.

Here, within a stone-throw of each other, are found St. Giles's Cathedral, with Sir Robert Lorimer's small and exquisite Chapel of the Thistle, the Parliament House and Law Courts, and the City Chambers. The first has been much altered and restored from time to time, and has become almost square in plan as the result of accretions. Parliament House is a classic building on an irregular and rather congested site, and successive rebuildings have not given it much cohesiveness of effect. It has, nevertheless, considerable dignity, and houses three great libraries and some fine portraits as well as the flower of Scotland's body legal.

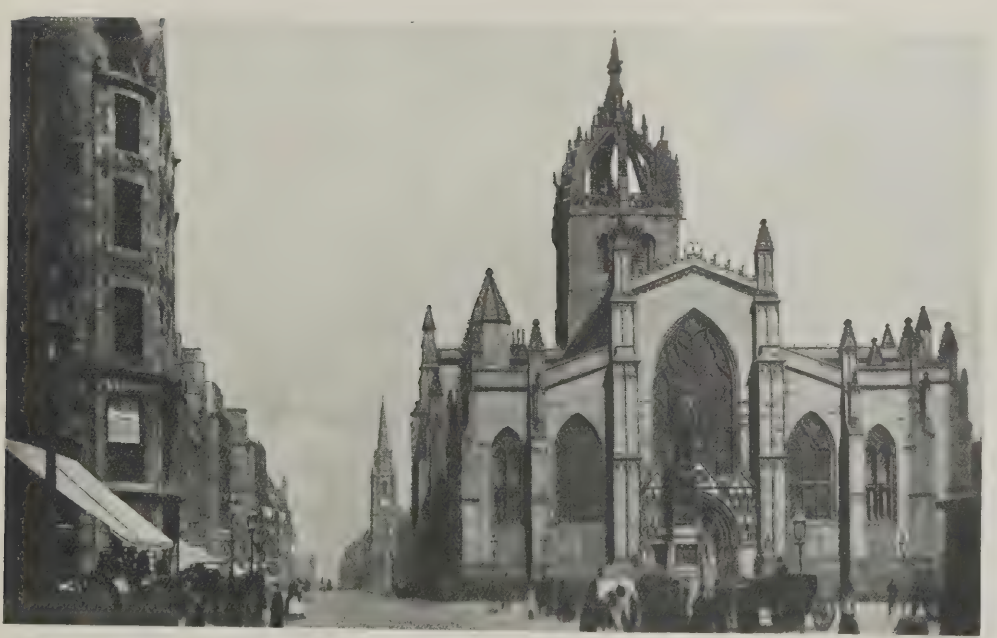
The street continues as the Canongate, with interest and squalor evenly distributed; then suddenly lands one in an open space facing Holyrood Palace. Nothing could be more dramatic than this sudden transition. The dark palace stands close under the Salisbury crags—a bare hillside without a sign of human habitation. Abutting on the north side is all that remains of Holyrood Abbey, the visible symbol of the Church's annexation to the State. The nave arcade has singularly graceful proportions. Nothing in the palace is so arresting in its first view and the fine plaster ceilings illustrated in Mr. Bankhart's book are unfortunately not visible to the public. Even the



THE ROYAL OBSERVATORY, CALTON HILL.



HOLYROOD PALACE.



ST. GILES'S CATHEDRAL.

*Photos: Photochrome Co*

SOME NOTABLE BUILDINGS IN EDINBURGH

bloodstains of Rizzio, at one time maintained by the Scottish Office of Works, have been allowed to disappear. Excepting the north-west wing, which contains Queen Mary's apartments, most of the existing palace was built or rebuilt by Charles II.

The district to the south of the old town contains several notable buildings, of which the university is chief. Robert Adam's design for this was his most important contribution to public architecture, and it is a misfortune that it was modified by Playfair, the two courts of the original design being made one. It is, nevertheless, a work of distinction with an air of urbane magnificence appropriate to a university. The entrance block with its recessed arch has a Roman touch, and the drum and cupola have a remarkable degree of scale considering that the last is little more than 20 ft. in diameter at its springing. The domed vestibule, circular in plan, with four arched openings penetrating into its surface of perfectly plain masonry, is a masterly piece of work, and the quadrangle entered therefrom is handsome and spacious.

The whole neighbourhood is richly scholastic, the modern part of the university, including the medical school and the McEwan Hall, being close at hand. This group, by Sir Rowand Anderson, is in a Lombardic type of Italian Renaissance which does not look quite at home in Edinburgh. None the less it has a grave distinction, and the difficult requirements of a scientific building have been honestly met without loss of dignity. Next there is Heriot's Hospital with its towers and turrets and cupolas—surely the most fantastic piece of stone and mortar in these islands. There is a legend which connects Inigo Jones with its design, but it is not now generally maintained, so it is not necessary to strain our powers of credulity. The interior is more restrained in parts, and the richly decorated council room approaches much more nearly to a consistent classic.

Further west in the Lothian Road the Usher Hall suddenly presents itself to view, bringing with it memories of a competition in which Scotland was beaten on her own ground. It has a boldness and scale which many recent buildings in the city lack.

Still further to the west lies an area of dignified streets and crescents savouring of the academic Edinburgh of the early nineteenth century, and in its midst a large Sir Gilbert Scott church, St. Mary's Cathedral. It is Gothic of remorseless purity and finish. The Roman Catholic church of St. Peter by Sir Robert Lorimer provides an interesting contrast. Its simple interior of whitewashed brick with a tall altar-piece in glowing colour is full of delight. The exterior is interesting, but hardly so attractive. The converse holds good of the eighteenth-century church of St. Cuthbert at the west end of Princes Street, which has a fine spire in the Wren manner.

Hurrying along Princes Street (for space begins to fail) we arrive at the Register House. Here is Robert Adam, as nowhere else, in civic form and without other men's meddling. The building is rectangular in form, enclosing a rotunda of which the roof appears externally as a low dome of the Pantheon type, and of which, alone among the various apartments, the internal treatment remains as Robert Adam left it.

Finally, the Calton Hill should end if it did not begin the visit. From nearly every part of Edinburgh it has been visible, and we may thank whatever powers there be for the High School so finely leaning to its slope, for the "stickit" Parthenon for being an open screen of columns

*Photo: Photochrome Co.*

JOHN KNOX'S HOUSE.

d not a deadly cold replica. For brilliance of composi- on and skill in placing this High School by Thomas amilton is a building without equal in Scotland. As a hool it may offer many grounds for criticism: some may islike the too literal use of Greek detail in an alien land; ut none can fail to be moved by the suggestion of vigour repose which its masses convey. From the top the view the thing. Most of the buildings referred to may be en, with the many which could not be mentioned. Per- ective is regained, and the city is put in its place by a ndscape that is truly in the grand manner.

[We quote the following extracts from an interesting ticle on "The Forecourt of Holyrood" by Mr. James A. orris, published in a recent issue of "The Glasgow erald":—

Edinburgh, above all capital cities, save perhaps that of cient Greece, is the most beautiful, as it is also the most cturesque and romantic in its atmosphere and environ- ent; more human also is it than even Rome, because less lympian. Besides, is it not our own—that beautiful old ey city clustered round its ancient fortified height, iled at times by the mists which float in from the North a, but glistering also in the clear-washed air and bright orthern sunshine; always like Scotland herself, "beautiful is a wet pebble."

From the Castle Rock to Holyrood the long downward cline stretches a jewelled thread of memory and achieve- ent. Along the old-time streets Scottish history still rges warmly in the heart that understands, and to the wer terminal of the historic causeway has recently en given a Forecourt, not on the scale first tended, but still a courtyard fittingly punctuated by stone pillars, with hammered iron gates and enclosure railings beautifully wrought, in keeping alike with Scottish examples of the craft as with the brooding spirit of the Abbey ruins and the historic Palace. Here architect, sculptor, and craftsman, if no longer one in person, have yet worked in unity of spirit; and now that fitting time has passed to enable first impressions to become also final, the work can be accepted as an abiding contribution to the embellishment of the Scottish Capital.

Edinburgh has long possessed a fine architectural record, picturesque alike in tradition and setting. In the Old Town her ancient closes still keep those many historic houses which vie in altitude of stories with the loftiness of her surrounding hills; and in the relatively modern work of the Brothers Adam, Playfair, and Hamilton she has monuments of noble masonry, impressive in their quiet dignity.

Generous also in the laying out of the streets and squares of the New Town outside the Old City walls; rich in such architecture as the Register House, the University, the High School, and the two classic temples on the Mound, she has a record of restraint which few modern cities can rival.

Sir Rowand Anderson introduced a later note of Italian Renaissance which the younger school has followed, and in the King Edward Memorial this influence is visible, with the result that the Forecourt and its statue are in sequential and not unworthy keeping with the Edinburgh of earlier days. Mr. George Washington Browne and Mr. H. S. Gamley, both Royal Scottish Academicians, are to be commended upon the beauty of their work.]

[*The previous article in this series appeared in our issue for March* 21.]

# The Edinburgh Conference Programme

THE British Architects' Conference will be held in Edinburgh from June 13 to 16 under the presidency of Mr. Paul Waterhouse, P.R.I.B.A. Simultaneously with the conference will be held the venth annual convention of the Incorporation of Archi- cts in Scotland. The headquarters will be the Incor- ration of Architects in Scotland, 15 Rutland Square, dinburgh. Appended is the programme:—

*Wednesday, June* 13.

8 to 10.30 p.m.—Smoking concert at 15 Rutland Square. embers will be the guests of the Incorporation of Archi- cts in Scotland.

*Thursday, June* 14.

10.15 to 10.30 a.m.—Welcome by Lord Provost and agistrates in the Council Chamber, Municipal Buildings.

10.30 to 11 a.m.—Paper by Mr. T. P. Marwick, F.R.I.B.A., esident of the Incorporation of Architects in Scotland, "Edinburgh: Its Rise and Progress."

11 a.m. to 12.30 p.m.—Paper by Mr. H. V. Lanchester, R.I.B.A., President of the Town Planning Institute, on he Place of Architecture in City Development"—dis- ssion to follow.

1 to 1.45 p.m.—Luncheon in Edinburgh Castle. (Ticket, .) The company will be photographed after luncheon.

2.15 to 4.30 p.m.—Inspection of Castle (Mr. J. Wilson aterson, M.B.E., A.R.I.B.A., architect, H.M. Office of orks, will act as leader). Drive by way of "Royal Mile" Holyrood, inspect abbey and state apartments. Drive und Arthur's Seat and through part of the City. icket, 2s. 6d.)

4.30 to 6 p.m.—"At Home" by R.I.B.A. in National allery. Tea will be served.

8.30 to 10.30 p.m.—Reception by Lord Provost Hutchison Freemasons' Hall, George Street.

*Friday, June* 15.

9.15 a.m. to 6 p.m.—Motor char-à-banc tour to Dryburgh Abbey and Melrose Abbey. Lunch at Melrose and tea at Peebles Hydropathic. Leave 15 Rutland Square at 9.15 a.m. prompt. (Ticket, 17s. 6d.) For convenience of some members a char-à-banc will leave Caledonian Station at 10 a.m.

7 for 7.30 p.m.—Banquet in Freemasons' Hall, George Street. (Ticket, 15s., including wines and cigars, £2.)

*Saturday, June* 16.

Annual general meeting of the Incorporation of Architects in Scotland in the Royal Scottish Society of Arts Hall, 117 George Street, at 10 a.m.

*Business.*

1. Minute of annual general meeting, June 16, 1922.
2. Report by President and Council for Session 1922-23, and treasurer's account for year 1922.
3. Summary of the Chapter Reports for past year.
4. Election of three Incorporation representatives to the council for the ensuing year—the nominations by the council being: Messrs. John Begg, F.R.I.B.A., Edinburgh; James A. Morris, F.R.I.B.A., Ayr; and James Salmon, F.R.I.B.A., Glasgow.
5. Appointment of auditor.
6. Confirmation of council's resolution to increase the dues for year 1924 to the following: Fellows, £1; Associates, 10s.; Students, 2s. 6d.
7. Election of the president for the ensuing year. The council nominate Mr. T. P. Marwick, F.R.I.B.A., Edinburgh.
8. Selection of the place for holding the next annual convention and the election in connection therewith of a Committee of Arrangements consisting of five Fellows and/or Associates.
9. Other competent business.

# The New Lyons' Corner House

### F. J. WILLS, Architect

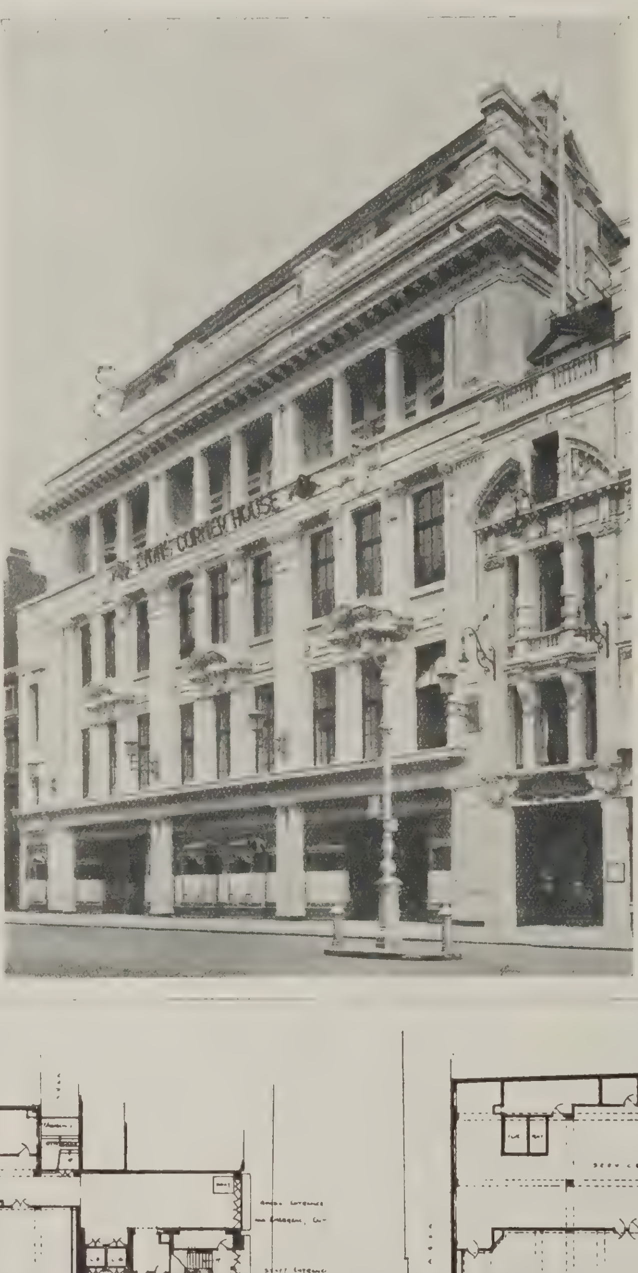
LONDONERS are becoming accustomed to associate that particular kind of terra-cotta which has a white glazed surface—known sometimes as an eggshell glaze—with the useful restaurants of Messrs. Joseph Lyons & Co. The latest of these was opened recently in Coventry Street, Piccadilly, standing next to the original Corner House which was opened fifteen years ago. The new Corner House is claimed to be the largest restaurant in the world.

Its nine floors range from 150 ft. above the street level to 70 ft. below it. Five of these are open to the public, another is devoted to staff messrooms, whilst two others will be used for the making of confectionery. It is difficult to visualize the extent of the floor space. Each floor measures about 250 ft. by 250 ft., about half the size of a football field, the total floor area being about five acres.

With the exception of the steel framework (for which 2,400 tons of steel were made and erected by Messrs. Dorman Long & Co.) the whole of the construction was the work of Messrs. Lyons' construction and engineering departments.

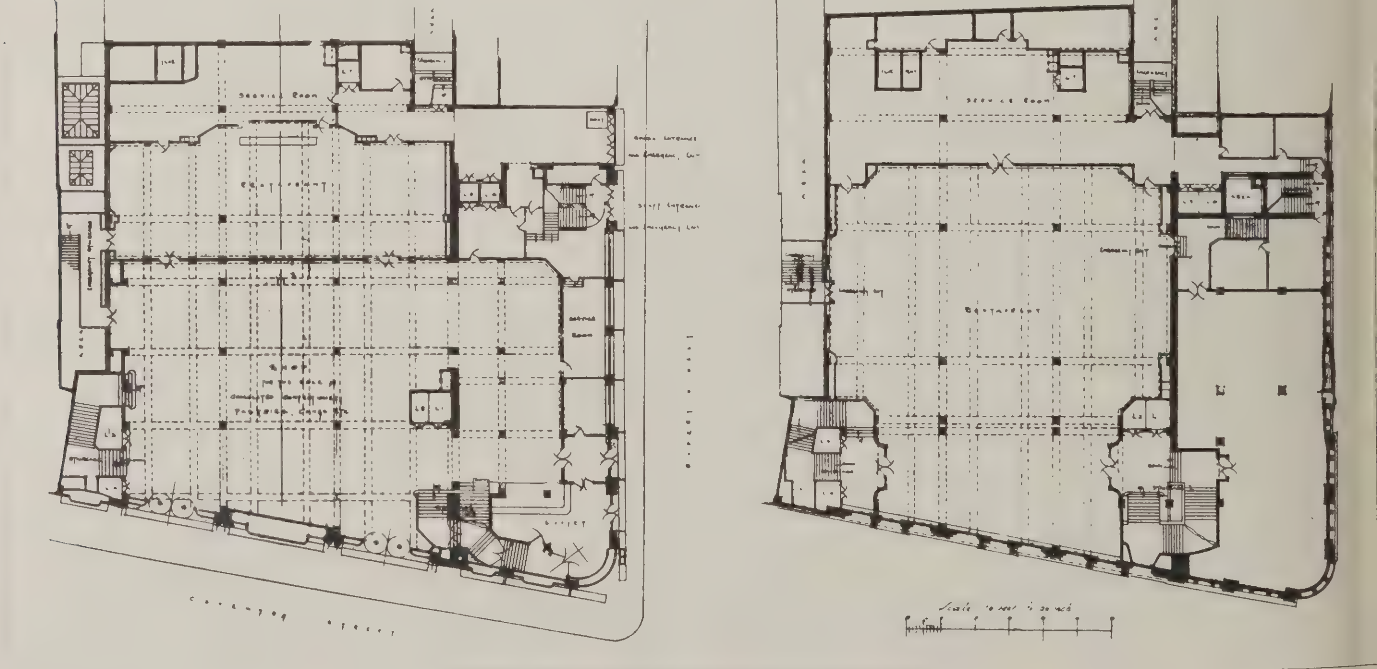
The new building stands on the site of the old and once famous "Piccadilly House" which, with bowling greens and a tennis court in front of it over the present thoroughfare of Coventry Street, was the resort of all the youth and fashion of the day. The site upon which this new restaurant stands was, indeed, the original "Piccadilly," which a little later gave its name to "the road of Reading" as far as Swallow Street, and much later still to the whole of the street we now know as such.

Terra-cotta, the material chosen for the façade, is, of course, one of the most durable. The surface can readily be cleaned, and it permanently resists the acids of the London atmosphere. The proportions of the elevation are studied, and for a popular restaurant Messrs. Lyons may be said to have aimed, through their architect, Mr. Wills, at a style of design which makes their buildings as distinctive as any in town.



## *The Interior.*

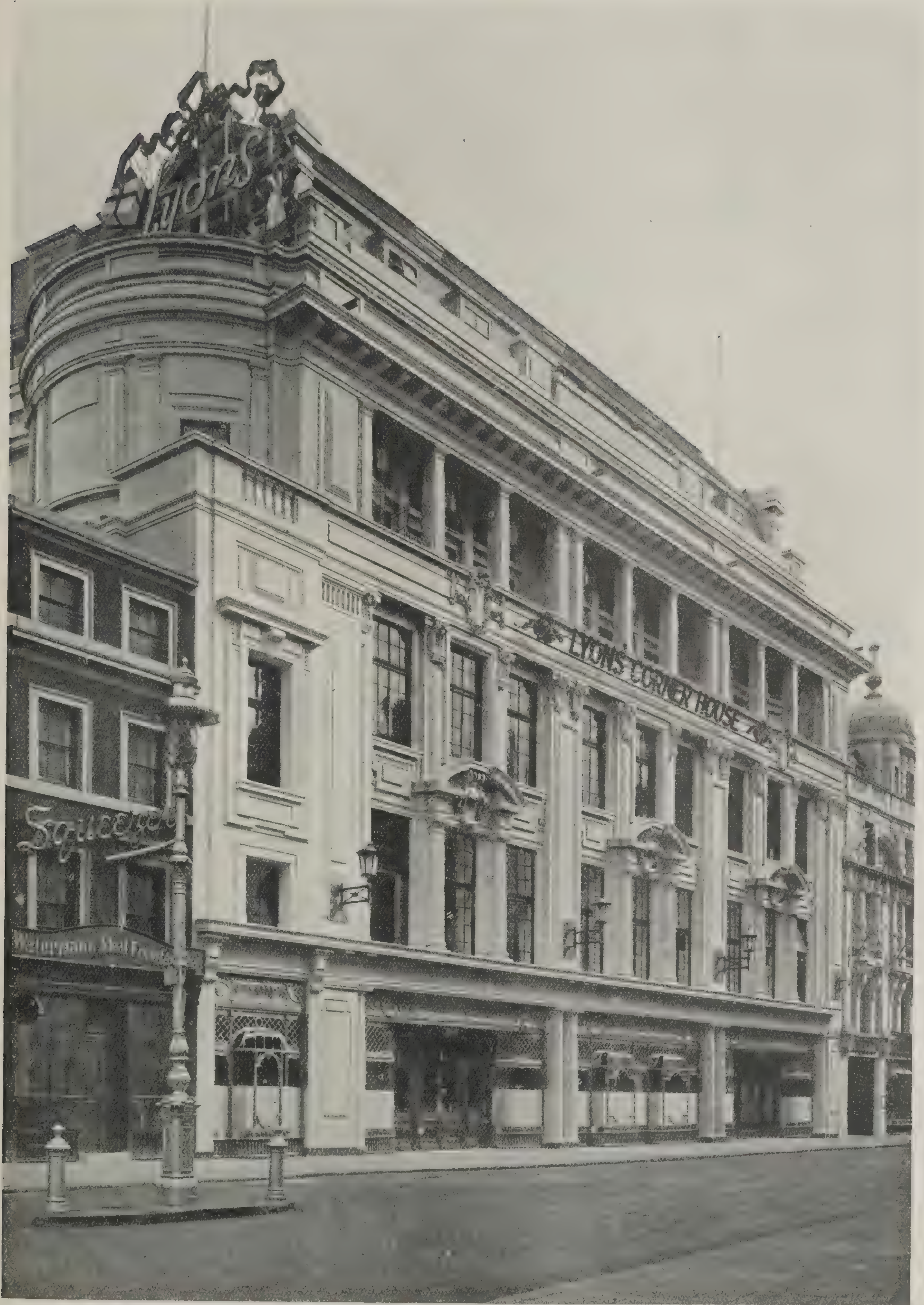
Perhaps the most striking feature of the interior is the marble work, and a fortune must have been spent on this alone. One is struck, too, by the profusion of the costly and beautiful woods—mahogany and walnut for the great part—and by the riot of other decorative features—modelled plasterwork, glazed



GROUND AND FIRST-FLOOR PLANS

# Current Architecture. 175.—Lyons' Corner House, Coventry Street, London

### F. J. Wills, Architect



The whole of this façade is in white glazed terra-cotta, a material that is readily cleaned and has the important quality of imperviousness to the acids of the London atmosphere.

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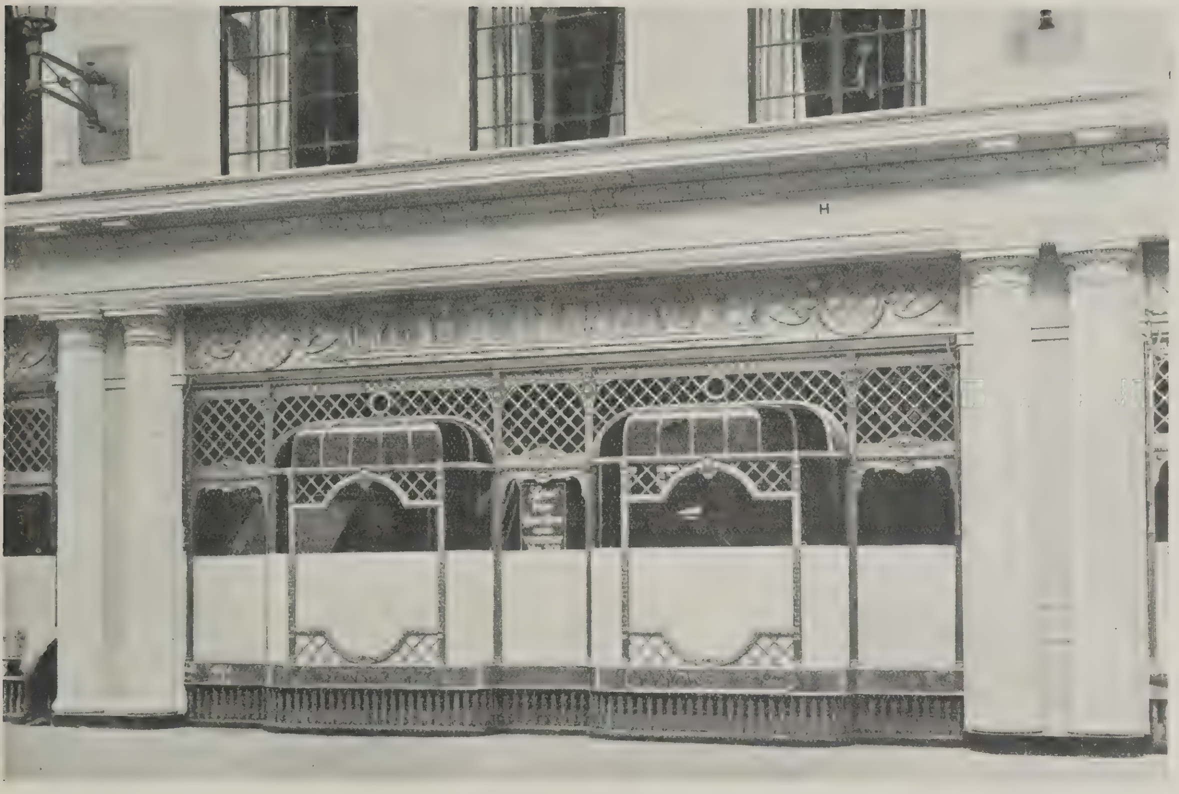
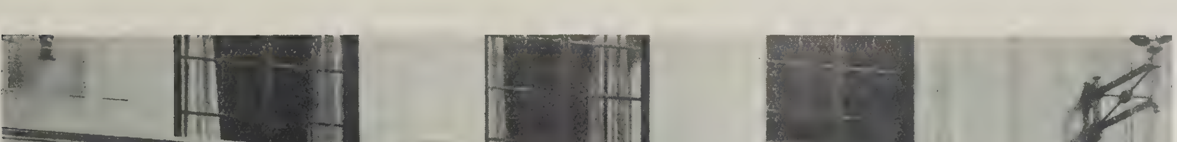
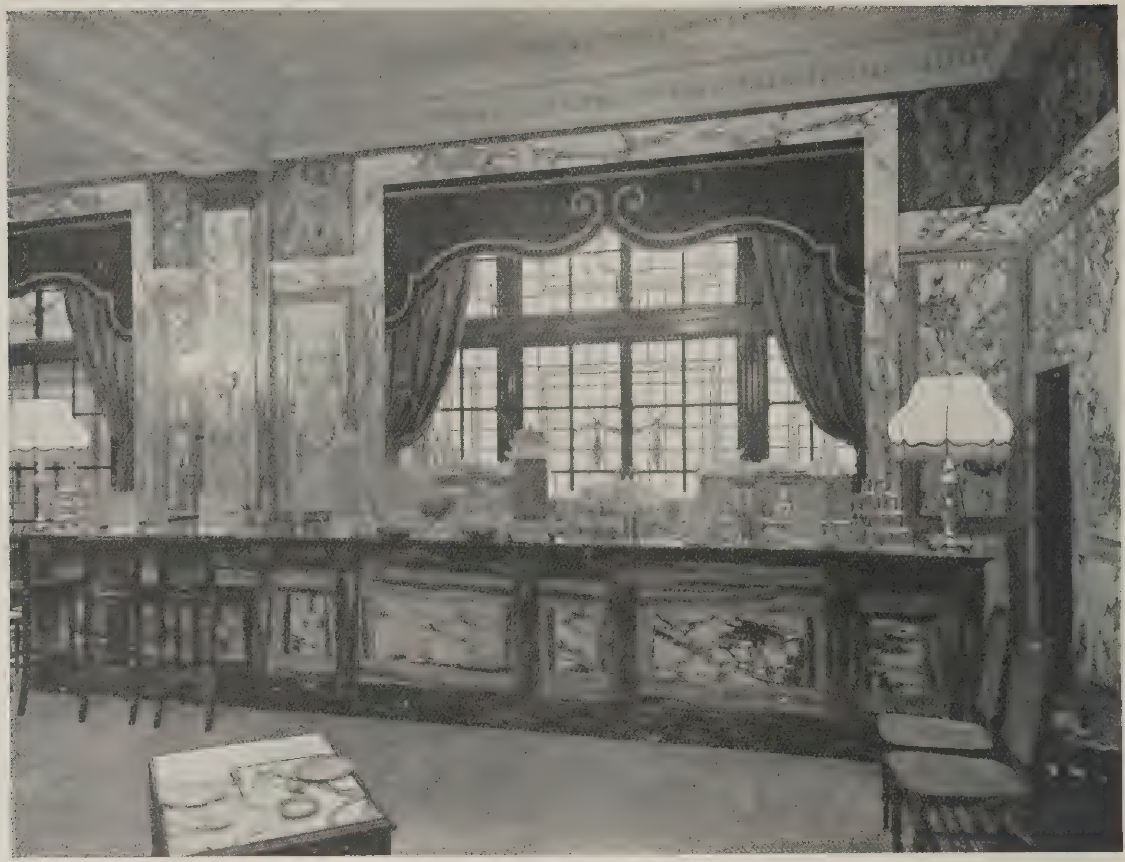


ONE OF THE SHOP FRONTS.

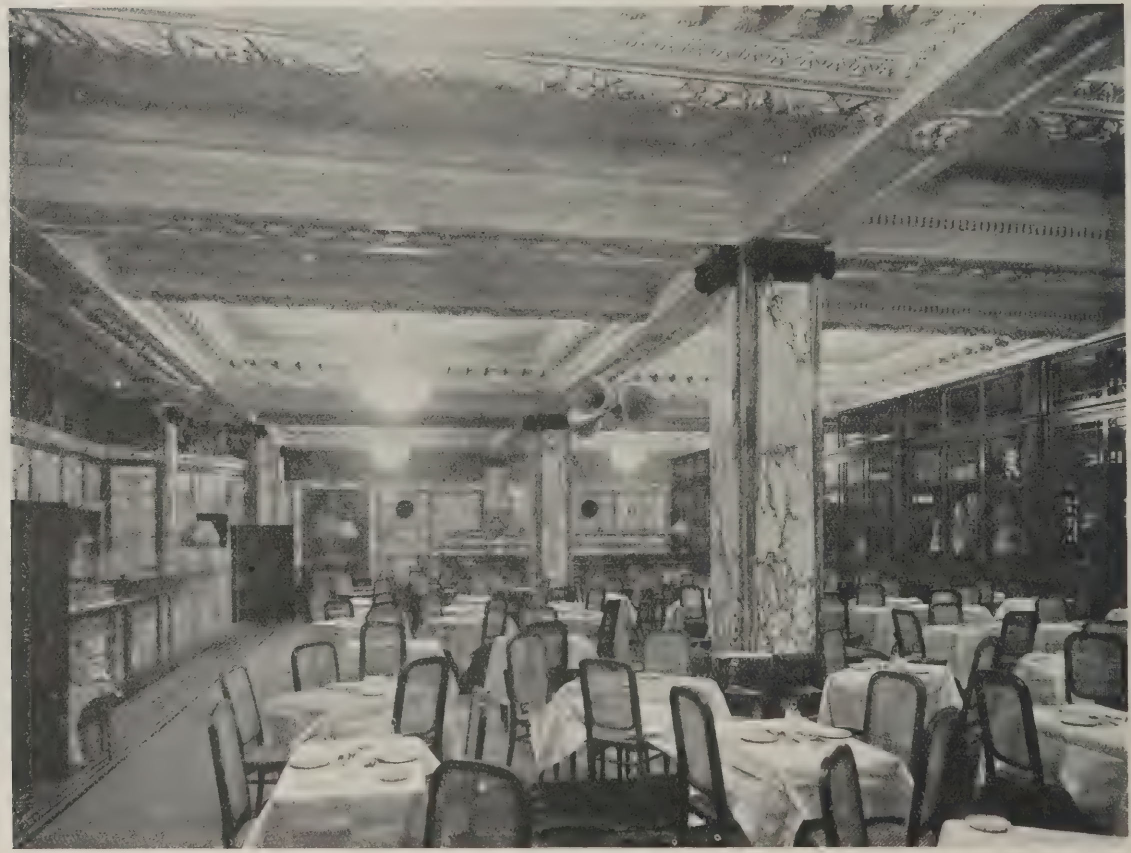


A DETAIL OF ONE OF THE ENTRANCES.

LYONS' CORNER HOUSE. F J. WILLS, ARCHITECT.



A CORNER OF THE CAFÉ.



A GENERAL VIEW OF THE CAFÉ.

LYONS' CORNER HOUSE. F. J. WILLS, ARCHITECT.

eens, colourful friezes, and shining glass. One can rack e's brain in vain to think of the addition of anything e. Cartouches, raised and sunk panels, architraves, liments complete and pediments broken. Scrolls, ags, consoles, dentils, keystones, aprons, columns, asters, sun-bursts, are all made use of in turn. It is ubtful whether there is a square yard of walling left adorned.

There has been no attempt at uniformity of decoration. ther has it been the other way. Thus the styles used in various public rooms are Pergolesi, Louis XIV, Empire, am, and Louis XVI. It is interesting to note that the saic floor of the salon on the ground floor contains 34,000 pieces. There are to be four restaurant services, h of four of the floors being a complete restaurant in elf, with kitchen, larder, etc., which can provide 1,000 ople with breakfast, lunch, tea, dinner, or supper.

### *The Structural Steelwork.*

The structural steelwork, which was rolled, fabricated, l erected by Dorman Long & Co., Ltd., of Middles- ugh and London, comprises eight floors and roof ried on thirty-two main stanchions, with floor girders of vards of 30 ft. span, the total weight of steelwork ounting to 2,400 tons.

ome idea of the importance of the steelwork in this lding may be gathered from the fact that the lower in lengths of stanchions measure 63 ft. in one piece, gh 22 tons, and are designed to carry a load of over 00 tons. Their bases, which stand on massive grillages, about 40 ft. below pavement level, and the first length ries the sub-basement, basement, ground, and first rs.

he reason for the rather unusual height of these stan- ons was that as the excavation of the site proceeded it immediately followed by the fixing of the steelwork, the thrust from the retaining wall was taken up by the n steelwork of the structure; the retaining wall itself ng built of panelled brickwork supported by a secondary cture.

The whole of the steelwork was fabricated at Dorman Long & Co.'s London works, with the exception of some of the stanchions which for the sake of expediency were made at their Middlesbrough works.

The steelwork was carried out in such a way that all trades could be employed simultaneously; at the moment when the roof was being erected the internal finishes and decorations were proceeding on the upper floors.

The whole of the floors, roof, staircases, and concrete casing to steelwork was carried out by Messrs. F. Bradford & Co., of Coopersale Road, Homerton, E.9. The hollow tile floors vary in thickness from 7 in. to 9 in. They were designed for a live load of 1 cwt. and 2 cwt. per ft. super, and when tested under working conditions successfully withstood a load of 7 cwt. per ft. super. The floor spans vary from 8 ft. to 17 ft., and in length up to 38 ft. across the bays.

The glazed terra-cotta used on the front and other elevations, supplied and fixed by Shaws Glazed Brick Co., Ltd., 12 Buckingham Street, Strand, W.C., and Whitebirk, Darwen, Lancashire, marks a new era in the manufacture of this material, inasmuch as it is burnt entirely by gas. The perfect control of burning conditions and the removal of all injurious fumes gives the manufacturer facilities for the production of colour, even tones, and regularity of size hitherto unattainable, and the effect on the work can be seen at a glance. It was only after an expenditure of large sums of money and over four years' constant experiment that the problem was solved. Messrs. Lyons, with their usual enterprise, having had their attention drawn to the possibilities of the new invention, at once sent representatives to inspect the process and its products, and immediately placed the order for the whole of the work for the Corner House—one of the largest contracts for terra-cotta since the war.

The lifts were installed by Messrs. Waygood-Otis, Ltd. There are four high-class electric passenger lifts running at 300 ft. per minute, with handsome bronze-finished cars with glass panels. The cars are fitted with special safety gear, which is designed to grip on the guides and sustain

LYONS' CORNER HOUSE: THE BASEMENT.

the car in case of failure of the suspension ropes without undue shock to passengers in the car, as the safety gear comes into operation gradually. Two of these passenger lifts are fitted with Waygood-Otis patent micro-drive self-levelling machines.

One electric staff lift, three electric goods lifts, and thirteen electric service lifts and wine lifts operated by push-button control and arranged to serve the different floors have also been installed. In most cases Messrs. Lyons have adopted the wise policy of having separate lifts to serve each floor so that they only stop at top and bottom levels, the lifts varying in travel according to the floors served.

The lifts work from St. James's and Pall Mall electric supply at 220 volts direct current.

The whole of the asphalt work, which included underpinning, lining to air ducts, footways, floors, cornices, and roofs, was carried out by the Limmer and Trinidad Lake Asphalt Company, Ltd.

The roof is covered with slates from the famous Old Delabole quarries at Delabole, Cornwall. Green Randoms 22 in. to 10 in. long, various widths, are used and laid in diminishing courses. The beautiful tones of these slates give a very pleasing colour effect. Messrs. Setchell and Sons, Ltd., London, Manchester, and Birmingham, are the sole distributors for the quarry.

LYONS' CORNER HOUSE: STAIRCASE AND FIRST-FLOOR LANDING.

The Roman marble mosaic paving to the hall of the ground floor, and also the "Biancola" non-slip stair treads, were supplied by the Art Pavements and Decorations, Ltd.

Messrs. Sankey & Co., Ltd., of Hammersmith, supplied large quantities of pressed and glazed bricks and blocks, and Portland cement, and also the partition blocks for approximately 7,000 superficial yards.

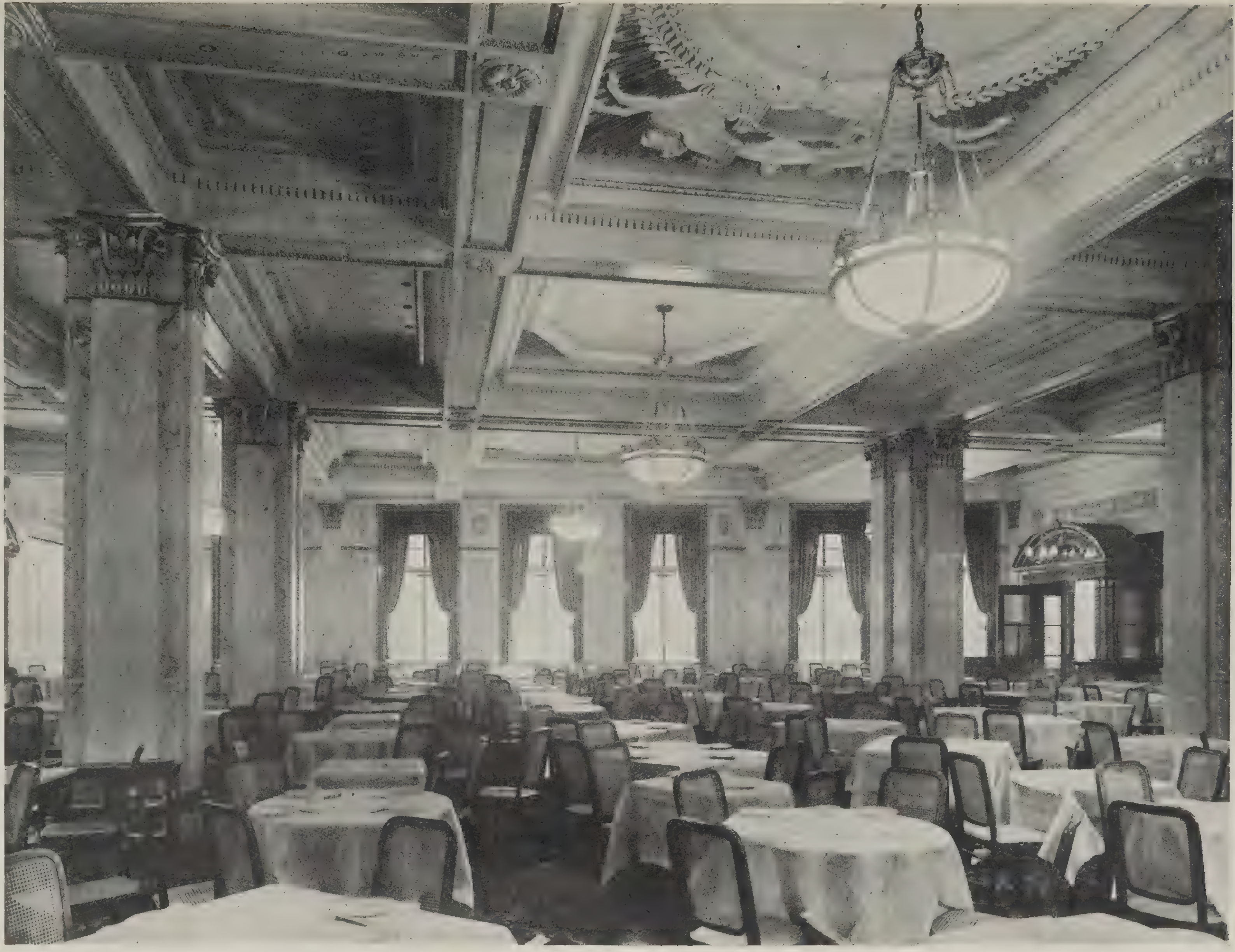
Messrs. G. Jackson and Sons, Ltd., have carried out the largest fibrous plaster contract in the building. Their work consists of the Pergolesi ceiling and frieze to the basement café; Adam ceiling and frieze to second-floor café; some work on the ground floor, and the carton pierre decoratio to the bandstands.

Obviously the amount of specialist work in a buildi of this class must be great. For instance, the ventilati problem was one which demanded the closest attentio All difficulties in this connection have been overcome. A is drawn into the lowest basement by motors of 150 h. the air being filtered, purified, cooled, and reheated, necessary, to whatever temperature is desired, and pump to the various rooms, from which it finds its way to t outlet pipes on the roof. The air in the building is chang fifteen times every hour.

The main ventilation of the entire building is effected four large "Keith" centrifugal fans, manufactured James Keith and Blackman Co., Ltd. Two of these se

## The First-Floor Dining-Room

F. J. Wills, Architect



This room, the most capacious in the restaurant, has a wall treatment of marble throughout, the isolated piers being also faced with marble. The ceiling, which is split up into a number of coffered compartments of varying design, is in modelled plaster, here and there gilt and coloured.

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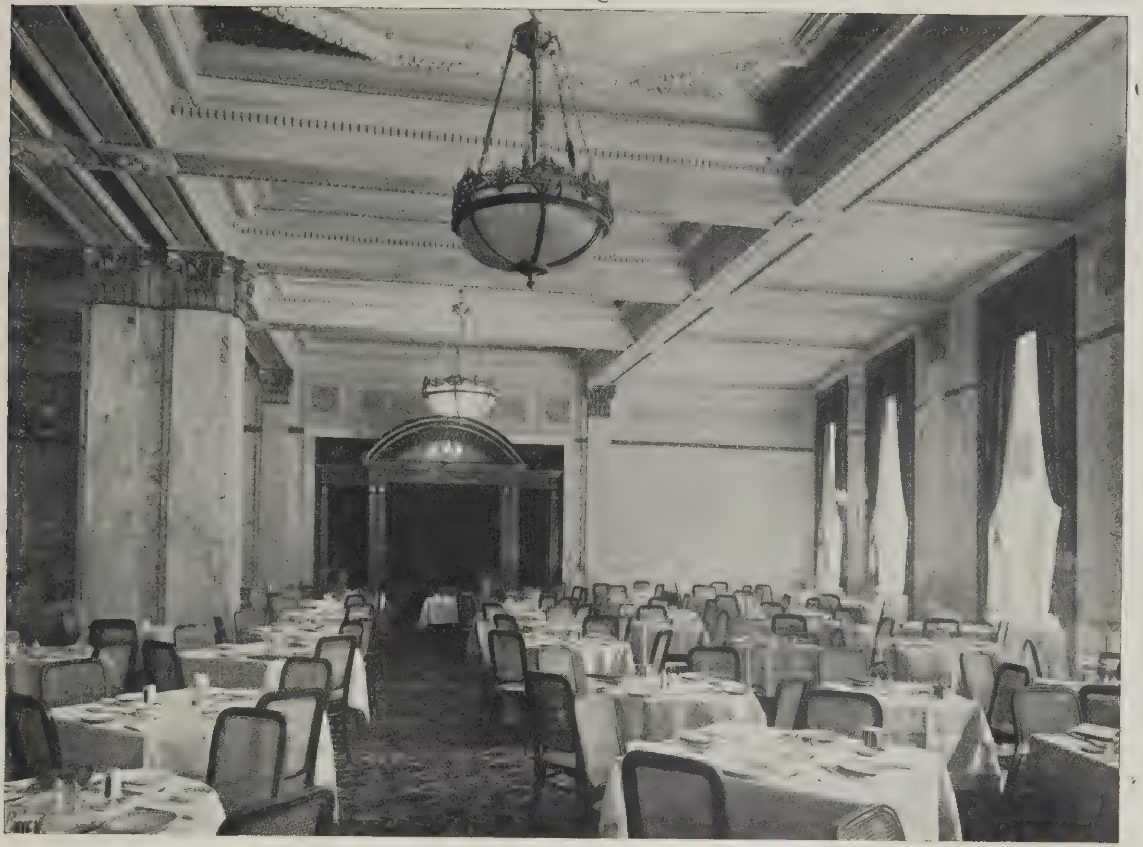
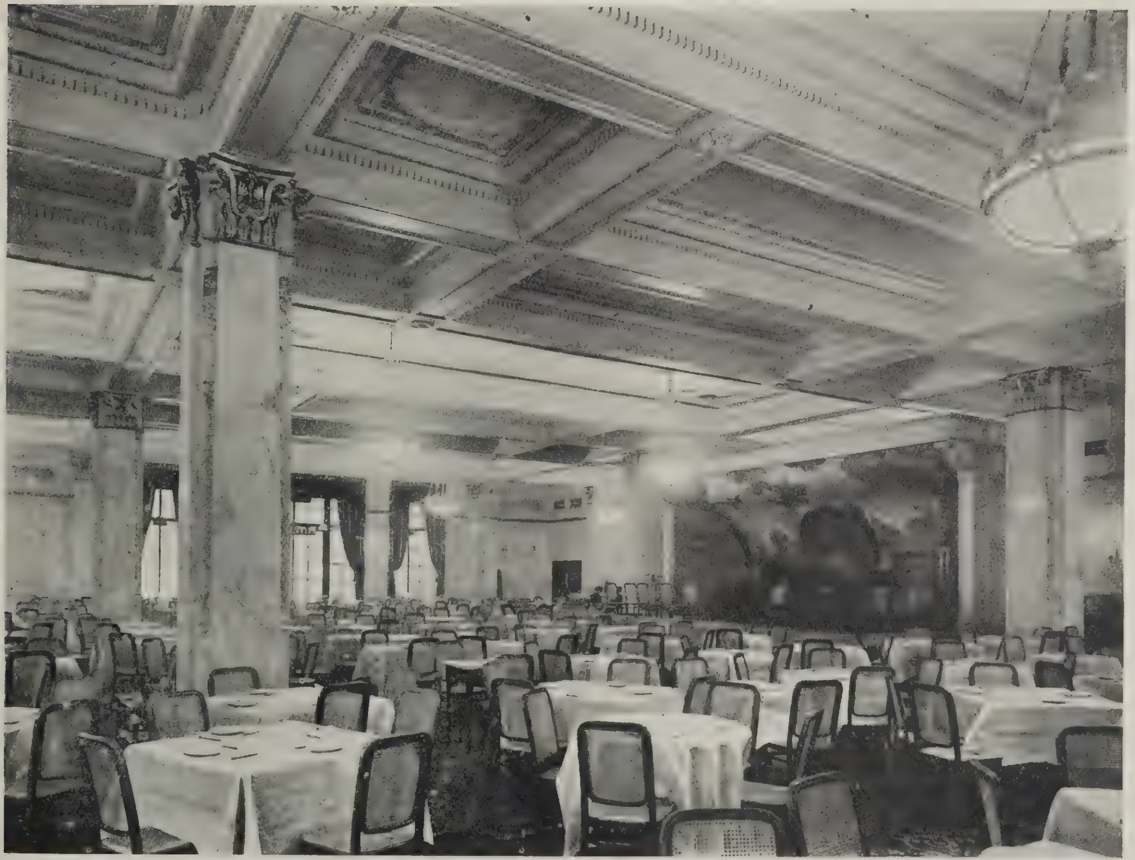




LYONS' CORNER HOUSE: TWO VIEWS IN THE FIRST-FLOOR DINING-ROOM.

are installed in the machinery basement below the café, and these blow 10,000,000 cu. ft. of fresh air every hour into the restaurant. At the same time two exactly similar fans mounted on the roof of the building are exhausting 10,000,000 cu. ft. of air per hour from the various floors through a system of air ducts, thus ensuring a frequent change of the air within the building irrespective of whether windows and doors may be open or shut.

Then, again, special attention has to be given to sections of the building in which cooking processes are carried out, as the odours of the kitchen must on no account be allowed to permeate to the public dining halls. The fish-frying stoves on each floor are therefore separately equipped with Keith fans having exhaust pipes connecting to large hoods over the stoves, the fumes being ejected by the fans up a steel flue which discharges into the atmosphere immediately above the roof level. For this purpose alone four additional Keith fans are employed having an aggregate capacity of 1,200,000 cu. ft. of air and fumes per hour.

It will readily be understood that it would be inconceivable in connection with an architectural structure to raise an unsightly chimney of sufficient height to produce the necessary draught to burn the fuel under the high-pressure steam boilers in the basement. Here again Messrs. Lyons' engineering department have overcome the difficulty by installing two Keith fans of the induced draught type, one motor driven and the other coupled to a high-speed steam engine, either of which can produce a draught equal to that of the highest chimney.

For lighting there are 3,500 lamps in the building, with a total of 2,000,000 candle-power. The supply is taken from three separate mains, so that there can be no failure. There are over thirty miles of cable and wire laid in fifteen miles of steel tubing.

Brine, at a temperature of 16 deg. Fahr. (16 deg. of frost), is laid on throughout the building in much the same way that hot water is laid on in a private house.

The brine is circulated in pipes of 5 in. internal diameter, and cools all the larders, the ice-cream retainers, the soda fountain, the cold storage cupboards under the provision counters, etc. A special device allows the storage of ice-cream bricks at 0 deg. Fahr.

The glass cases of the lunch counters are of especial interest. In them food may be kept at a cool temperature of 35 deg. These glass cases are several glasses thick, and between each plate of glass is a layer of air of succeedingly lower temperature. The cooling plant is underneath.

With regard to the huge water supply, we print an article descriptive of this in another part of the JOURNAL.

The large part of the cooking processes—toasting, grilling, roasting, fish frying, pastry making, chocolate making, omelette and soufflé making, etc.—are carried out by means of gaseous fuel.

Following is a complete list of the sub-contractors who have been connected with the building :—

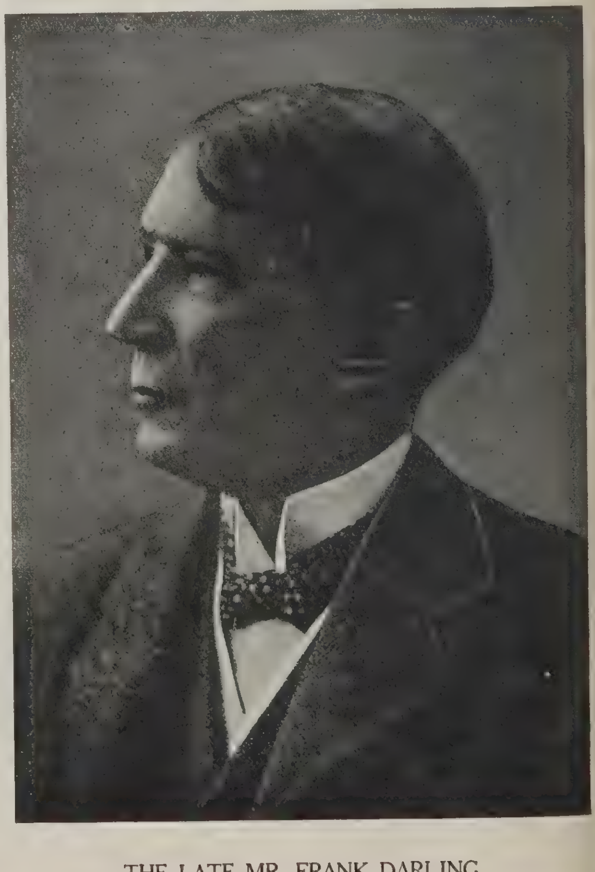
Sankey & Co., Ltd., Hammersmith (partition blocks and other materials) ; Crittall Manfg. Co., Ltd., Braintree (metal windows) ; Dorman Long & Co., Ltd., Middlesbrough (structural steelwork—2,400 tons) ; Waygood-Otis, Ltd. (lifts) ; Babcock and Wilcox, Ltd. (water-tube steam boilers) ; Carrier Co., Ltd., Greenford (Carrier air-conditioning plant) ; G.E.C., Ltd. (Osram lamps and electric fittings) ; Shaw's Glazed Brick Co., Ltd., Whitebirk, Darwen (glazed terra-cotta) ; H. T. Jenkins and Son, Ltd., Torquay (marblework) ; Mather and Platt, Ltd. (standard service cast-iron tanks) ; Art Pavements and Decorations, Ltd. (non-slip inlay to staircases) ; F. Bradford & Co., Homerton (hollow block floors, etc.) ; W. and T. Avery, Ltd., Birmingham (weighing apparatus) ; H. Dyke Dennis, Ruabon, N. Wales (terra-cotta, bricks, tiles, etc.) ; G. Jackson and Sons and H. H. Martyn & Co. (decorative plasterwork) ; Stratford-on-Avon Guild, Ltd., Stratford-on-Avon (part of frieze) ; T. Laurie Price, Ltd. (refrigerating service) ; Jas. Keith and Blackman, Ltd. (ventilating fans) ; Jones and Willis, Ltd., Hornsey (shop front) ; Matthew Keenan & Co., Ltd., Bow (boiler and steam-pipe coverings) ; Old Delabole Slate Quarries (slates) ; Limmer Asphalte Co., Ltd. (asphalte) ; Birmingham Guild, Ltd. (lift enclosures) ; Aiton & Co., Ltd. (high-pressure piping) ; Gas Light and Coke Co. (gas).

# The late Mr. Frank Darling

The Secretary of the R.I.B.A. has just received the news of the death on May 19, at the age of seventy-three, of Mr. Frank Darling, of Toronto. He was the most distinguished Canadian architect of his time, and was responsible for many of the most important public and commercial buildings in Canada. In the year 1915 Mr. Darling received from the R.I.B.A. the Royal Gold Medal for the promotion of architecture. So far, he is the only Dominion architect to receive this honour.

He was the son of the Rev. W. S. Darling, who was for many years rector of Holy Trinity Church, Toronto. Born at Scarborough, Ontario, in 1850, Frank Darling was educated at Upper Canada College and Trinity College School. Coming to England in 1870, he studied under George Edmund Street, the architect of the Royal Courts of Justice, and also under Sir Arthur Blomfield. One of his friends has said of him that "his father started out to make him a banker," but a hard-headed manager apparently thought that the candidate had too much artistic temperament for so dreary a business as banking, with the result that Mr. Darling ultimately adopted a more congenia method of building up banks. At the age of sixteen Darling entered the drawing office of Henry Langley, on the south east corner of King and Jordan Streets, Toronto, where now stands one of his great bank buildings. He began practice in 1875, and entered into partnership with John A Pearson in 1895. Mr. Darling's name is associated with many of the most important buildings in Canada, particularly in Toronto, chief among them being the Genera Hospital, the Canadian Pacific Railway building, the Royal Ontario Museum, Electric Offices, buildings fo Toronto University and Trinity College, head offices fo the Bank of Nova Scotia, the Dominion Union and Standard Banks, and innumerable residences.

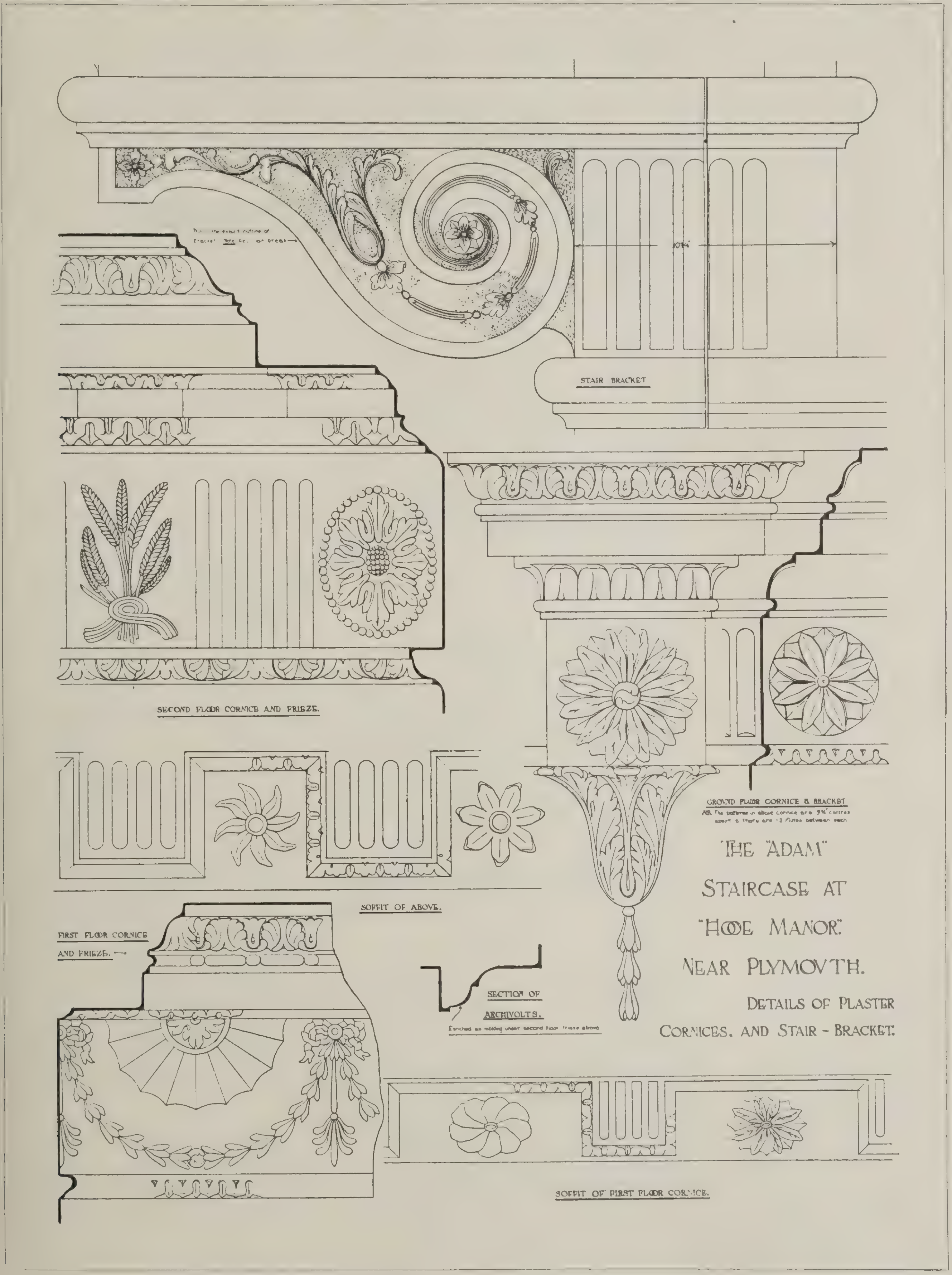
Winnipeg contains many examples of Mr. Darling' work, among them being the General Post Office, the Grain Exchange, and the Union, Nova Scotia, and Imperial Banks, and his hand is seen in a Canadian Bank o Commerce in nearly every important city in Canada.



THE LATE MR. FRANK DARLING.

# Measured Drawings. 34.—Details of the "Adam" Staircase at Hooe Manor, near Plymouth

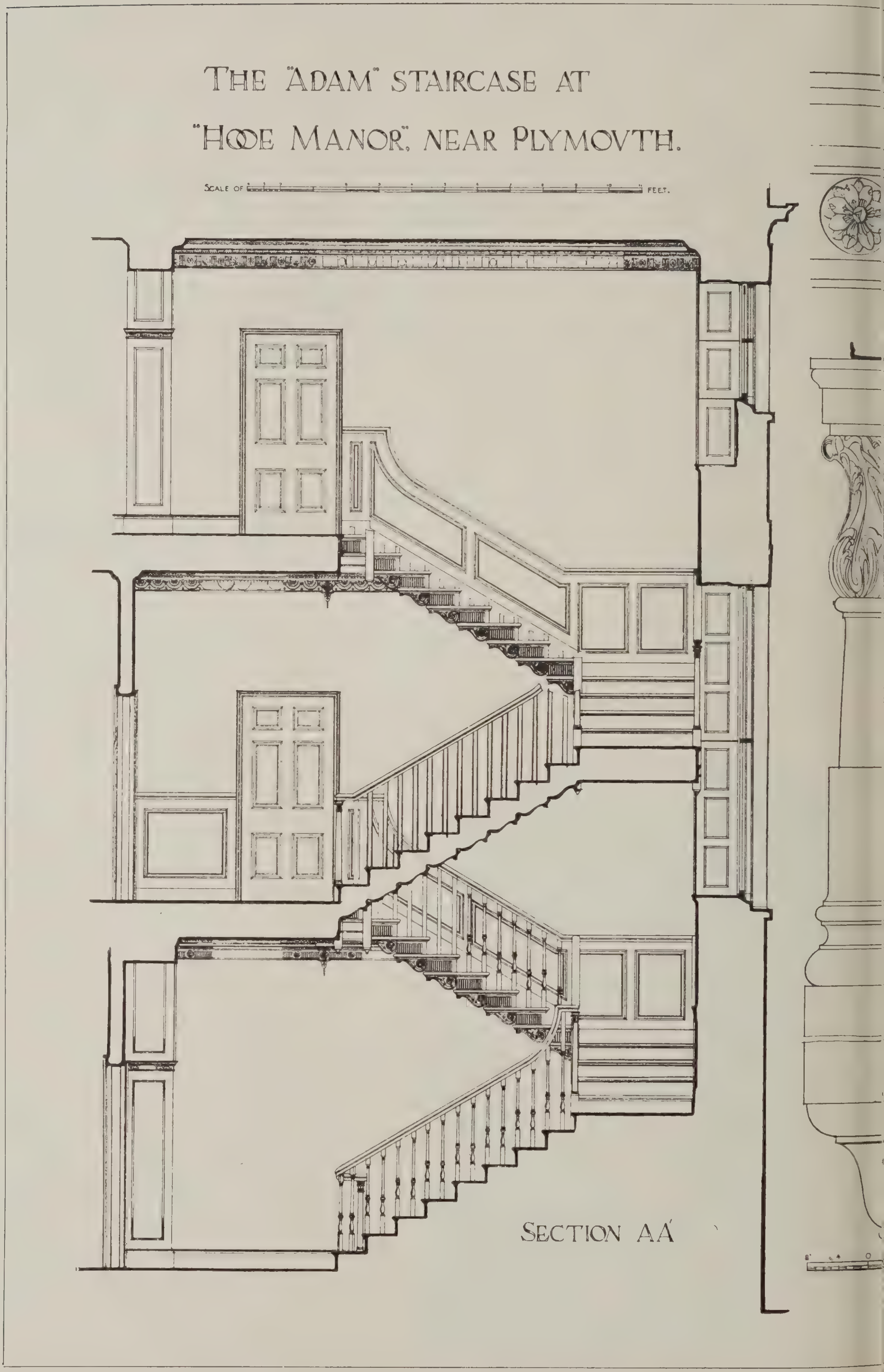
Measured and drawn by William Bruce Bailey


the exact outline of
break
STAIR BRACKET
SECOND FLOOR CORNICE AND FRIEZE.
SOFFIT OF ABOVE.
FIRST FLOOR CORNICE AND FRIEZE.
SECTION OF ARCHIVOLTS.
Enriched as molding under second floor frieze above
GROUND FLOOR CORNICE & BRACKET
N.B. The paterae in above cornice are 9⅝" centres apart & there are 12 flutes between each
THE "ADAM" STAIRCASE AT "HOOE MANOR" NEAR PLYMOUTH.
DETAILS OF PLASTER CORNICES. AND STAIR-BRACKET.
SOFFIT OF FIRST FLOOR CORNICE.

*(See also drawing on double-page and notes on page 1009.)*

## Measured Drawings. 35.—The "Ad

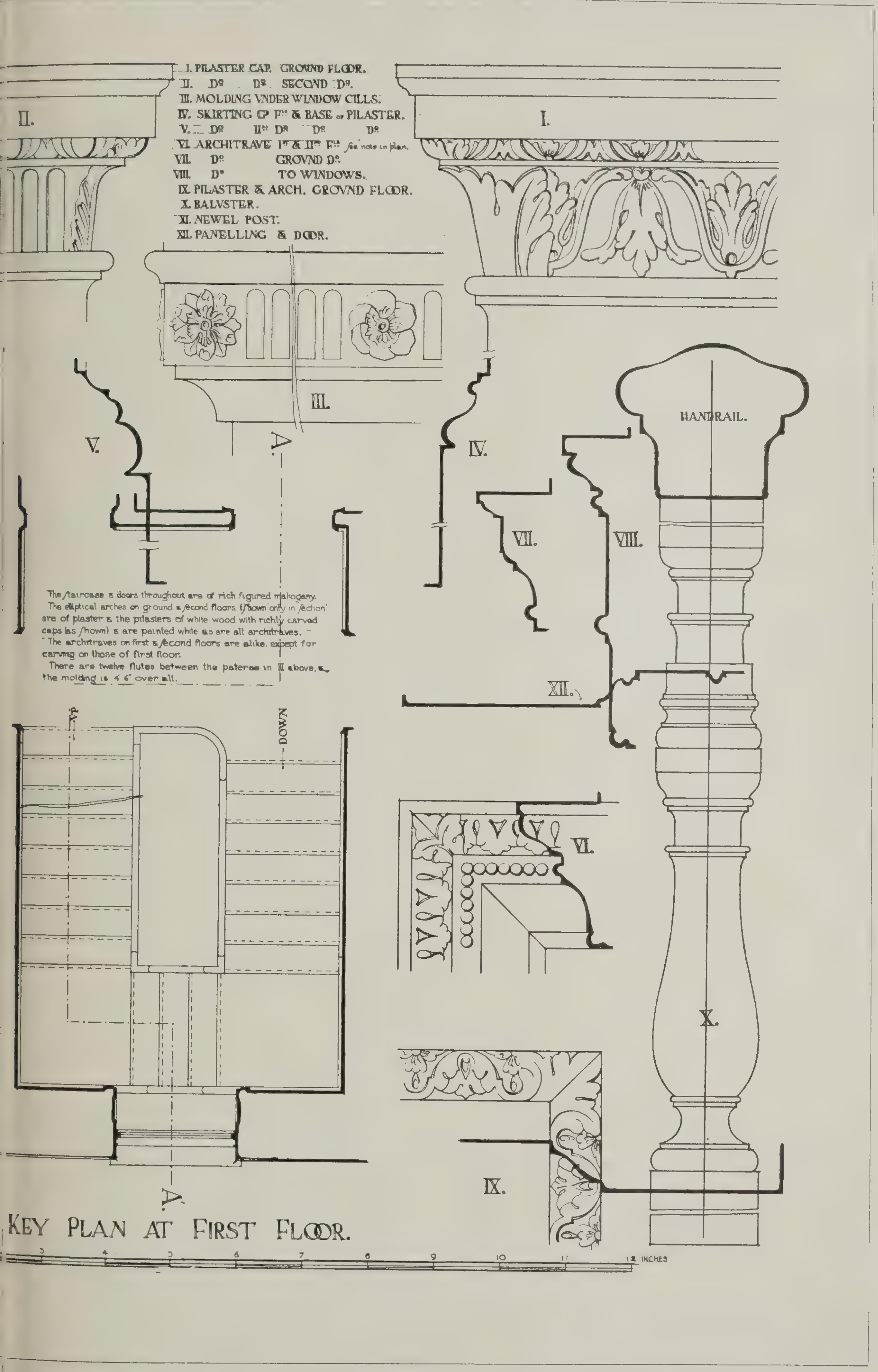
Measured and Dr



This staircase dates, apparently, from the year 1777. It is in the typical Adam manner, and is built of rich figure

# case at Hooe Manor, near Plymouth

am Bruce Bailey



The ſtaircase & doors throughout are of rich figured mahogany.
The elliptical arches on ground & ſecond floors (ſhown only in ſection) are of plaster & the pilasters of white wood with richly carved caps (as ſhown) & are painted white as are all architraves.
The architraves on first & ſecond floors are alike, except for carving on those of first floor.
There are twelve flutes between the pateras in III above, & the molding is 4' 6" over all.

her particulars are given in the notes on page 1009. Large scale details of the staircase are shown on page 1005.

# Some Minor Aspects of Town Planning.

## 2.—Agriculture and Town Planning

By H. J. BIRNSTINGL, A.R.I.B.A.

IT is essential that the attitude of mind which considers that agricultural and urban interests are distinct and can be considered independently of each other should give place to a more comprehensive vision. It should be realized that the two interests are very intimately related, and that in town or regional planning cognizance must be taken of agriculture. The division of interests which at present exists is an entirely artificial one. Already it has been the cause of great national loss by diminishing home-grown produce and by increasing emigration from the country to the town, thus increasing overcrowding with all its concomitant evils of illness and poverty. The war was a clear indication of the danger and folly of not encouraging home production. The danger accruing from the continued emigration from rural to urban conditions is no new one. It has constantly been the subject of legislation, as also has the imposition of restrictions to the growth of towns. But the time for such methods has passed. No one to-day would contemplate, or tolerate, restriction of movement. There are, however, other methods which it behoves the town-planner to consider. Of these, apart from the questions of wages, the most important are: the maintenance around towns of definite agricultural belts; transport facilities; the encouragement and establishment of co-operative methods amongst farmers and small-holders for buying, selling, and distributing, banking, and obtaining credit; facilities for obtaining land; the dissemination and encouragement of scientific methods of production; easy access for the rural population to the town with its wider scope for intellectual pursuits and amusements, and of the urban population to the country with its health-giving relaxation.

The maintenance of an agricultural belt has been one of the first principles in garden cities, but as there the land is generally in public ownership, the forgoing of the increment which would naturally accrue if the land were put to other uses is accepted by the community as a whole for its common good. Such a preservation, although primarily maintained for agricultural purposes, has other incidental advantages. It prevents urban encroachment from without. It is the modern version of the rampart—a defence from invasion, and should completely encircle the town except where adequate protection is afforded by some natural feature, such as the sea, a river, or a mountain chain. In the Doncaster Regional Survey the zoning includes a neutral area, from which it is thought probable that agricultural pursuits will slowly be thrust out as the land is developed for other purposes. It also includes a purely agricultural zone which is to be definitely preserved for that purpose. The land thus earmarked is low-lying and is considered unsuitable for housing. Agriculture itself, however, makes certain specific demands upon the land, and these must be recognized. It must not be presumed that land deemed unsuitable for any other purpose can be scheduled successfully for agriculture. Where, owing to existing development, it is not possible to surround a town with a belt, the best alternative is a wedge of land penetrating as far as possible into the urban area. This has been done at Doncaster.

The present agitation on the part of many rural districts against the increasing road transport is typical of a short-sighted obstructionist policy that has done much to hinder agricultural development. Although the burden thrown on many rural local authorities, owing to the damage to roads by motor traffic, may be heavy, nevertheless, the benefit arising out of increased transport facilities far outweighs what is but a temporary mal-adjustment. Improved transport facilities is one of the first steps towards the cheapening of commodities, a benefit that will at once be felt in the rural districts; moreover, distribution is facilitated. One of the objects, therefore, in preparing a scheme is to encourage intercourse between the town and the surrounding agricultural tracts by providing good roads for motor transport. This does not mean that the passage of a main route through a village high street is not to be avoided when possible. The provision of a switch road to obviate actually passing through the centre of a village no more means that the village is not connected by road than the fact that the railway station is not adjacent to the post office means that it is not connected by rail. Indeed, day by day the analogy between rail and road development grows, even to the present opposition which is a repetition of that of last century.

The need for co-operation amongst those engaged in agricultural pursuits is almost too patent to require emphasis. Yet there is an almost entire lack of it in England. The consequence is that Danish farmers come to England to learn how to breed pigs then return to their country, breed them, and by means of efficient organization and co-operation are able to undersell the English farmer. Agricultural co-operation may scarcely seem a matter with which the town-planner need concern himself. But this is only a superficial view. In the garden city there is ample scope to organize co-operative movements, and if these do not at once succeed it is no proof that the principle is at fault, but only the administration of it. But even in planning the future development of existing areas, the provision of markets and the planning of roads so as to form natural distributing centres may help to hasten the inevitable. In the matter of agricultural organization England has much to learn from Ireland, and her creameries were, until recent destructive events, justly famous. The work of the Irish Agricultural Organization Society has led to the creation of similar societies in England, but they have not been attended by the same success. Town planning can certainly help here.

Garden cities are able to give special facilities to small-holders for obtaining land. Letchworth, for example, offered a quarter-acre site with road frontage and water main on a ninety-nine year building lease at a fixed ground rent and as much adjacent land as was required on a twenty-one year agricultural lease. This may not be the best arrangement, but it is indicative of a general desire to facilitate agricultural development in the reserved belt encircling the town. It is a matter which must receive attention. It is useless merely to preserve land if there is no kind of policy as to the means of developing it for the purpose for which it is reserved. Since the war the Small Holdings and Allotments Act has empowered county councils to purchase land and to equip it for small holdings for ex-Service men. Subsequently by the Land Settlement Act of 1919 the State accepted liability for the deficit between the actual and economic rents, and a sum of £20,000,000 was definitely allotted for the provision of holdings. This sum was borrowable by county councils whose losses on an approved scheme were guaranteed for seven years by the Government. This term expires on April 1, 1926. By the end of May, 1921, 15,000 men had n placed on the land in this way. The results of this k should be studied by town-planners. An important sideration is the economic planning of the buildings. e the Ministry of Agriculture and Fisheries have done uable work, both experimentally on their own sites and he publication of data. Equally important is the deter-ation of the right acreage for economic working. This st, of course, vary with the nature of the occupation. s generally in the best interests both of the urban con-ner and the surrounding rural producers that, in the case an agricultural belt, perishable goods for immediate in the town should be the main production. Milk, s, fruit, vegetables, and rapid and well-organized keting facilities, which exclude the absorption of fits by middlemen should be aimed at. Fruit, poultry, market gardening can be worked well together, and development of the Government's system of distribut-stations for eggs and day-old chicks will do much to elop the egg industry and place it on sounder lines by centrating on good-laying strains. Local authorities do much to forward such schemes.

he dissemination of knowledge in agricultural methods sure means of increasing production and so making the ustry more attractive for those contemplating adopting or it cannot be denied that to make a success of a small ding entails unceasing hard work. The Government has e much in this direction, and the expenditure on agri-ural research and education for the year 1921–22 was 0,000 for England and Wales. Experimental stations now scattered all over the country: Reading, Aberyst-h, East Malling, Cambridge, and Rothamsted, and the istry of Agriculture maintains a research laboratory for icultural machinery. Moreover, the Ministry provides agricultural organizer for each county, who assists, by ans of a local institute, in the education of young men cannot afford the time entailed by a course at one of agricultural colleges. With a view to assisting in this k, therefore, every town should have its institute and ocal research department and experimental farm where ctical and theoretical instruction could be given by ans of short concentrated courses of instruction and ures.

he desire to migrate from country to town would inish if the facilities for amusement and intellectual suits were more easily accessible to the country dweller. chief method of achieving this is by means of efficient nsport services. A regional scheme should endeavour ink up all outlying villages with the urban centre. The ncaster Report again affords an example of how this uld be done. Omnibus services need to be carefully anized and properly related with each other. Un-ricted competition in these matters is not necessarily way to achieve the maximum efficiency. It may rather d to chaos. The various means of transport—road, rail, and tram—and the various companies concerned, need co-ordination, and encouragement should be given to people to travel by means of cheap fares on certain days. Transport services must be run in connection with theatres, concerts, and lectures. The municipal theatre, although recognized and highly placed in the hierarchy of municipal undertakings in almost every other European country, finds no favour in England, but at least each town should, after the manner of Manchester, Birmingham, and Liverpool, build up its own repertory theatre. Each town also should have in addition to its libraries, its museum, and art gallery, which the population from the rural belt should be encouraged to visit. Musical festivals, too, might be more general. Everything, in fact, should be done to break down that artificial barrier between town and country, and to make the inhabitants of both realize the existence of a joint interest, and the complementary relationship of one to the other, by fostering intercourse and by making the particular attractions of each readily accessible to the other.

Between the thoroughly urban and rural dweller there is an intermediate class composed of those who, though not engaged in agricultural pursuits, yet live in rural or semi-rural conditions. These are able very considerably to add to the nation's food supply. It is estimated, for example, that 800,000 tons were added to the nation's food supply in 1918 by allotments. This is only one advantage. There are others: the healthy exercise which is yielded by the cultivation of an allotment; the diversion of leisure from wasteful or harmful pursuits to one of extreme utility; and the spiritual enlightenment and mental repose which contact with the soil brings to the city worker. The war proved clearly enough the want of foresight in previous town development in not reserving land for allotments. Now, when land has acquired in urban centres a building value of £1,000 an acre or more, the demand for allotments cannot be gratified. All future towns, however, must be planned with adequate provision for the needs of would-be allotment holders, and these should receive every encouragement; so, too, should those householders who possess small gardens. Poultry, ducks, pigs, goats, bees are splendid and remunerative part-time occupations for those who have a little land, and any restrictions governing the following of such pursuits, whether by-laws or clauses in municipal or other leases, should be made as wide as possible, compatible with public health and convenience. By such means as these we may help to increase the nation's food supply (before the war the United Kingdom only produced about 42 per cent. of its food consumption); to produce a healthier race combining the best of town and country; and to check the depopulation of the countryside. In these matters, as in all others, town planning has its part to play.

[The previous article of this series appeared in our issue for May 16.]

(*To be continued.*)

# Hooe Manor

THE name of the architect of Hooe Manor, near Plymouth, is not known. It was evidently built in the year 1777, as this date and the initials "C. H." appear on a lead rain-waterhead. The stables re built a year later, the date being carved on the key-ne of the arch over the door. The house is built of stone a yellow colour, and is tooled vertically all over with oves about $\frac{1}{2}$ in. wide and $\frac{1}{16}$ in. deep.

he exterior is very severe. The plan is a rectangle with side wings projecting towards the entrance front. only ornamental portion of this front is the wood ch, with two Doric pilasters on either side of the door, a segmental arched pediment. The garden front is a le less severe. There is an exit from the drawing-room der a very nice Roman Doric porch. The only windows with architraves are those immediately above this porch. There are projecting string-courses at the first and second floor levels, and the quoins on the garden front are rusticated.

The beautiful staircase was presumably built with the house. It is in fine dark mahogany, and all plasterwork is of Adam character. There is a beautiful little Adam ceiling to crown the staircase above the top landing. This is coloured in delicate shades of pink, green, blue, and yellow; these were left untouched by the owner on the advice of Mr. J. Leighton Fouracre, F.R.I.B.A., who was the architect for the alterations in 1913, or thereabouts. The house then contained some beautiful Adam plasterwork, mantels, and dog-grates. Two of the Adam dog-grates were sold locally.

B. SEYMOUR BAILEY.

# A House in Welwyn Garden City

## ALLEN FOXLEY, M.A., Architect

THIS house—No. 33 Bridge Road, Welwyn Garden City—was designed by Mr. Allen Foxley, M.A., of Messrs. Crickmer and Foxley, architects, for his own occupation. It was completed in October last. The facing is in Luton bricks, the plinth and pilasters being in a darker colour, and the roof is covered with Lombardic tiles supplied and fixed by Messrs. Ames and Finnis. The windows are "Hope's" standard steel casements, with bronze fittings, and fixed in wooden frames. The walls of the principal rooms are hung with grey-brown canvas fixed to wooden frames. There is no range, but a "Beacon" boiler, fixed in the kitchen, supplies the house with hot water. The general contractors were Messrs. Shrouder and Matthews, of Stevenage, Hert

The plan of the house is unusual, but compact a effective. From a small porch access is gained to the h (where accommodation is provided for cloaks), thence the living-room, which, 21 ft. by 14 ft. 3 in., is the princip feature of the ground floor. On one side are the kitch and the scullery, with a conveniently arranged servi hatch, and on the other a workroom, entered from the ha and a garden room entered from the living-room itse The upper floor provides a principal bedroom, spare be room, boudoir, maids' bedroom, bathroom, etc., and, rig and left of the staircase respectively, a boxroom and linen cupboard.

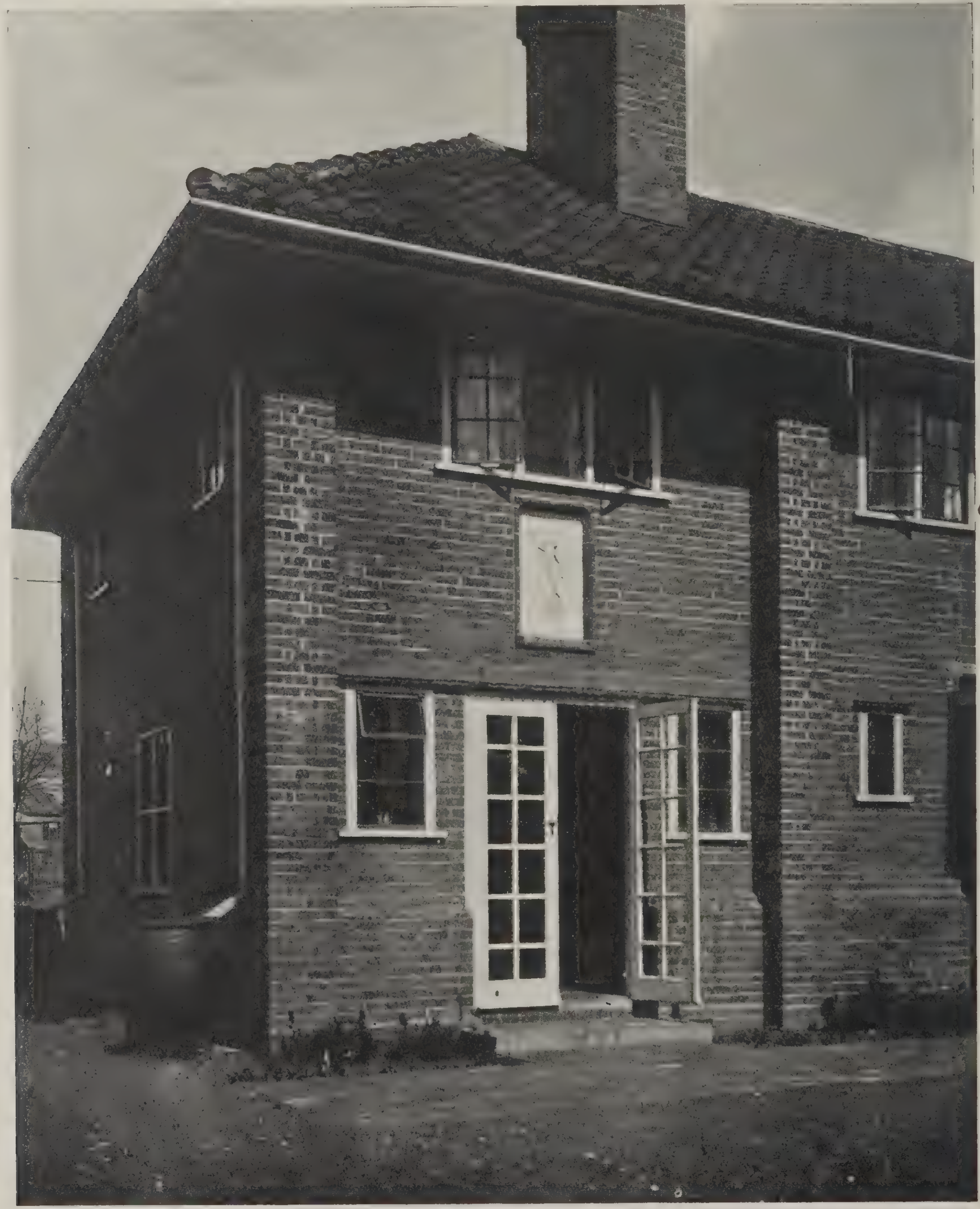


*Photo: J. P. Steele, Letchworth.*

NO. 33 BRIDGE ROAD, WELWYN GARDEN CITY, HERTS: A DETAIL OF THE SOUTH-WEST ANGLE.

# dern Domestic Architecture. 51.—No. 33 Bridge Road, Welwyn Garden City

### Allen Foxley, M.A., Architect

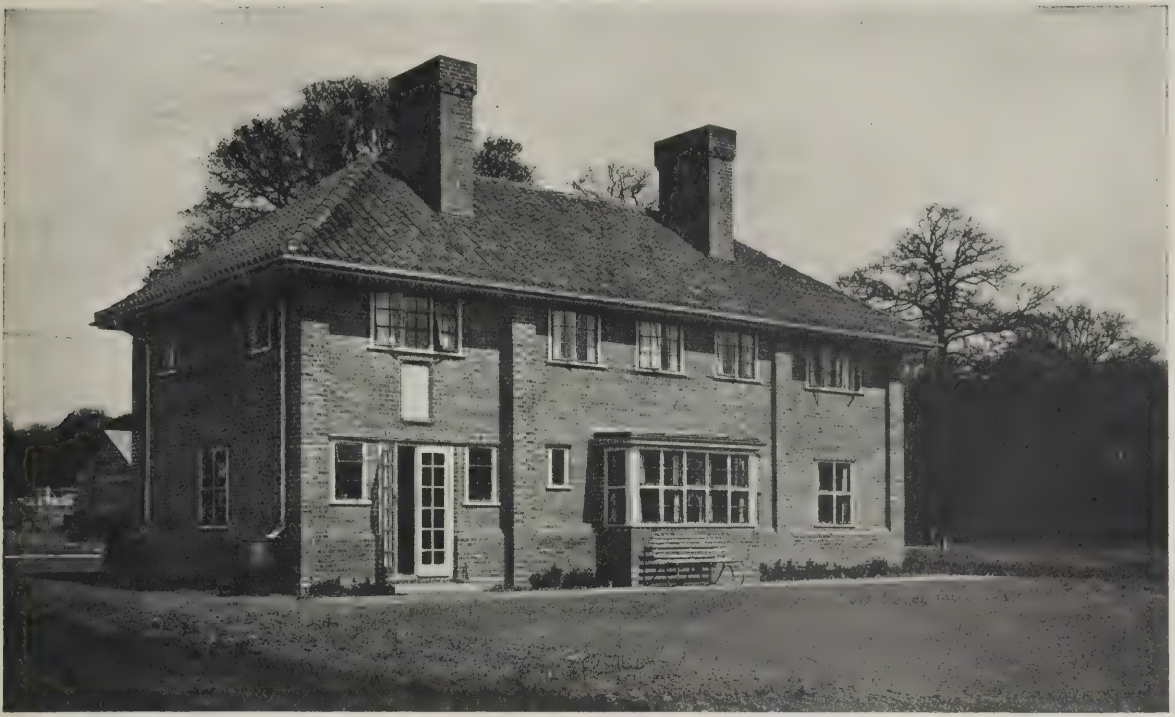
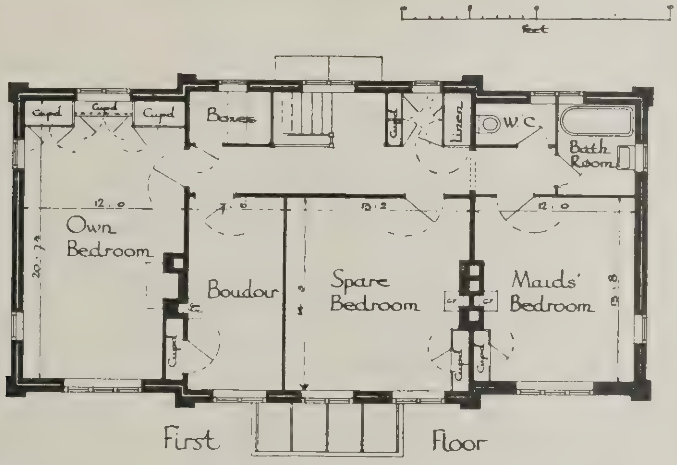
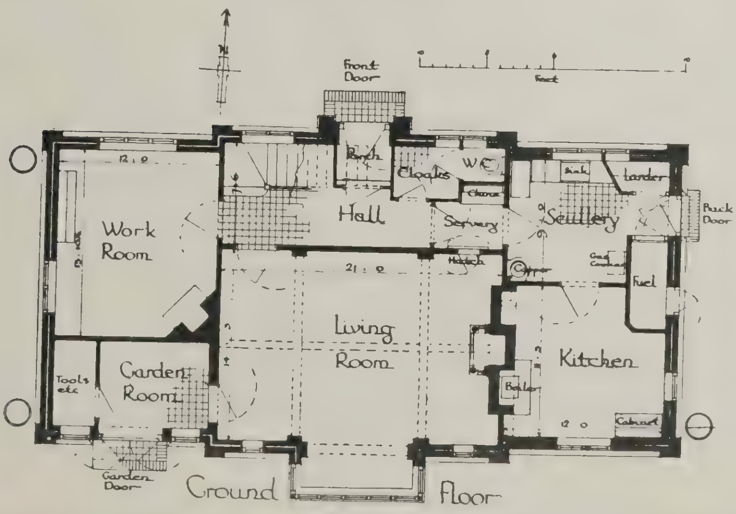


Photo: J. P. Steele, Letchworth.

THE EXTERIOR FROM THE SOUTH-WEST.





This house has been designed by Mr. Allen Foxley for himself. The principal feature of the ground floor is the living-room, which has a bay window to the garden front. The house is faced with Luton bricks, those for the plinth and the pilasters being of a darker colour. The roof is covered with Lombardic tiles.

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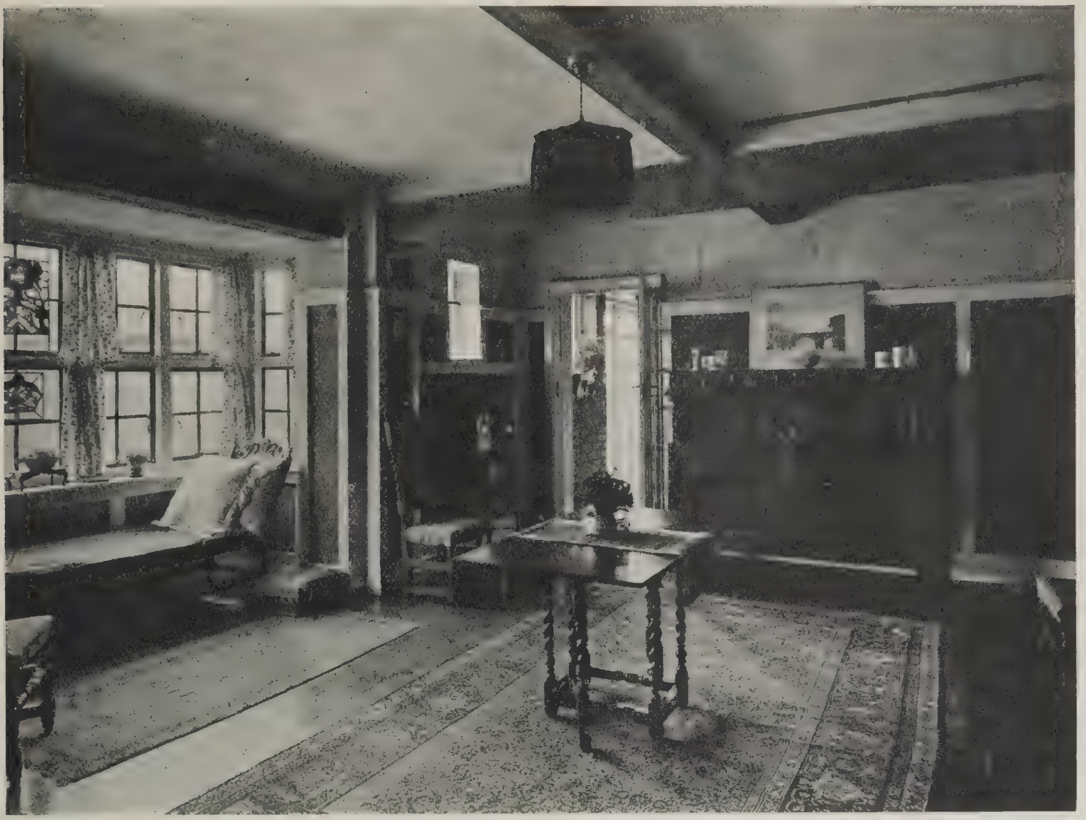
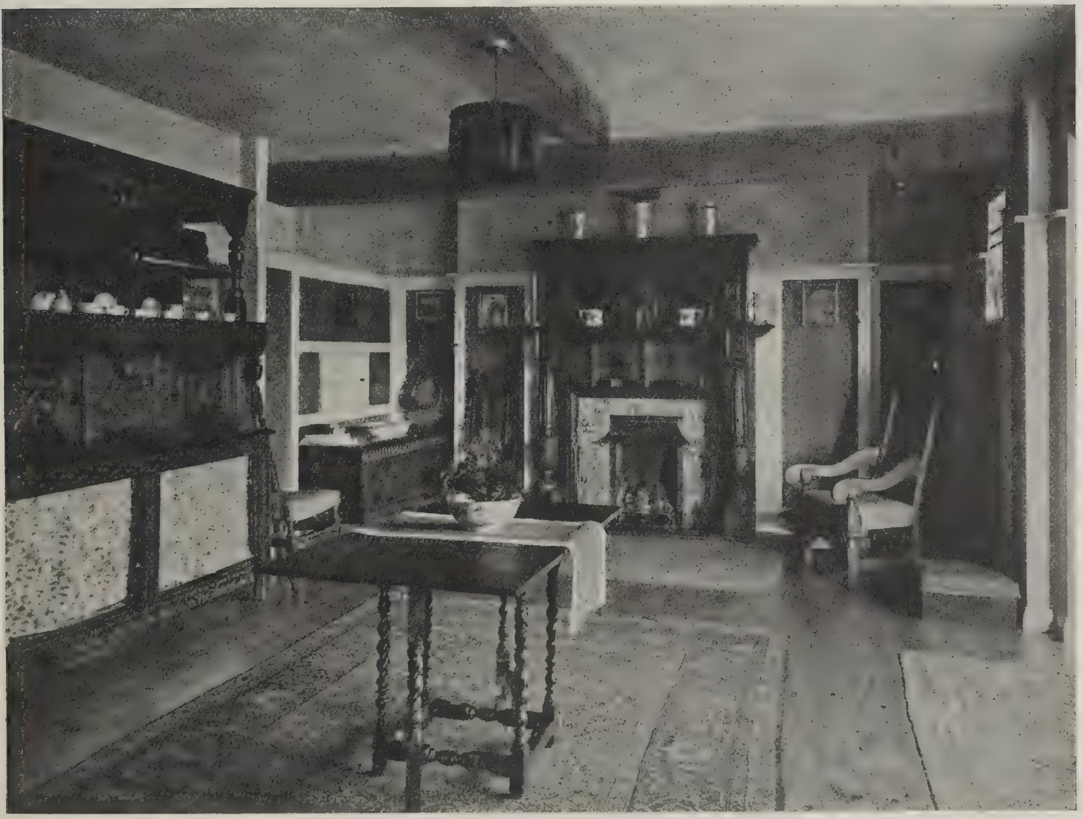


THE LIVING-ROOM, LOOKING WEST.



*Photos: J. P. Steele, Letchworth.*

THE LIVING-ROOM, LOOKING EAST.

NO. 33 BRIDGE ROAD, WELWYN GARDEN CITY.
DESIGNED BY MR. ALLEN FOXLEY FOR HIMSELF.

# Cottages at Alderley Edge

## J. HUBERT WORTHINGTON, M.A., A.R.I.B.A., Architect

WE illustrate on this and the following pages some cottages which have been erected in a suburb of Manchester from the designs of Mr. John Hubert Worthington, M.A., A.R.I.B.A., of Messrs. Thomas Worthington and Sons, F. and A.R.I.B.A., architects. The cottages comprise a block of twelve at Alderley Edge, for the Alderley Edge Public Utility Society, Ltd.

The cottages are set back 150 ft. from the road, and have tennis courts in front. They are built of Potts Alderley bricks and roofed with sand-faced tiles. The aspect and superficial area of the various cottages are given on the accompanying plans. Accommodation is provided in eight of the cottages for a parlour, and in of them for a living-room, scullery, coal, etc., three be rooms, and a bathroom. The cottages have been planne with much ingenuity, and are eminently suited to moder requirements.

Externally the cottages are pleasing and show an exce lent use of simple materials. Architectural effect has bee secured by breaking up each elevation by arranging tw rooms on each floor to extend beyond the main plan, b an interesting roof line, and by the symmetrical dispositio of the doorways, passages, and windows.

The contractors were Messrs. Isaac Massey and Sons, Alderley Edge.

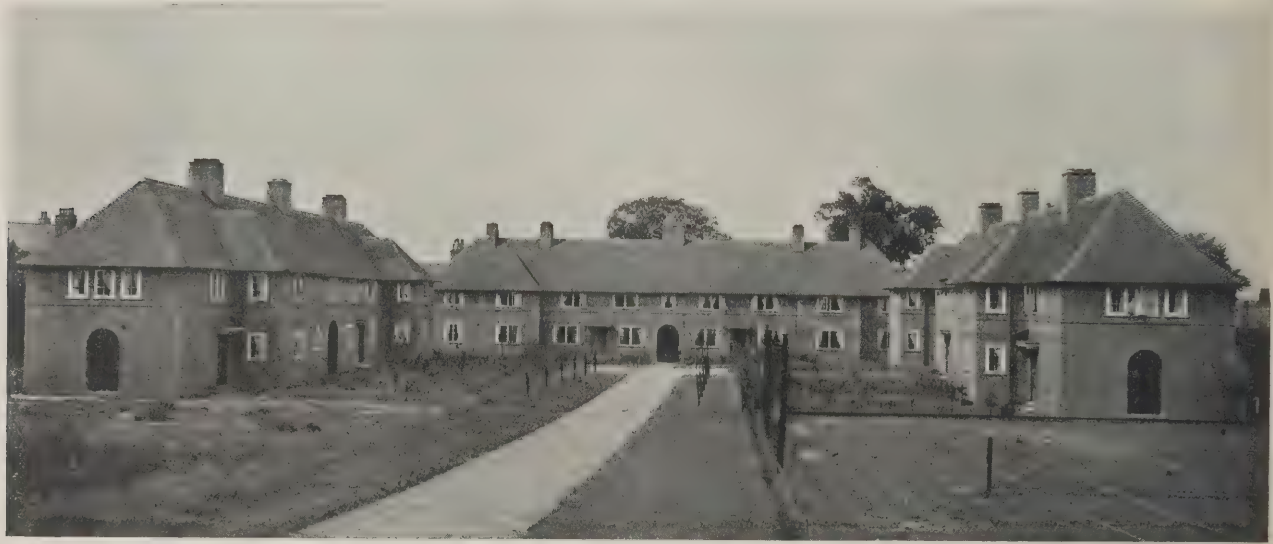
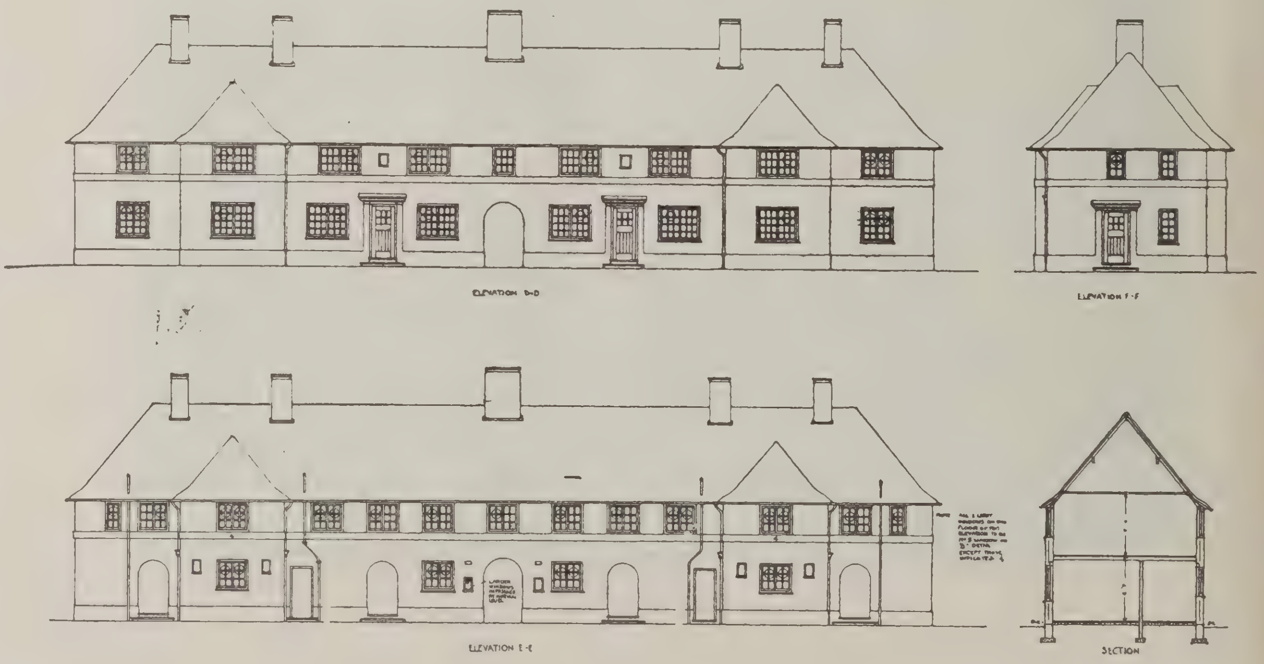


*Photo: Stewart Bale.*

A VIEW FROM THE ROAD.



THE ELEVATIONS AND SECTIONS.

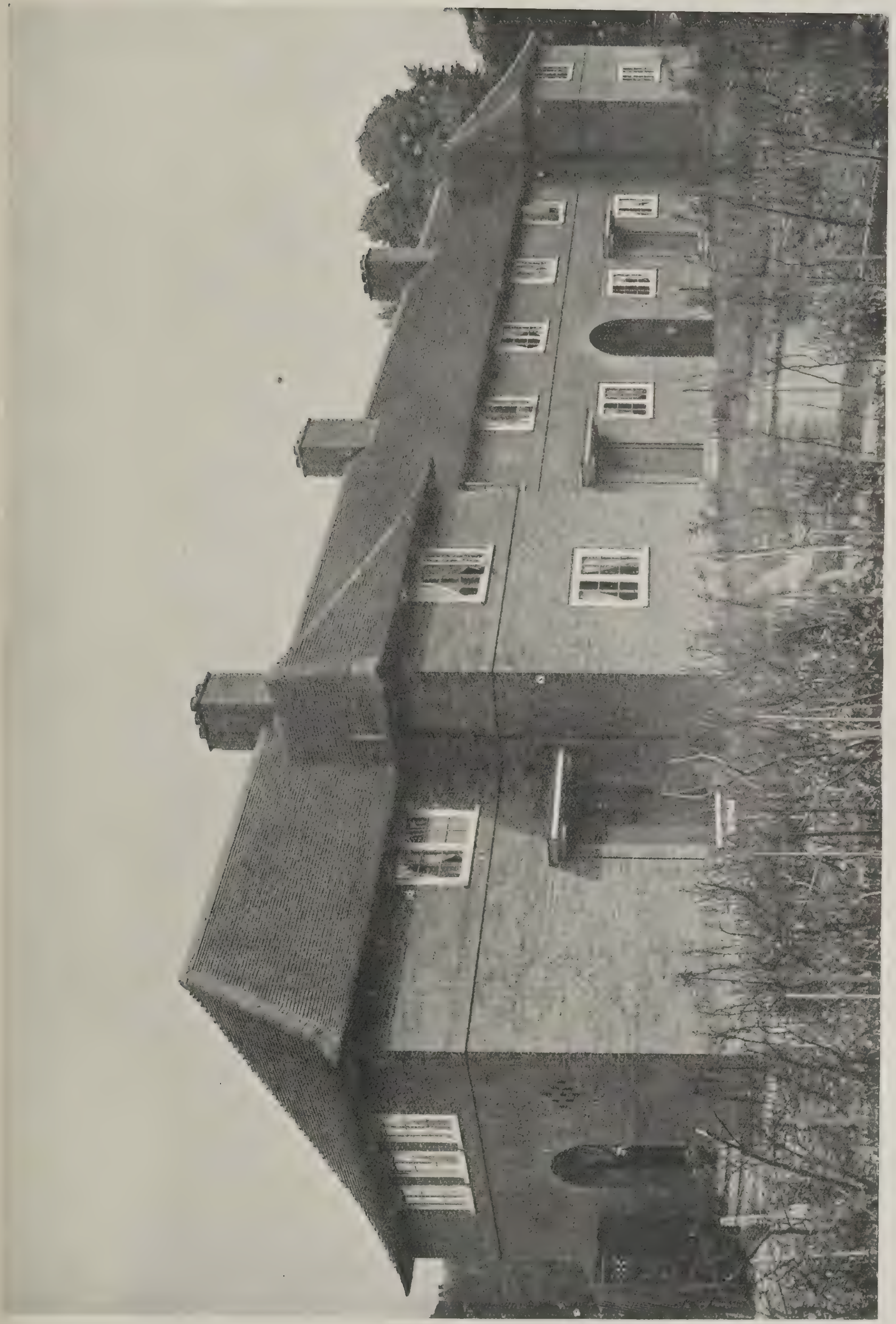
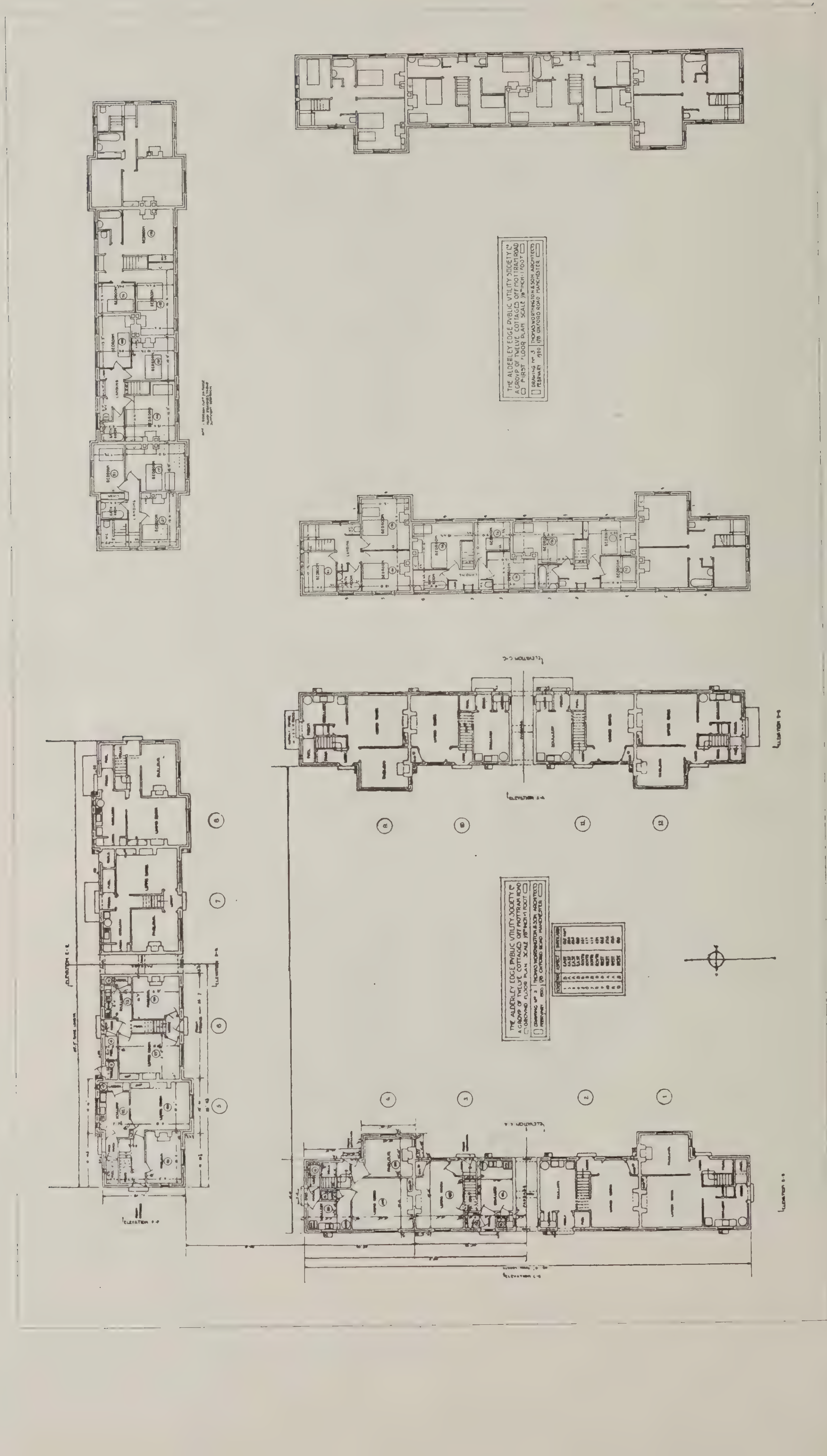


Photo: Stewart Bale.

COTTAGES AT ALDERLEY EDGE, MANCHESTER.

J. HUBERT WORTHINGTON, M.A., A.R.I.B.A., ARCHITECT.


THE ALDERLEY EDGE PUBLIC UTILITY SOCIETY LTD
A GROUP OF TWELVE COTTAGES OFF MOTTRAM ROAD
FIRST FLOOR PLAN SCALE 1/8TH INCH = 1 FOOT
DRAWING No 3 FEBRUARY 1920
THOMAS WORTHINGTON & SON ARCHITECTS 178 OXFORD ROAD MANCHESTER
THE ALDERLEY EDGE PUBLIC UTILITY SOCIETY LTD
A GROUP OF TWELVE COTTAGES OFF MOTTRAM ROAD
GROUND FLOOR PLAN SCALE 1/8TH INCH = 1 FOOT
DRAWING No 2 FEBRUARY 1920
THOMAS WORTHINGTON & SON ARCHITECTS 178 OXFORD ROAD MANCHESTER
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ELEVATION A-A
ELEVATION B-B
ELEVATION C-C
ELEVATION D-D
ELEVATION E-E
BEDROOM
LANDING
LIVING ROOM
SCULLERY

PLANS OF COTTAGES AT ALDERLEY EDGE, MANCHESTER.

J. HUBERT WORTHINGTON, M.A., A.R.I.B.A., ARCHITECT.

# Correspondence

## I.B.A. Code of Professional Conduct

*o the Editor of* THE ARCHITECTS' JOURNAL.

R,—The fact that the present Prac- Committee, by a majority of three, in favour of formulating a Code was d by me, not reluctantly, but with derable pleasure; the previous reso- ns of a contrary nature were carried e Practice Committee either by a large majority or unanimously. Welch writes: "What matters it her the majority was three or y-three." To my mind it makes a difference, in the latter case the ution usually has considerably more ht with most people.

SYDNEY PERKS.

## atriotism and Prices

*o the Editor of* THE ARCHITECTS' JOURNAL.

R,—In the course of my work to-day l to buy a bedroom grate, the price hich in Thames Street, without any surrounds or mantel, was 62s. In n and construction it was of the lest, and if a man like Henry Ford produced it by modern methods, the would probably have been round t sixty-two pence, yet I was advised prices were to be advanced. The tion I should like to ask in your columns is: whether any advances resent prices are justified by existing itions. Wages have gone down, uction has gone up. From the nal point of view it is of the utmost rtance that if prices take to them- s any movement, direction should be ward. The Government are again ng a forlorn attempt on "Housing," an increase in prices will bring this d campaign to as untimely an end e first, with results which may easily sastrous, and we may be confronted the problems of 1923 in 1928.

eaking from my own experience, a e in Berkshire, built from my designs, w being finished at a cost of 1s. 2d. ic foot. A year or so ago the price d have been 1s. 9d., compared with -war price of 8d. If we could only niddle-class houses built to-day at, 10d. to 1s., the volume of work re- g would be surprising, and the -sighted manufacturer would reap ater reward from a policy of small s and quick returns than his present tionate methods. He might also in mind that the results would be aching and tend to reduce un- oyment in other trades. It would ectly help to solve the housing of working-classes, as many middle- families are to-day living in cottages are more suitable for working men. only we could have a general recog- of the fact that the profiteer with y to spend is dead, buried, and, hopes, in some cheerless hell, we t make progress.

e average decent middle-class man, does the work of the world, and pays iper, is poor, very poor indeed, yet till supplies the main volume of ess. If the market of his trade is to be captured all over the world, it is not good business to try and charge him as much as possible. The clever and the patriotic thing is to try and give extremely good value for as small a profit as is possible, and depend on the turnover.

The Government themselves are not free from blame, because their re-valuation proposals appear to be based on greed and will not help matters.

I therefore appeal to all architects, builders, and building owners to give this question of any advance of prices their very careful attention and to watch the manufacturers' trusts. Many of these people have not any souls to save, but by combination we may be able to kick their bodies into the paths of rectitude.

C. H. B. QUENNELL.

## "The Old Lady of Conduit Street"

*To the Editor of* THE ARCHITECTS' JOURNAL.

SIR,—The articles on "The Old Lady of Conduit Street" and "Architecture and the Complementary Arts," in your issue for June 6, contain some comments on architectural officialdom which are worthy of emphasis. The "Old Lady," it seems, deplores too much zeal and "there is to her, with her very Britannic outlook, something a little un-English in too much enthusiasm"; a very true observation. But reflect, that all great work, in art, humanity, and politics, our Britannic greatness itself, has been effected by this un-English enthusiasm.

However much we congratulate ourselves on the small amount of real, true art which is being created at the present time, it is useless to close our eyes to the sordid ugliness which is rampant throughout the land. Think what glorious places our towns would be if only we designed the material necessities of life with a reasonable regard to proportion and common sense, if art was fed "by every common sight in the streets, by every civic custom and institution." At present most of these things feed crime and ugliness instead of art. And yet all this sordidness is regarded with smug indifference; there is most decidedly something un-English in too much enthusiasm.

When one thinks of the amount of genius, time and money which is being thrown away on silly professional politics, compared to the scant attention given to the vital and pressing questions of art, it makes one doubt the "Old Lady's" sanity.

O for the heat of the "sacred fire"!

EDGAR LUCAS.

## Architecture and the Complementary Arts

*To the Editor of* THE ARCHITECTS' JOURNAL.

SIR,—In his article, "Architecture and the Complementary Arts," Mr. Frederick R. Hiorns makes a suggestion which, if carried into effect, would be a very real form of Unification. He sees the R.I.B.A. as the representative of the Mother of the Arts taking the lead and gathering into one body, an advisory council, the elected representatives of all the arts and crafts. Such a body of opinion must carry with it an authority on all matters connected with the arts which would be of real weight, and might even convince the commercials of this present generation.

Mr. Hiorns makes his point when he mentions the present destruction of fine things by money-making commercialism; how else could the destruction of Regent Street have been brought about?

As an example of what this real Unification can accomplish one may take the case of the Whitgift Hospital; at the instance of the R.I.B.A. some twenty societies were brought together at Conduit Street to do what they could to prevent the destruction of the hospital and what it stands for. Their protest, most ably voiced in the House of Lords, secured a unanimous vote there against any tampering with this example of the beautiful.

No doubt attempts have been made in the past to influence public opinion by means of Committees of Taste, indeed, the architect of the now destroyed Regent Street was himself a member of such a committee, but by their very nature these have been, and must be, but coteries.

Let us have, therefore, a real Unification of all the arts around their common mother, which would encourage the craftsman, protect existing beautiful things, and help to give the not yet entirely commercialised people that for the lack of which they are starved.

ARTHUR WELFORD.

# Contemporary Art

### *The Knoedler Galleries.*

Modern Russian art is either classic or chaotic; either devoted to perfection of technique or to archaic arrogance. Its artists say they will either rival the great masters of drawing—Ingres, Burne-Jones — or they will go back and start at the melting-pot stage. One of the former is Savely Sorin, who has added a masterpiece to the Luxembourg in his portrait of Anna Pavlova. Like Ingres, Sorin is warm with romanticism, not cold in his classic contours like the formalists. His subjects live whether they are Russian princesses proud of mien or Paris art students correct of attire, and his treatment includes every medium possible for a drawing apparently, except oil paint: coloured chalks and charcoal, pencil, water-colour in washes and body-colour. The results are living, vivid and intriguing.

### *The New English Art Club.*

Like Sorin, Randolph Schwabe is a master of drawing, and moreover he is an Englishman with ideas about his work. His altar-piece of "St. Francis and the Birds" is not only the most important work he has done, it is by far the most significant picture in an exhibition which includes works by Wilson Steer and Charles Ginner. The feet of St. Francis are as beautifully drawn as if done by Ingres or Burne-Jones, and in his face there is character. Ginner's "Flask Walk" is one of his best pictures, and in Hampstead he has found a subject admirably suited to the intense particularity of the eighteenth century which is the secret of his art. Wilson Steer's portrait "Geoffrey Blackwell, Esq." is admirable, and so is Grace Wheatley's woolly study of her husband (No. 54), whose "Sand-banks" does not quite do him justice. Barnard Lintott's "Portrait of a Painter" is a favourable naturalistic study which would have been better for the obliteration of the frequent white spots of canvas priming showing through his paint. Another portrait of quality is that by Neville Lewis (No. 82). A clever piece of artificial light painting is "Wolverhampton Fair" by J. E. Nicholls, while Fairlie Harmar is successful with sunlight in "Sarson Farm." There are some good drawings and prints by Francis Unwin, F. E. Hodge, Ian Strang (a strangely silent and deserted Oxford Street), Kathleen Boyle, Frederick Brown and C. J. Holmes. Ethelbert White's "Paddington Pond" is particularly good.

### *Walker's Galleries.*

The exhibition of seventy sketches by Evelyn L. Engleheart is notable not only for its all-round level of accomplishment, but for the telling intimacy, especially of the Egyptian scenes.

Mrs. J. S. C. Davis has also made studies abroad, but her Devonshire series are better than the Indian. About half the works shown are flower pieces, very well done.

### *The Fine Art Society.*

As month follows month some new manifestation of the vitality of modern Spanish art is made in this country. The latest is the series of remarkable drawings made at the order of the Government by Ricardo Marin for the tercentenary of the death of Cervantes. No work has called forth such concentrated and prolonged illustrative faculty as "Don Quixote"; none so inspired great illustrative artists. The monumental series of Daniel Vierge is matched by Gustave Doré's, and now a new artist essays to try his lance against these two masters, and does not fail. Marin's drawings are worthy not only of Cervantes, but of Vierge and Doré. In addition some beautifully decorated fans are here shown; wonderful and original fan-work; some remarkably chic portraits and other drawings in colour of fashionable ladies, and some oil paintings which are well representative of the Spanish oil painting of to-day. Altogether some 150 works are exhibited.

Tom Mostyn has a show of moderate-size pictures in oil, glowing, and in some cases burning, with heavily applied colour. Highly decorative in character they would have achieved an added interest if the figures inserted in some of them had had more significance, as the Dante-like person of "The Golden Terrace," but particularly in the ambitious "Crucifixion," in which the figures on the cross are quite unimpressive. As sumptuous decorative compositions with deftly-handled colour harmonies they leave nothing to be desired in their class. Their author calls them "Gardens of Romance."

### *Greatorex Galleries.*

Walter Burroughs - Fowler shows twenty-four oil paintings and about the same number of water-colour drawings, and the latter are the better work. In fact they are very good work, exhibiting the honest craftsmanship that (it never tires one to say) belongs to the proper presentation of this form of English art.

KINETON PARKES.

## Washes for Outside Work

Washes of various kinds, both white and coloured, are often needed for outside work where expense stands in the way of oil-paint being used. There are many washes of different composition which may be used for the purpose, and the simplest is an ordinary lime-white. This is made from lime (not whiting) and must be very thoroughly slaked by the addition of hot water. Quite often water is poured on the lime, which is then left to fall to powder, but a better plan is to put it in an old barrel and cover up the top with a sack so as to keep in the hot fumes, and to stir occasionally, taking care that plenty of water is used, until a wash of the consistency of thin cream is produced. Then a solution of alum must be added; three pounds to the gallon is frequently used, but some prefer a saturated solution. While this is being poured in the whole should be well stirred, and it is advisable to strain the mixture through a coarse sieve to get rid of any unslaked particles of the lime which may be present.

Another lime-white, which is better than the above, is obtained by making eight gallons of lime-cream, as before, and then pouring in four pounds of glue size dissolved in one gallon of boiling water, together with three and a half pounds of zinc oxide. If a proportion of salt is added it will increase the wearing qualities of this wash.

Still another wash is obtained by adding to a gallon of slaked lime-cream a quarter of a pound of Burgundy pitch, dissolved by heat in one pint of raw linseed oil. The slaked lime may be thinned with skimmed milk instead of water, which will improve its quality, or flour and water boiled to form a paste may be used instead.

In all these lime-washes it is very important that the coat is not too thick: two coats are, of course, preferable to one. If colour is required it can be added in the shape of any earth colour which is lime-proof. Oxide of iron, ochre, and umber may be employed in various proportions, and a large number of different tints obtained.

Perhaps the best wash for outside work, when considered from the point of view of durability, is made from Portland cement and glue, with or without colours. Plaster of paris can be added if desired, in the proportion of about one-tenth of the mass. Powdered glue size should be melted in boiling water, about one-twentieth part of the whole, and a little alum is an improvement as it will affect the glue advantageously. The Portland cement must be of good quality and fresh, and all the ingredients must be very thoroughly mixed and strained. The success of this recipe depends almost wholly upon plenty of water being provided while the Portland cement is setting, therefore it is advisable to thoroughly wet the surface before applying the wash and not to do the work on a wall on which the sun is shining, unless means are taken for spraying water upon the surface, or there is some other way of keeping it wet. Instead of glue, silicate of soda, commonly called water-glass, is sometimes used in connection with Portland cement, in proportion of one quart to five gallons of the mixture. In addition to the colours mentioned above, blues and
greens can be purchased which can
mixed with cement or lime without be
affected. Black in small quantities n
also be added, which, with red and yell
gives a variety of pleasing tints.

If lampblack is used for tinting
should be stirred up separately in c
water containing a little borax so as
overcome the greasy nature of the bla
If hot water is used a little soap
answer the same purpose.

A white finish is often desired
washes, in which case if sand enters i
the composition it should be silver sa
Where colour is required it is advisa
to experiment a little in order to obt
the exact tint that is most suitable a
to paint with a little of the wash on
work so as to observe the effect. Lin
proof colours only must be used, and
these are selected they are safe not o
when mixed with lime, but also w
Portland and other cements and w
chalk or whiting.

Washable water-paints mixed w
petrifying liquid are frequently used
outside work, and last in good conditi
about two or three years. They may
had in various attractive colours, but
is necessary in ordering to state that th
are required for outside use.

The following are additional recip
for washes for outside use which are
cluded for the sake of completene
They may all be coloured as above su
gested :—

1. For application to brick or sto
(not over old paint or lime-wash) th
parts of Portland cement and one part
clean sand are first mixed together d
Add yellow ochre if a buff colour is
quired, Venetian red for a brick colo
and slaked lime for a white, using
correspondingly smaller quantity of t
cement. Add water and thoroughly s
until a fairly thin wash is obtain
Then strain and apply to the surfa
which should always be well soaked w
water so as to supply the moistu
necessary for the cement to set ha
Use a flat brush, and do not apply in ve
hot weather.

2. Slake half a bushel of lime with boili
water, keeping it covered during t
slaking. Prepare separately (*a*) a pe
of salt dissolved in hot water; (*b*) thr
pounds of ground rice boiled to a th
paste; (*c*) one pound of white glue d
solved in water in a glue pot, and th
thinned down with a quart of hot wate
(*d*) half a pound of whiting broken up
water and thinned down. Mix all the
ingredients, stir thoroughly, and stra
Then put aside the vessel containing t
wash for three days. Heat the mixtu
and apply hot.

All the above washes may be us
for inside work if desired. In most case
for the latter purpose, washable diste
pers or water paints are used, but the
is always a demand for a cheaper artic
which will not rub off. The following recip
are taken from W. G. Scott's Americ
book on "White Paints and Painti
Materials," long since out of print. Th
are quite reliable. The figures have be
adjusted to allow for the difference in t
capacity of an American and an Imperi
gallon. (*a*) Twenty pounds dry Pa
white (whiting) mixed until free
lumps with one gallon boiling wate
(*b*) Half a pound white sizing glue; so
four hours in one pint of cold wate

solve on a water bath (gluepot) and r into (*a*).

he above recipe makes rather more n two gallons of stock. It is of proper sh consistency and may be used at e, but it is better after standing half nour. Any tint may be given the white k by stirring the desired dry colour a little water and adding sufficient id colour to the base.

he following data in regard to the ering capacity were obtained as an rage of several years' work from shop rds :—

gallon covers on plaster .. 310 sq. ft.
,, ,, brick .. 200 sq. ft.
,, ,, wood .. 260 sq. ft.

amp-proof distemper. (white stock), plastered walls. (*a*) Twenty pounds of is white or extra gilder's whiting, one on of boiling water. (*b*) Half a pound vhite sizing glue; soak four hours in pints of cold water, then dissolve on ater bath. (*c*) Two ounces of phoste of soda; dissolve in one and a rter pints of boiling water. Mix (*c*) (*a*) then add (*b*).

J.

# Competition News

### *The Manchester War Memorial.*

he Manchester War Memorial Comee have appointed Mr. Percy Worthon to act as assessor in the competi about to be opened in connection the erection of the war memorial in Peter's Square. Premiums, ranging 200 to 60 guineas, are to be offered ne designers who secure the first four es in the contest. The architect nately appointed to carry out the will be paid in accordance with the duled charges of the R.I.B.A. It is nded that the memorial shall occupy oximately the site now held by the . When the memorial displaces the St. Peter's Church will be comorated by a suitable tablet in the ity.

### *au International du Travail, Geneva.*

xty-nine designs were submitted in above competition. By a repeated ess of elimination these were red by the jury of assessors to five, and s have been awarded to the successompetitors as follows :—

–No. 46 (motto : "47,546 mètres "), M. Epitaux, Lausanne. 5,500

–No. 17 (motto : "Labor"), M. enaz, Lausanne. 4,500 Fr.

–No. 31 (motto "Cheap"), M. rrière, Lausanne. 4,500 Fr.

–No. 2 (motto : "Avenir"), M. ry, Geneva. 3,500 Fr.

–No. 27 (motto : "Pax Vobiscum"), Rittmeyer and Furrer, Winter-. 2,000 Fr.

e following gentlemen constituted ury : MM. Fontaine, Président du il d'administration du Bureau internal du Travail; Usteri, ancien Con- aux Etats (représentant du Conseil al); H. B. Butler, Directeur-adjoint Bureau international du Travail; ce Brincourt, Société Centrale des tectes, Paris; A. Guyonnet, Société des Ingénieurs et des Architectes; Maurice Turrettini, Société Suisse des Ingénieurs et des Architectes; E. P. Warren, Royal Institute of British Architects.

# List of Competitions Open

| Date of Delivery. | COMPETITION. |
|---|---|
| June 30 | National War Memorial at Melbourne to cost £250,000. Competition, in two stages. Apply Agent-General in London, Victoria House, Melbourne Place, Strand. Deposit £2 2s. |
| June 30 | Pavilion to serve as Public Hall at Largs. Premium £25. Apply Mr. Peter Morris, Town Clerk, Largs. |
| June 30 | The National Painters' and Decorators' Joint Education Committee and the Incorporated Institute of British Decorators are offering a prize, value £10 10s., for the best design for the decoration of a room in which at least one panel is of a pictorial character. Candidates must be over 18 and under 25 on May 1, 1923, and must be engaged in or preparing to follow the craft of painting and decorating. Designers to the trade and instructors are eligible. Apply Mr. W. A. D. Englefield, Secretary, Incorporated Institute of British Decorators, Painters' Hall, Little Trinity Lane, London, E.C.4, or Mr. Will Mellor, Secretary, National Painters' and Decorators' Joint Education Committee, 9 Albert Square, Manchester. |
| July 3 | Pavilion in Calverley Gardens, Tunbridge Wells. Assessor Mr. E. Guy Dawber, F.S.A., F.R.I.B.A. Premiums £150, £100, and £50. Apply Town Clerk. |
| Aug. 25 | Public Swimming Baths and Washhouses, East Greenwich. Assessor, Mr Henry V. Ashley, F.R.I.B.A. Premiums: £300, £200, £100. Apply Mr. Frederick J. Simpson, Town Clerk, Town Hall, Greenwich. |
| Sept. 30 | Designs for a series of plaquettes in bronze illustrative of London as the capital city of the Empire, or of one or more of her main architectural features. Designs should be submitted in the form of models in plaster. The following prizes are offered:—One prize of 100 guineas, two prizes of 50 guineas, three prizes of 25 guineas. Apply Deputy Master of the Royal Mint, London, E.C.1. |
| Nov. 5 | Art Gallery for Hull. Assessor, Mr. John W. Simpson, PP.R.I.B.A. Apply (with cheque for £2 2s.) to Mr. H. A. Learoyd, Town Clerk, Guildhall, Hull. |
| No date | Designs for lay-out of about three acres of land as burial ground at Yeovil. Premium £20. Apply Mr. H. C. Batten, Clerk to the Burial Committee, Yeovil. |
| No date | The Student Welfare Committee, University of Glasgow, invite Competitive Designs (limited to Architects having an office in and practising within the Municipal Boundaries of the City of Glasgow) for a Pavilion to be erected on the University Athletic Ground at Westerlands, Anniesland, at a cost of £10,000. Assessor Mr. Alexander N. Paterson, A.R.S.A. Apply Honorary Secretary, Student Welfare Committee, The University, Glasgow. |

# Publications Received

### *The Housing Problem.*

A pamphlet on housing has been prepared by the Housing Sub-Committee of the Consultative Committee of Women's Organisations under the title of "The Housing Problem."

It is pointed out that it has been difficult hitherto to obtain a concise, yet adequate, statement of the problem of housing, which is occupying so much public attention at the moment, and it was thought that an outline of this kind would meet a real need. In this pamphlet an attempt has been made to draw up a clear statement of the present housing shortage, its causes and effects. It does not put forward any programme of reform, but reviews the problem from the economic, social, and legal points of view. In Part I will be found a brief résumé of the provision of houses in the past and the difficulties of the present position; Part II contains the various current proposals for meeting the shortage with an impartial criticism of each.

"The Housing Problem: A Statement of the Present Position." The Consultative Committee of Women's Organisations, 5 York Buildings, Adelphi. Price 1s.

"The London of Thackeray." By E. Beresford Chancellor, M.A., F.S.A., F.R.Hist.Soc. Price 15s. net. Grant, Richards, Ltd., London.

"Practical Joinery and Carpentry." By R. Greenhalgh. Price 6s. net. George Routledge and Sons, Ltd., London.

# The Incorporation of Architects in Scotland

The past year was of particular importance to the members of the Incorporation of Architects in Scotland. During the previous year the Incorporation was successful in obtaining a Royal Charter, and during last session—according to the annual report of the president and council—the new by-laws were drawn up, approved at a special general meeting, and lodged with the Privy Council for approval; a common seal was made from the design of Mr. A. N. Paterson, of Glasgow, and the council resolved that the members might make use of the initials authorized by the charter: Fellows—"F.I.Archts.(Scot.)," and Associates—"A.I.Archts.(Scot.)."

On leaving Glasgow the late Professor Cooper presented to the Incorporation a carved oak panel of the seventeenth century, which at one time had been in the old East Church, Aberdeen, and eleven plates illustrative of sculpture work in various sacrament houses in the north-east counties of Scotland. The following presentations were also made: By Sir John J. Burnet—his portrait in crayon by Mr. James Paterson, R.S.A.; by Dr. William Kelly—his portrait in oil by Mr. John M. Aiken, A.R.S.A.; by Mr. A. N. Paterson—his portrait (by himself) in crayon, and a water-colour (by himself) of the Villa Medici, Rome; by Mr. James B. Dunn—four frames of original drawings of architectural subjects by the late Mr. R. W. Billings, and two framed drawings, "The Builders" and "The Quarry," by Mr. Harry Morley, London. The house, 15 Rutland Square, bequeathed to the Incorporation by the late Sir R. Rowand Anderson to form a permanent home for the Incorporation, has now been most suitably adapted by Messrs. Begg and Lorne Campbell, architects, so as to meet the requirements of the Incorporation. £18,000 was received from the estate of the late Sir R. Rowand Anderson, and a further sum of £500 is expected. There are now over 600 members of the Incorporation. £33 1s. 6d. was collected towards the repair of St. Paul's Cathedral.

# The King and the Print Society

The King has graciously accepted a copy of the second publication of the Print Society, "66 Etchings," edited by E. Hesketh Hubbard, R.O.I., A.R.W.A., the founder of the Society, with an Introduction by Kineton Parkes.

# The Water Supply of a Modern Restaurant

Fourteen Mather and Platt standard tanks were supplied for Messrs. Lyons's New Corner House. A tank, dimensions 10 ft.×5 ft.×4 ft., is fixed on the floor of the sub-basement and is a receptacle for crude water, which is supplied from the mains of the Metropolitan Water Board through a 6-in. metered connection. The branch from this connection feeds the crude-water tank through a 4-in. ball valve. The connection from the town's main, 4 in. diameter, then rises to feed four tanks fixed on mezzanine floor between first and second floors. The sizes of the tanks are: No. 1 tank, 14 ft. 6 in. × 10 ft. 6 in. × 5 ft. 6 in.; No. 2 tank, 10 ft.×7 ft.×5 ft. 6 in.; No. 3 tank, 14 ft.×7 ft. 6 in.×5 ft. 6 in.; No. 4 tank, 16 ft.×6 ft. 6 in.×5 ft. 6 in.; each tank being fed through 2½ in. ball valve.

The 4 in. rising connection continues to feed five tanks on mezzanine floor between second and third floors, their sizes being: No. 5 tank, 12 ft. 6 in.× 10 ft. 6 in.×5 ft.; No. 6 tank, 10 ft.× 7 ft.×5 ft.; No. 7 tank, 16 ft.×7 ft. 6 in. ×5 ft.; No. 8 tank, 17 ft. 6 in.×8 ft.× 5 ft.; No. 9 tank, 11 ft. 6 in. × 9 ft. 6 in. ×5 ft. The rising main continues in 4 in. and feeds two tanks in the roof, 14 ft. 6 in.×12 ft. 6 in.× 5 ft. 6 in.

Tanks Nos. 1, 2, 3, and 4 give the crude water supply to the basement and sub-basement. Tanks Nos. 5, 6, 7, 8, and 9 give the crude water supply to the first floor and ground floor. Tanks 10 and 11 give the crude water supply to Nos. 2, 3, 4, 5, and 6 floors.

As the top floor is of a height where it is possible that the pressure in the town's main would not always discharge water in tanks Nos. 10 and 11, the crude-water tank fixed in the sub-basement can be used, in the event of pressure in the town's main being low, as a supply to: (*a*) a steam-driven pump; (*b*) an electrically-driven turbine pump. These pumps can discharge through a separate and distinct 4 in. pumping main to the crude-water tanks so that the crude-water supply is thus insured in every possible way.

From the crude-water tanks Nos. 10 and 11 fixed in the roof a feed is taken to a water softener in the sub-basement, and from the water softener soft water is pumped up to the tanks Nos. 12 and 13 (Mather and Platt standard tanks) in the roof. Each of these tanks has dimensions 14 ft.×10 ft.×5 ft. 6 in. From these soft-water tanks a water supply is taken to the calorifiers fixed in the sub-basement, from whence hot soft water is pumped up to each floor, there being an entirely separate hot soft-water service for kitchen service and lavatory service.

### *Arrangement of Tanks.*

The tanks are arranged at different levels for three reasons:—

(*a*) The question of space had to be considered for the various floors, as it was impossible to accommodate all the tanks on one or two floors.

(*b*) The question of distribution of the weight of the total quantities of water contained by the tanks—57,500 gals. (over 255 tons)—had to be considered. The tank beds are formed by cross-rolled steel joists, spanning the main constructional beams. Thus, any direct weight from the tanks is not in the hollow-brick floors, but the weight is entirely taken by the main constructional beams.

(*c*) Incidentally, arranging the tanks at different levels saves considerable quantities of piping as the lower floors are fed by the tanks at the lower levels, and so on. The feed pipes for the water supplies to each floor, whether crude or hot water, are 2 in. diameter. The main feeders are 4 in.

Each tank is fitted with a separate overflow pipe and drain pipe. All the overflow pipes unite into one common 4 in. waste, which is led to a hopper on the high level drainage above ground level, except for the crude-water tank in the sub-basement, which drains in a blow-off tank from whence water has to be pumped to the high drain level.

Owing to want of head room there was no space to fix a valve above the floor on the outlet piping from each tank. This outlet piping passes through the floor above which the tank is fixed and then runs horizontally below the ceiling of the room under the tank. On this horizontal pipe a stop valve is fixed with a long spindle passing through the floor above, with hand wheel in the room in which the tank is fixed.

An interesting point in connection with the water supplies is that all the piping, whether from town's main, hot water supply, soft water supply, steam, or gas, is fixed on each side of a duct which runs from the ceiling of the sub-basement to the top room—about 140 ft. in height. A ladder passes up the duct and stages are fixed at intervals, so that access to the pipe joints can easily be had if necessary.

There are also doors into the duct at the various floor levels.

Messrs. Mather and Platt previously supplied the tanks which formed similar types of water supplies at the Strand Palace Hotel and the Regent Palace Hotel.

# Coming Events

*Wednesday, June* 13.

R.I.B.A.—Annual Conference in Edinburgh.

Women's Housing and Village Councils Federation.—Afternoon Session of the Conference: "Women and Housing." 2.45 p.m.

*Thursday, June* 14.

British Museum.—"The Terramare and Etruscan Periods." By Miss Claire Gaudet. 3.15 p.m.

*Friday, June* 15.

A.W.G.—Election of Candidates, at 7.45 p.m. "Architecture and the Press." 8 p.m.

*Saturday, June* 30.

A.A.—Visit to Long Crendon Manor, Long Crendon, near Thame. Alterations and additions, by Mr. Philip Tilden.

# A Correction

In the course of our obituary notice of the late Mr. E. Keynes Purchase, F.R.I.B.A., published in our last issue, we stated that he was articled to Mr. T. Nicholson, F.R.I.B.A., a diocesan architect in *Reading*. This should read *Hereford*.

# Obituary

### *Death of Two Manchester Architects.*

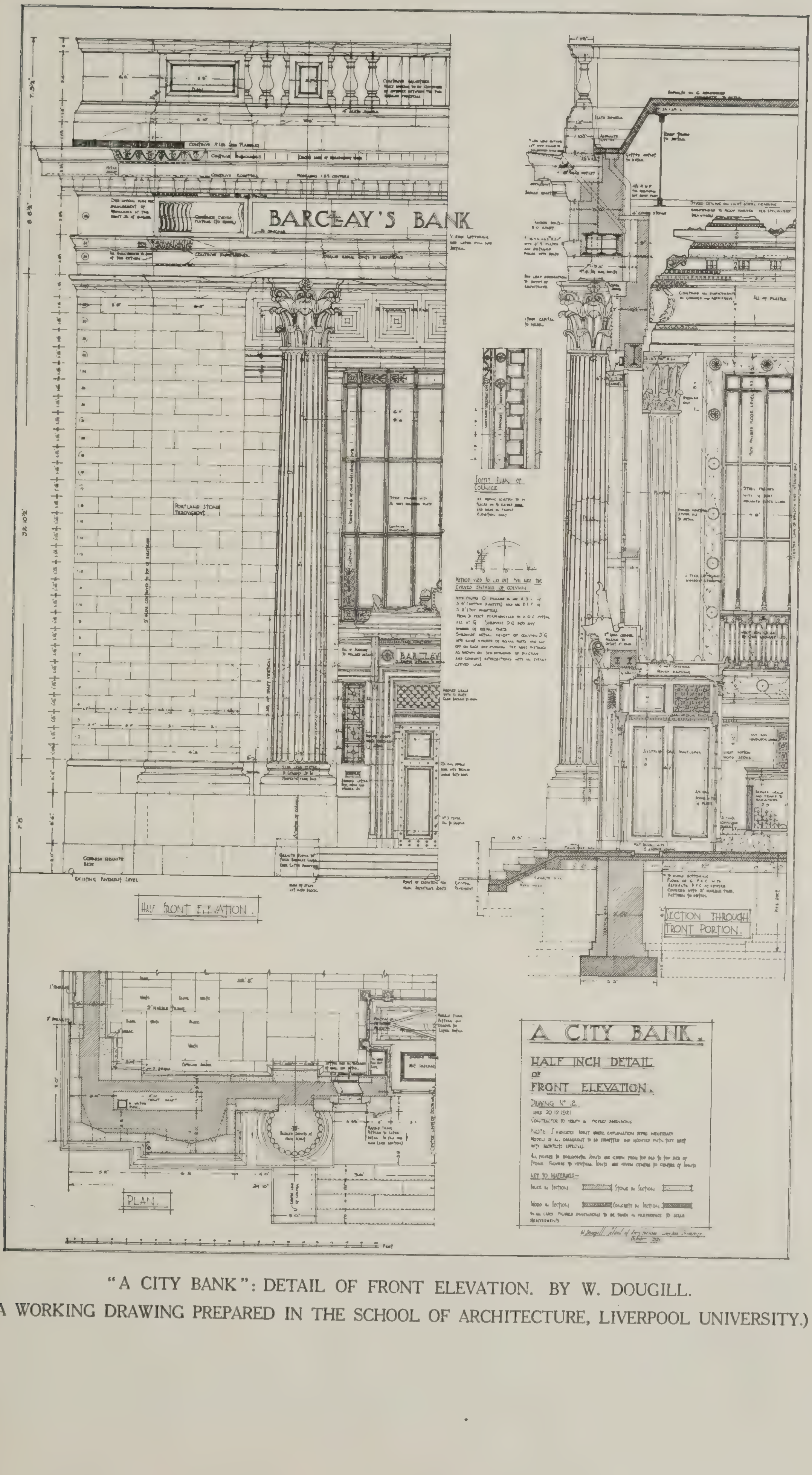
The deaths of two well-known Man
chester architects have occurred in th
Sale district. Mr. Peter Hesketh, o
Whitehall Road, Brooklands, died at th
age of sixty-five, and Mr. Arthur Ernes
Woodhouse, of Hereford Street, Sale, wa
forty-eight years old. Mr. Woodhous
was the architect for numerous counci
schools, built by the Stretford Educatio
authorities, and St. Peter's Church, Gors
Hill, Stretford, was erected from hi
design.

### *The late Alderman A. E. Sawday.*

It is with deep regret that we recor
the death at Hastings of Alderma
Albert Edward Sawday, O.B.E., J.P.
F.R.I.B.A., a member of the Leiceste
City Council, and a former mayor of th
city. Alderman Sawday was staying a
Hastings with his brother. The decease
gentleman, who was in his seventy
second year, had been in failing healt
for some time, and it was hoped that hi
stay at Hastings would have restored hi
to health. Alderman Sawday was fo
forty-five years a member of the Leiceste
Council, was Chairman of the Estate
Committee for many years, and wa
mayor in 1903. By profession he was a
architect enjoying an extensive practic
being responsible for the erection of som
of the most imposing factory buildings i
the district, as well as the Poor La
offices. He served his articles with
London firm, and was for a time i
partnership with Mr. Francis Redfern a
Leicester.

The deceased gentleman was accorde
a civic funeral at Leicester. In additio
to the Mayor all the members of the Cit
Council, and representatives of loc
religious, educational, and political bodie
were present. The following represente
the Leicester and Leicestershire Societ
of Architects: Messrs. Stockdale Harris
(president), W. H. Cowdell, E. B. Coope
Walter Brand, A. H. Hind, Charl
Kempson, C. Christian, J. Brown,
Turner, W. Keay, A. Hubert, W.
Bedingfield, F. Moore, and W. H. Sim
son. Mr. T. Trevor Sawday (nephew), wh
was associated with Ald. Sawday in h
business as an architect, was the princip
mourner.

THE LATE ALDERMAN A. E. SAWDAY


BARCLAY'S BANK
PORTLAND STONE THROUGHOUT
HALF FRONT ELEVATION.
SOFFIT PLAN OF CORNICE
METHOD USED TO LAY OUT FULL SIZE THE CURVED ENTASIS OF COLUMN
SECTION THROUGH FRONT PORTION.
PLAN.
A CITY BANK.
HALF INCH DETAIL
OF
FRONT ELEVATION.
DRAWING Nº 2
ISSUED 20 12 1921
CONTRACTOR TO VERIFY ALL FIGURED DIMENSIONS
NOTE ʃ INDICATES JOINT WHERE EXPLANATION SEEMS NECESSARY
MODELS OF ALL ORNAMENT TO BE SUBMITTED AND MODIFIED UNTIL THEY MEET WITH ARCHITECTS APPROVAL
ALL FIGURES TO HORIZONTAL JOINTS ARE GIVEN FROM TOP BED TO TOP BED OF STONE. FIGURES TO VERTICAL JOINTS ARE GIVEN CENTRE TO CENTRE OF JOINTS
KEY TO MATERIALS—
BRICK IN SECTION
STONE IN SECTION
WOOD IN SECTION
CONCRETE IN SECTION
IN ALL CASES FIGURED DIMENSIONS TO BE TAKEN IN PREFERENCE TO SCALE MEASUREMENTS
W. Dougill School of Architecture Liverpool University
FEET

"A CITY BANK": DETAIL OF FRONT ELEVATION. BY W. DOUGILL.
(A WORKING DRAWING PREPARED IN THE SCHOOL OF ARCHITECTURE, LIVERPOOL UNIVERSITY.)

# The Week's News

### *Chislet Housing.*

Three hundred houses are to be built for Chislet (Kent) colliery workers.

### *The Hampshire Assize Courts.*

£2,000 is being spent by the Hampshire County Council in repairing the roof and walls of the Assize Courts.

### *More Houses for Leicester.*

Leicester Housing Committee are asking the City Council to sanction the erection of 571 more houses.

### *New Headquarters for Automobile Association.*

A new headquarters for the Automobile Association is to be erected in Leicester Square.

### *Bournemouth Cliff Protection Works.*

Bournemouth Corporation is to proceed at once with cliff protection works to cost over £50,000.

### *Royal Charter for the F.B.I.*

The Federation of British Industries has been granted a Royal Charter of Incorporation by the King.

### *Housing at Twickenham.*

The Freehold Property Trust, Ltd., are negotiating for the purchase of the Chudleigh Estate, upon which it is proposed to erect some 200 houses of medium class.

### *New Houses for London.*

Within the next two years the London County Council are to erect 6,000 more houses and hope to induce private enterprise to make a like contribution.

### *Bognor's Pavilion.*

A meeting of Bognor ratepayers have unanimously decided upon the further expenditure of £4,000 to complete the pavilion.

### *Cardiff Housing.*

The Housing Committee recommend that steps be taken to proceed with a further 2,000 houses on the Ely site and that a scheme be prepared and submitted to the Ministry of Health.

### *Redcar Housing.*

The whole of the building land for Government houses, purchased by the borough of Redcar, has been sold to a local builder, with the condition that forty houses shall be erected within two years.

### *New Road for Ilfracombe.*

A scheme for the construction of a new road from the harbour to Hillsborough Road, to provide work for the unemployed next winter, is under consideration by the Urban District Council.

### *Bishopstoke Sanatoria Accommodation.*

The Hampshire County Council Public Works and Buildings Committee recommend the adaptation of "The Mount," Bishopstoke, to accommodate sixty sanatoria patients. The cost is estimated at £14,000.

### *Newcastle Fusiliers War Memorial.*

£900 is still required to defray the cost of erecting the Newcastle Fusiliers War Memorial. £1,600 has already been collected. Subscriptions should be sent to Major Rogers, St. George's Drill Hall, Newcastle.

### *St. Swithun's Shrine.*

What appear to be some portions of the stonework base of St. Swithun's Shrine, demolished by Cromwell's Commissioners at the Dissolution in 1538, have recently been discovered in Winchester Cathedral, by Mr. J. D. Le Couteur and Mr. D. H. M. Carter (the latter a present Wykehamist).

### *Hinckley's Housing Move.*

The Hinckley Urban District Council have decided on a housing programme, subject to the passing of the Housing Bill, the outcome of which, it is anticipated, will be the erection of large numbers of small working-class dwellings.

### *Slum Clearance at Hitchin.*

The Hitchin Urban District Council have submitted to the Ministry of Health a scheme for the clearance of the Queen Street slum area, and the re-housing of the displaced tenants. The scheme is estimated to cost £36,000.

### *The Bank of England Rebuilding.*

In view of the projected rebuilding of the Bank of England, the City Corporation of London are proposing to serve notices to treat on the Bank of England, in connection with the scheme to widen Prince's Street to 60 ft. At present it varies in width from 36 ft. to about 50 ft.

### *The Old G.P.O. Site.*

Messrs. John Bright and Brothers have bought the freehold of 21,000 sq. ft. of the old G.P.O. site at St. Martin's-le-Grand. The premises to be erected thereon will be to the design of Mr. Josiah Gunton, F.R.I.B.A., and will face St. Martin's-le-Grand and Gresham Street.

### *Another London Landmark Falls.*

The latest of the old London landmarks to disappear in its present form is Henekey's Wine Bar in Holborn, which dates back just about two centuries. The old lantern which used to illuminate the cellars in Stuart times still hangs in the bar, and there are many relics still extant of the first proprietors.

### *Peterborough Cathedral.*

There is enough money in hand to carry on the architect's complete scheme of structural repairs to Peterborough Cathedral. An extensive scheme of internal restoration is to be started, and, when the bell tower is made safe, the peal of bells, silent for many years, will be rung.

### *Garden City for Newcastle.*

The Milvain Garden City, on the highest situation in Newcastle, is being laid out and built on to supply semi-detached villas and bungalows. There are 52 acres, which will supply about 700 houses with sites of 30 ft. frontages and 100 ft. depths. Messrs. Dixon and Bell are the architects.

### *Rotherham Housing.*

The Ministry of Health are prepared to allow the erection of 104 houses on Section D of the Doncaster Road housing site to rank for subsidy under the Housing Bill now before Parliament, if it became law. The Town Clerk is to apply
sanction to a loan for £39,450 to cover
estimated cost of the houses.

### *The Condition of Rhymney Churche*

At a meeting of the District Counc
Association at Newport (Mon.), Mr.
Evans (Rhymney), dealing with s
sidences in Monmouthshire, said t
churches at Rhymney were becoming
safe owing to subsidences. The Gove
ment are to be urged to compensate
owners of the property damaged thro
the subsidences.

### *A Regent Street Café to be Rebuilt.*

The Café Verry, Regent Street, is to
rebuilt. The demolition of the old p
perty, which dates from 1826, has b
under discussion for some time, and pl
have been approved for a six-story bl
to cost something approaching a quar
of a million pounds. Dickens, Thacker
Tennyson, and Gladstone were all
quenters of the old Café Verry.

### £40,000 *Gift to a Hospital.*

At a meeting of governors of
Nottingham Children's Hospital, it
announced that Mr. J. D. Player
partner in the Nottingham tobacco f
of John Player & Sons, will build
equip at his own expense a new wing
the hospital, thereby doubling the
commodation. The cost is estimated
£40,000.

### *The Architecture Club.*

The fourth quarterly dinner of
Architecture Club will be held on Th
day, June 21, at 7.30 p.m., at the H
Cecil. Among the speakers will be
A. B. Walkley and Mr. Oswald Bar
The committee hope that all members
be present on this occasion. Each men
may bring one guest, who may be
either sex. Tickets are 10s. 6d. e
inclusive of gratuities, but not of w
Dinner jackets will be worn.

### *Lady Glazier for Exeter.*

Miss Daphne Drake, of Exeter,
has been appointed glazier to the D
and Chapter of Exeter Cathedral, is
first woman in the United Kingdom
occupy such a position. She succ
her father, the late Mr. Maurice Dr
the Devonshire novelist and autho
on stained glass. Miss Drake, who se
her apprenticeship in her father's w
shops, is an Associate of the Society
Master Glass Painters.

### £3,000,000 *Road.*

Liverpool City Council, Lancas
County Council, and thirteen boro
councils are to negotiate with
Ministry of Transport, for the const
tion of a new super-road from Liver
to East Lancashire and Yorkshire.
road, it is proposed, should go nort
Manchester to Oldham, passing the
manufacturing district of Bury, Bol
Rochdale, and Atherton, into the ma
facturing districts of Yorkshire.
cost of the new road would be £3,000,

### *Institution of Gas Engineers.*

The Institution of Gas Engineers
hold its annual meeting this yea
Belfast, commencing on June 26, u

presidency of Mr. James D. Smith, st.C.E., the engineer of the Corpora- s gas undertaking. This is the cen- ry year of gas lighting in Belfast, gas ıg been first supplied to the public on August 30, 1823.

*The First Spiral Staircase.*

cturing on discoveries in Egypt at Royal Institution, Professor Flinders e said that in Ethiopia, eighty miles 1 of Cairo, there was recently dis- red the remains of the first true spiral case known. It was found near ruins of a huge theatre capable of ng 11,000 persons, wherein the stage apparently 200 ft. long.

*Summer Visit to Norway.*

is year the summer visit organized Leplay House will be to Norway. expected to visit Christiania, the al agricultural districts, the Jotun- mountains, a glacier region, and of the western fjords and towns. bers of the party will also be able tend their visit to include Gothen- (for the International Exhibition), other places in Sweden if they

0,000,000 *Scheme for Motor-ways.*

scheme to construct two broad r-ways through England has been n foot by a syndicate known as the hern and Western Motor-ways Co., Lord Montagu of Beaulieu as its man. One of the motor-ways will from London to Manchester and pool. The other will run from Wales to Newcastle-on-Tyne. The cost of the scheme is estimated to 30,000,000.

*Eastbourne Improvements.*

fore inviting competitive designs for roposed Grand Parade improvement, der to provide better facilities for performances in the busy season, own Council is asking the Duke of nshire's Compton estate what re- ions it would impose in regard to ature and dimensions of the scheme. Council favours the Wish Tower ds as the site for the projected im- ment, and any permanent works require the approval of the estate.

*Liverpool Cathedral.*

erpool Cathedral's first completed n will be consecrated on July 19 of year, that day being the twentieth ersary of the laying of the founda- stone by King Edward. King rd laid the foundation stone in and the Duke of Connaught the ation stone of the chapter house in when work was begun on the lady (which has been finished for some the vestries, and the choir.

*he Prince of Wales's Hospital.*

Prince of Wales has promised to the extension being carried out at rince of Wales's General Hospital, ham. The total cost will be be- £30,000 and £40,000, and will of fifty-four additional beds ng up the total to 179) and rooms enty-eight nurses. There will also new operating theatre, lighting vements, etc. A balance of about is still required.

*L.C.C. Central School of Arts and Crafts.*

The annual exhibition of the work of the session of the L.C.C. Central School of Arts and Crafts, Southampton Row, W.C.1, will be open until June 23, from 10 a.m. to 8 p.m. daily, Saturdays 10 to 12 noon. Admission is free on signing the visitors' book. The exhibits include work in architecture, furniture, wood and stone carving, stained glass, pottery, book illustration, etching, lithography, miniatures, drawing, modelling, and design.

*The Restoration of French Homes.*

A society has been formed, with headquarters in Paris, with the object of restoring and preserving the historic old homes of France. The lead was set by Dr. Carvallo, an architectural expert and art connoisseur. It is realized that the efforts of the State to keep the old chateaux, farms, and cottages in repair are not sufficient. The officials will include some of the foremost authorities on historic art and architecture in the country.

*University College Extension.*

The King and Queen laid recently the foundation stone of a new Nursing Home and Obstetric Hospital, and declared open the recently completed Anatomical Institute. The extensions are due to the trustees of the Rockefeller Benefaction, who have allotted £1,205,000 to the College, Hospital, and Medical School for the purposes of promoting medical education and research. Except for the Rotunda Hospital at Dublin, this will be the first obstetric unit for men students in the Empire.

*Blackburn War Memorial.*

Sir Bertram Mackennal, the sculptor, has been commissioned to design Blackburn's war memorial. Sir Bertram has chosen for his theme "Sacrifice and Devotion," which is represented in the design by a mother supporting her dying son. The War Memorial Committee have accepted the design, and decided that on a pedestal under the statue there should be a simple line: "In remembrance, 1914-1918." The statue will cost about £3,000, and the garden of remembrance now being prepared for its reception in the Corporation Park, about £2,500.

*The Housing Bill.*

The Scottish Board of Health have issued to all local authorities a circular explaining the provisions of the Housing Bill. The Board suggest that action should be taken immediately in anticipation of the passage of the Bill, so that the maximum advantage may be taken of the present building season. The Board suggest that the local authorities should proceed at once to determine what form of assistance they are prepared to give to private enterprise, and to ascertain the extent to which private enterprise in their districts is ready to respond.

*Poplar Housing Scheme.*

The Poplar Special Housing Committee recommend the purchase for £3,500 of a freehold site at the corner of Alfred Street and Bow Road, which, if wholly laid out for dwellings, would provide thirty-five flats. They further recommend the purchase of sites in Kingfield Street, Billson Street, Stebondale Street, and Parsonage Street, at a cost of £4,290. These sites would, the report states, allow for the provision of sixty-one houses (forty-four with three bedrooms, living-room, bath-room, and scullery, and seventeen with two bedrooms, etc.).

*Bank of England Rebuilding Scheme.*

The Bill promoted by the Governor and company of the Bank of England, in connection with the rebuilding of the Bank, has passed the Select Committee of the House of Lords on unopposed Bills. The object of the measure is to amend or repeal certain provisions of the Act of 21 George III, chap. lxxi, of 1781, which provides for vesting in the Bank of England of the parish church of Saint Christopher le Stocks in the City and the adjoining churchyard, and also to make further provision for the removal of any human remains which may be found in lands formerly the site of the church and churchyard.

*Gift to Ashmolean Museum.*

The collection of Pre-Raphaelite pictures at the Ashmolean Museum, Oxford, is to receive an addition in the form of an example of the work of Frederick Sandys, who is unrepresented there. Captain Langton Douglas, Director of the National Gallery of Ireland, and a New College graduate, is presenting to the museum Sandys's Royal Academy picture of 1865, "Gentle Spring," in memory of his third son, who was killed in action. "Gentle Spring" was long in the Alexander A. Ionides collection, and was lent by Mrs. Ionides to the exhibition at Burlington House in 1905 of the works of G. F. Watts and Sandys.

*St. Paul's Cathedral.*

The R.I.B.A. has forwarded to Canon Alexander a cheque for £300 as a subscription towards the Preservation Fund of St. Paul's Cathedral. Among the allied societies which have joined with the Institute in making this contribution have been the Berks, Bucks, and Oxon Architectural Association, the Birmingham Architectural Association, the Incorporation of Architects in Scotland, the Manchester Society of Architects, the Nottingham and Derby Architectural Society, the Northamptonshire Architectural Association, the Northern Architectural Association, the South Wales Institute of Architects, and the Sheffield, South Yorkshire, and District Society of Architects and Surveyors. Further contributions are invited to complete the fund.

*Architects' and Surveyors' Approved Society.*

The new Committee of Management of the Architects' and Surveyors' Approved Society met on May 29 at the new office 36 Victoria Street, Westminster. It was decided in view of the fact that substantial assistance had been given to the society by the R.I.B.A., the Surveyors' Institution, the Architectural Association, and the Society of Architects, that the allied societies should be appealed to directly for the support of their members, and that every member of the staff should be enrolled as members of the approved society. Attention is called to the fact that the society, in addition to the ordinary benefits, is able to give members special benefits, hospital, dental, optical, surgical aid, and convalescent home treatment.

# The R.I.B.A. and the Housing Bill

On the recommendation of the Housing Committee, the Council of the R.I.B.A. endeavoured to obtain the following amendments to the Housing Bill during the committee stage. The amendments were put forward by the member for West Newcastle-on-Tyne (Mr. Adams), and the member for West Walthamstow (Mr. McEntee) respectively. The Minister of Health was unable to accept either amendment.

1. To be inserted at the end of sub-section (2) section 1 :—

And provided that in the design of the houses regard shall be had to the amenities of the neighbourhood, to convenience of planning, to suitability of aspect, to architectural appearance, and to the provision of adequate space between and about the buildings.

2. The following new sub-section to be inserted after sub-section (2) section 1 :—

Before being approved by the council of a local authority the designs for the houses shall be publicly exhibited for a period of not less than seven days, and if within a further period of seven days following such public exhibition written objection is made to the council by not less than ten ratepayers in the area of the local authority the council shall take into consideration such objections and if they think fit shall invite the R.I.B.A. to nominate one or more architects to advise them on the designs.

# Law Report

## Easement—Ancient Lights—Jurisdiction of Court

*Slack v. Leeds Industrial Co-operative Society, Ltd.*

March 26. Court of Appeal.
Before the Master of the Rolls (Lord Sterndale) and Lords Justices Warrington and Younger.

This was an appeal by the defendants from a judgment of Mr. Justice Romer, sitting in the Chancery Division. In the Court below the action was by the plaintiff for an injunction to restrain the defendants from erecting any buildings so as to cause a nuisance or illegal obstruction to the plaintiff's ancient windows. At the time the writ was issued and of the trial the defendants' buildings had not been actually erected to such a height as to cause a nuisance or illegal obstruction, and it followed that no legal wrong had at either of those two dates been committed.

Mr. Justice Romer held that the defendants were intending to erect buildings according to a certain plan and model, and, further, that the buildings so erected would cause a nuisance or illegal obstruction to the plaintiff's ancient lights sufficient to give him a cause of action, and it followed that he would be entitled to an injunction. His Lordship also found facts as justifying generally the awarding of damages in substitution of an injunction, and observed that if the buildings had been completed he would have awarded damages in lieu of an injunction. He was, however, bound by a decision of the Court of Appeal—though he differed from that decision—that as no wrong had actually been committed, he had no jurisdiction to award damages. He therefore granted an injunction in the terms asked for by the plaintiffs.

It was from this decision that the defendants appealed.

Mr. Cunliffe, K.C. (with him Mr. Vernon), argued the case for the appellants, and Mr. Hughes, K.C. (with him Mr. J. E. Harman), for the respondent.

The Court by a majority (Lord Justice Younger dissenting) dismissed the appeal.

The Master of the Rolls said he came to the conclusion that the Court had no jurisdiction under Lord Cairn's Act to award damages in substitution for an injunction in a case where the injury to light was only apprehended in the future and no actual present obstruction existed. There was a strong decision of three judges which clearly showed that in the opinion of those learned judges the jurisdiction did not exist. That decision had never been disapproved of, though frequently referred to. That being so, if they were to be overruled, it should only be done by the final tribunal, and not by a court of co-ordinate jurisdiction.

Lord Justice Warrington concurred.

Lord Justice Younger dissented.

# Parliamentary Notes

[BY OUR SPECIAL REPRESENTATIVE.]

*London Slum Clearance.*

The London County Council (Money) Bill was read a second time. During the discussion Mr. Hume stated, for the Council, that a sum of £2,417,000 was asked for housing purposes. Of this £313,000 was required for slum clearances; £1,351,000 for housing under the Addison scheme; and about £750,000 for new works under the Chamberlain scheme. Within the next two years the Council hoped to build 6,000 houses and to induce private enterprise to put up 10,000 more. Under the Addison scheme the Council had built 7,000 houses.

*The Housing Bill.*

Further alterations have been made during the progress of the Housing Bill through committee. A new sub-section was agreed to, making it clear that a metropolitan borough council would be entitled to the State subsidy, and enabling the London County Council, in the case of any house provided by a metropolitan borough council, to supplement the State contribution by a sum not exceeding £3 annually for twenty years. On Clause 4 the Minister agreed to an extension of the date for the completion of houses, under the prescribed conditions, from January 1 to June 1, 1926. Clause 5 was amended so as to enable a local authority, before October 1, 1926, to advance money to persons or bodies of persons constructing or altering houses, or acquiring houses, the construction of which was begun after April 25, 1923, whether within or without the area of the local authority.

# New Prize for Liverpool

The White Star Company have founded an annual prize of ten guineas in the Liverpool School of Architecture for the design of a portion of the interior of an Atlantic liner. The subject will be set each year in consultation with the general manager of the line.

# Architects' Fees for Privat Enterprise Housing Worl

The following scale of architects' fe for private enterprise housing work h been prepared by the R.I.B.A. in co junction with the National Federation House - Builders, the London Hous Builders' Association, and the Nation Federation of Building Trades Employe of Great Britain and Ireland. It is i tended to apply to the fees of archite instructed to prepare house plans builders in cases where the services of t architect are limited to the preparati of drawings only. The Council of t Royal Institute recommend all Membe and Licentiates of the R.I.B.A. to ad this scale as a basis for their fees for t work in question. The scale has be brought to the notice of the members the National Federation of Hous Builders, the London House-Builde Association, and the National Federati of Building Trades Employers of Gre Britain and Ireland.

*Section A.—House Plans : Houses of £5 Agreed Value and Under.*

1. Detached Houses.—For preparati of $\frac{1}{8}$ in. scale drawings and providing copy only to the builder, together wi $\frac{1}{2}$ in. details in pencil for one house on (including depositing a set of plans wi the local authority in accordance wi their by-laws and other legal requi ments), the charge shall be 4 per cent. up the agreed cost of the house.

2. Pair of Houses.—For preparation drawings as set forth above, the char for one pair of houses shall be 3 per ce upon the agreed cost of such pair of hous

3. Repetition Work and Lay-out Pla —For preparation of drawings compl as set forth above and including the p paration of lay-out * plans to a scale n less than $\frac{1}{500}$ for the next twenty-fi houses, the fee shall be £3 3s. per hous

For the preparation of drawings co plete as set forth above and including t preparation of lay-out * plan to a sc of not less than $\frac{1}{500}$ for the next fi houses, the fee shall be £2 2s. per hous

*Note.*—Examples of the working of t above section. Number of houses to built, say, sixty-five.

| No. of Houses. | Fees (£500 House). | Fees (£400 Hou |
|---|---|---|
| One detached house at 4 per cent. .. | £20 0 0 | £16 0 0 |
| Second house at 2 per cent. .. .. | £10 0 0 | £8 0 0 |
| Next 25 at £3 3 0 .. | £78 15 0 | £78 15 0 |
| Next 38 at £2 2 0 .. | £79 16 0 | £79 16 0 |
| 65 | £188 11 0 | £182 11 0 |
| Average fee per house | £2 18 0·18d. | £2 16 2 |

N.B.—This schedule shall include t preparation of plans for two types for t first twenty houses and one extra type every additional twenty houses. In t event of any deviation in plan or ele tion over and above the type plans abo mentioned the architect's fees shall decided by mutual agreement betwe himself and the builder.

*Section B.—House Plans : Houses of Agreed Cost exceeding £500 but exceeding £2,000.*

The same scale as that laid down section A shall apply except as rega clause 1 the charge shall be 3 per ce upon the agreed cost of the house, wit minimum fee of £20.

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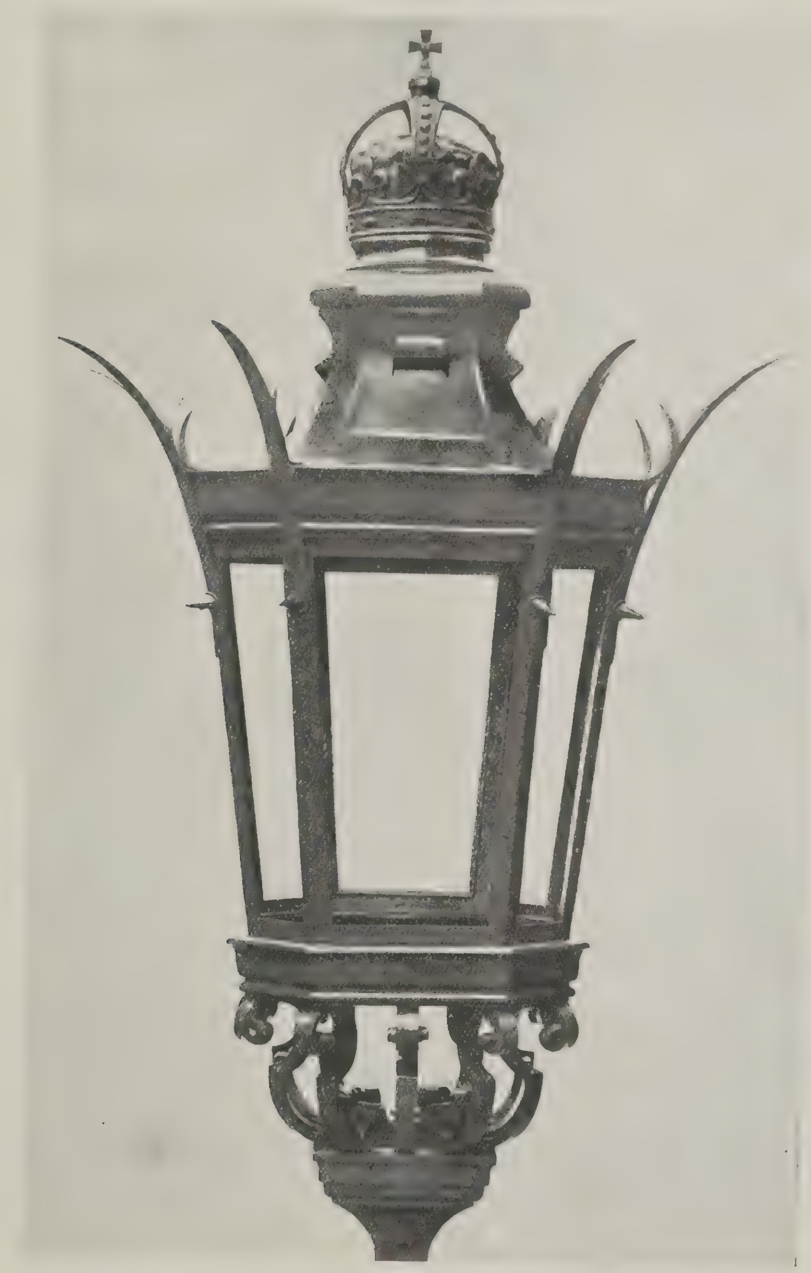
* Lay-out is intended to mean that the Builders' ro and sewers have already been formed.

dnesday, June 20, 1923. Vol. LVII. No. 1485

# THE ARCHITECTS' JOURNAL & Architectural Engineer

*With which is incorporated "The Builders' Journal."*



WROUGHT-IRON AND BRONZE LAMP, VICTORIA GATE, HYDE PARK.

Designed by J. H. Markham, F.R.I.B.A. (See also page 1059.)

27-29 Tothill Street, Westminster, S.W.1.

c

# The University, Edinburgh

Robert Adam, Architect

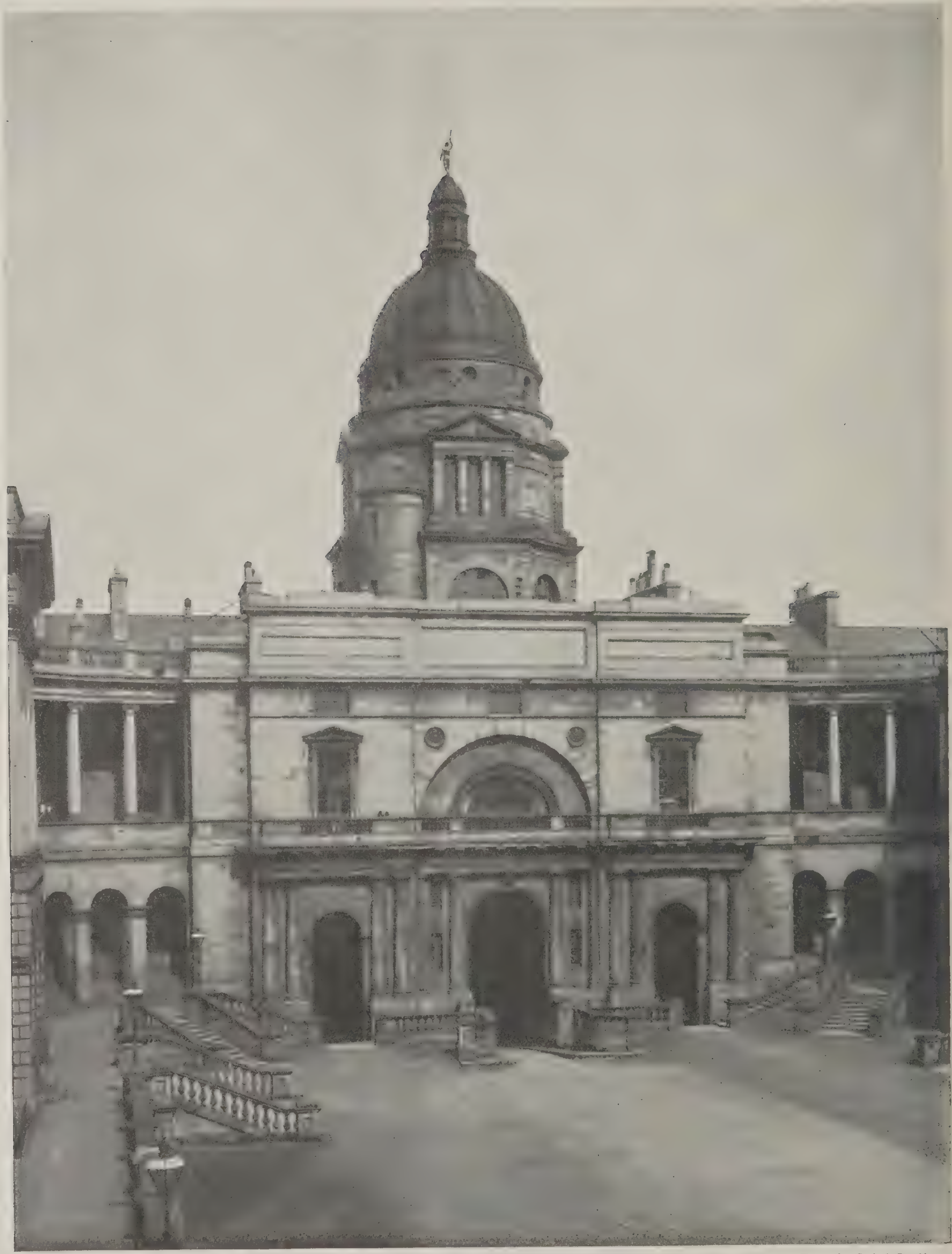


*Photo: Francis Caird Inglis.*

Robert Adam was educated at the old University, and later in life designed the new one. Owing to lack of funds only part of the scheme was carried out, and the building was eventually completed from the designs of W. H. Playfair. The building is a notable architectural feature of Edinburgh, the venue of last week's Conference, a full report of which begins on page 1038.

THE
ARCHITECTS' JOURNAL
27-29 Tothill Street, Westminster, S.W.1.

esday, June 20, 1923

Volume LVII. No. 1485

# The R.I.B.A. Elections and After

THE result of the R.I.B.A. elections is a sweeping
victory for the Emergency Committee. Not one
of the Defence League's candidates for the
Council has been returned, and the cynic will be
ted to observe "Vous l'avez voulu, George Dandin!"
here is little doubt, despite the passionate protests of
efenders, that it was the Defence League's example at
previous election when they adopted the course of
ng forward an *en bloc* party, backed up with a
uous canvassing campaign, that led to the adoption of
ar tactics by the opposing party at the recent election
the result as recorded above.

eaking for ourselves, though we regard the result with
ne satisfaction, such satisfaction is not unmixed with
t that such men as Mr. Sydney Perks, who, though a
uous, is a genial fighter, and Mr. Scott-Moncrieff, who
vivid and arresting personality with a very real en-
asm for the wider aspects of architecture, should be
red from service on the Council. But with the policy
ed by both the contending parties such a result,
h regrettable, was almost inevitable—the individuals
sacrificed for the group.

past year has been rich in lessons for all, and though
ncerely trust that never again in the history of the
ute will it be necessary to vote on such narrow party
we must say frankly that we do not regard the
y of the Defence League at last year's election and
contentious year of office as an unmixed evil. As we
ventured to say in the columns of this JOURNAL before,
ink the old Councils of the R.I.B.A. (previous to
22 elections) were not altogether in touch with the
r or the wishes of a great number of the members.
the merits of Registration and Unification as pre-
l by either party we do not now propose to enter—the
of both are well known to our readers and no useful
se can be served by going over the old ground at this
re.

earlier Councils of the Institute contained many men
at distinction in the profession, but it was very
lly felt amongst wide sections of the electorate that
al power was in the hands of a small and energetic
who acted at times with an almost oligarchic disregard
wishes and sentiments of a large section of their
sional brethren. Uncomfortable rumours were abroad
of them probably baseless) that some kind of a rota
lerstanding existed that certain men were to hold
as president in succession on the lines of "you keep
this year and your turn will come next"—and it is
n quite recent years that the nomination of the
nt has been the result of voting by the whole of the
l; up to this time some mysterious nomination
ttee managed things in its own sweet way. The next
which must come before long, will be the election of
resident, not by some eighteen members of the
l, but by the whole electorate. Another grievance
not voiced by many members, against these older
ls was what was felt to be the undue and prepon-
g influence of the R.A.'s.

right that our most distinguished architects should
ted members of the Royal Academy, and it is right that the most distinguished architects should help and advise their brother architects, but it is not right that the Institute should be regarded as an inferior and tributary body to the Academy.

Having said so many hard things of the older Councils, of which the recently elected Council may be said to be the lineal descendant, it may be asked why are we so satisfied with the results of the election. We are satisfied for these reasons: because we believe that man for man they are a better team than their opponents, that in the main their policy as regards registration is the right one, and, lastly, because we believe that they stand as much for the interests of architecture as for the interests of architects. For this is the real test: what architecture are we going to give the public it is our honour and privilege to serve? Questions of fees are important, questions of professional dignity (oh! happy words, and how much evil has been done in thy name from the time of Pecksniff to the present day) are important, but they are of very secondary and minor importance to the major question of architecture.

Now a word on policy. The evil of all policies, whether institutional or national, is when the policy is considered as an end in itself and not as a means to an end, and the contempt we all instinctively feel for the professional politician (if such a person really exists) is due to his insistence on the means without regard to those larger and wider human interests which should be the end and aim of all political effort. Such language may sound specious and impracticable, but it is in reality the essence of the practical and the common-sense. The great British public, our lords and masters, are at the present moment taking a greater interest in architecture (that is, in sound and beautiful building) than probably they have ever done since the close of the eighteenth century, and except as we give it good architecture it is not interested in us. It has no use for architects as architects, only for architects as servants, and the sooner we learn this hard and difficult lesson and the less we make public parade of our professional dignity, the sooner shall we win that real esteem, the esteem that comes from humble and patient service, which in the end is the only esteem worth having. The wearing of birettas, be they ever so high, and of gowns, be they ever so gaily coloured, will not advance us one inch along our weary way, in fact, they may very seriously impede our progress.

One of the most important factors that the Institute will have to take into account is the renaissance, if the term may be allowed, of our provincial cities. In this connection we would congratulate Mr. Gotch upon his election to the Presidency of the Institute. He is the first provincial architect to hold this high office, and no one is better qualified to discharge its responsible duties.

We hope that the policy of the new Council, whilst not neglecting the interests of the individual, will ultimately include those larger and deeper questions which are neither individual nor local, but national. The age of the "medicine-man" has passed, and we can no longer hold our audiences with weird and mystic jargon be it ever so professional; in the terse language of modernity "We have now to deliver the goods!"

# The Edinburgh Conference

## A Few Impressions

THREE days compact of rich, varied, and memorable experience. To attempt a description of it all is to realize the inadequacy of language and the limitations of space. The abundant, overflowing hospitality of our Scottish hosts; the pleasure of meeting old friends and making new ones; the receptions, the speech making, the feasting; the majestic panorama of Edinburgh and the country around from the heights of the Castle; the "Historic Mile" to Holyrood; the picturesque charm of "Auld Reekie" and the classic splendours of the New Town; the romantic scenery, the thrilling memories of the Border country; the impressive ruins of Dryburgh and Melrose—these are some of the elements, the sights, sounds, and sensations of a memorable three days that remain fixed separately in the mind yet somehow blend together to make an harmonic whole. Since they cannot be so bodied forth, some slight attempt must be made to set them down in detail.

The Conference began with a smoking-concert at the headquarters in Rutland Square on Wednesday night. It is understood that this was a "wee Scots nicht" in contradistinction to "an auld Scots nicht," which latter was the joyful experience of visitors from the South on the Friday evening, when the Conference Banquet was held. Possibly the presence of haggis on the latter occasion accounts for a distinction which is otherwise obscure to an Englishman.

The concert, at which the genial and eloquent Scots President, Mr. Marwick, took the chair, was exactly what an Englishman likes, and expects, to hear when he finds himself among the Scots. Scottish songs were sung, recitations in dialect (with much rolling of "r's") were given, and one member of the gathering played exquisitely upon the violin some of those haunting and melancholy Scots airs that seem to embody the very spirit of the race.

On Thursday morning the Conference assembled in the Council Room of the City Chambers, where an official welcome was given by the Lord Provost and Magistrates. Two papers were read—by Mr. Marwick and Mr. Lanchester—representing what may be not inappropriately described respectively as the poetry and the prose of the subject of town planning. Mr. Marwick, as Professor Abercrombie observed, was eloquent, poetic, human, emotional in praise of his great and obviously beloved city; while Mr. Lanchester clearly set forth, by implication at any rate, the scientific causes of our emotional reactions to fine cities. The discussion which followed was brief, bright, and full of point, and if one or two speakers were mutually destructive nobody minded very much, for luncheon was now in view. Up the steep High Street went the party to the Castle, set on Edinburgh's towering rock, lingering here and there on the way to peer down dark and mysterious-looking wynds, courts, and closes.

Luncheon was taken in the Billings building, Crown Square, on the embattled heights, with a quartet of kilted pipers playing outside. Followed a tour of inspection of the Castle under the guidance of Mr. J. Wilson Paterson, O.B.E. The Scottish Crown Jewels, older than those in the Tower of London because, hidden away, they successfully escaped the clutching hand of Cromwell, were duly admired. Then to the windy eminence of the battlements. Words cannot describe the wonderful view which is here obtained of the rolling country that encircles the city, with the estuary of the Firth of Forth stretching away to the north and seeming to merge into the hills of Fife.

At imminent risk of a human "landslide," members then grouped themselves on a grassy bank within the Castle precinct for the taking of a photograph—a rather protracted business owing to the restive behaviour of the camera in a rather high wind.

Then came a drive down the "Historic Mile" to Holyrood—a road impregnated with history; past Heriot Hospital; past the great tenements in which so large proportion of Edinburgh's poor are housed; past the Roy Exchange, the Mercat Cross, John Knox's house, th Canongate Tolbooth, the picturesque White Horse Clos and so to Holyrood. Here, after viewing Mr. Geor Washington Browne's King Edward Memorial, the compan stayed awhile, admiring the many fine apartments. F those who like a touch of the gruesome in their pleasur there was the additional thrill of Rizzio's blood.

Followed a drive around Holyrood Park and the encircl ment of the grassy slopes and craggy bluffs of Arthur Seat, ending with an unrivalled panoramic view of cit landscape, seascape, and river. Later, a reception by th R.I.B.A. in the Art Gallery, and in the evening another b the Right Hon. the Lord Provost Hutchison, in the Fre masons' Hall, provided excellent opportunity for the mo formal social intercourse befitting a conference.

Friday was perhaps the most memorable day of all, f it was devoted almost entirely to a charabanc tour throug a hundred miles of the romantic Border country immo talized in the poetry of Scott. The way was by Lauder a Earlston, through scenery of varied enchantment— towering hills and bosky hollows; by green uplands studd with brilliant patches of yellow gorse; through range aft range of miniature mountains, each opening up new vist of hazy splendour; and so, by a long, steady climb, to t great heights above Tweed, where Scott was wont to ha his horse and gaze across the loveliness of Bemersyde a dream of the days when the blue bonnets were bound f the Border.

The fragments of Dryburgh, sequestered in a bower yews and cedars, melancholy reminder of the days of feu devastation, and bloodshed, are well cared for, the Office Works at this very moment being engaged in preservi what yet remains. How fitting that the bones of Sco should rest beneath this ruined transept, in the very hea of the Border that he loved so passionately and sang so enchantingly. The work that has been done here, t excavations carried out, the discoveries made were lucid explained by Mr. Richards, of the Office of Works, w rendered the same courteous service at Melrose, whic though a ruin, is far more complete than Dryburgh. Melrose lunch was taken.

Aboard the charabancs again, members were tak through more lovely Tweedside scenery, catching an in dental glimpse, amid the valley foliage, of the gables a chimney-stacks of Abbotsford. Thus to Peebles, where t was taken in the great hydropathic designed by Mr. Jam Miller.

The banquet in the evening held in the Freemasons' Ha provided the "auld Scots nicht," and to the Southron t most interesting part of it was the ceremony of the hagg (Did we observe a Londoner furtively concealing his porti beneath the table?) For those who have not seen t ceremony, nay, the ritual, of the "haggis and nips," here a brief account of it. Enters a piper, playing. Behind hi come the waiters holding the haggis on high, while, brin ing up the rear, is a stalwart flourishing a bottle of whisk The procession circles the tables twice to the music of t pipes. The piper halts behind the chair of the Preside who hands him a glass of liquor which, after an invocation Gaelic, he tosses off. The ceremony is ended. Haggis is serve

Then the speeches; a brilliant one by Lady Fletcher, witty and wise one by the President; the proposing of t health of the President by Sir Robert Lorimer, the singi of "He's a Jolly Good Fellow," and of "Auld Lang Syne and the Scottish Conference is over. What everybody now asking is: When is the next one to be held north Tweed?

G. J. H.

# The New President of the R.I.B.A.

MR. J. ALFRED GOTCH, J.P., F.S.A., the new president of the R.I.B.A., is a senior partner in the firm of Messrs. Gotch and Saunders, of Kettering, architects. His election is unique he history of the Royal Institute, inasmuch as he is the provincial member to be elected president.

MR. J. ALFRED GOTCH

son of the late Mr. Thomas Henry Gotch, Mr. ed Gotch, who was born in 1852, was educated at tering Grammar School, the University of Zurich, King's ege, and the A.A. He was articled to Mr. R. W. John- of Melton Mowbray, at that time the only architect tising in Kettering. Mr. Gotch commenced practice is own account in 1879 at Kettering, where he was wards joined by Mr. Charles Saunders, and recently ephew, Mr. Laurence M. Gotch, F.R.I.B.A., has also me a member of the firm. For some years Mr. h acted as surveyor to the Kettering Local Board.

r. Gotch served on the Council of the Royal Insti- from 1886 to 1904, and from 1905 to the present , while from 1914 to 1919 he was vice-president. He also elected to the committee of the Architectural ciation from 1883 to 1887, and was president of the ciation 1886-7. He also held the office of president of Northants Association of Architects 1911-22.

e is an acknowledged authority on the domestic architecture of the Renaissance, and despite the claims of a busy practice, a large number of authoritative works dealing with this fascinating subject have come from his pen within the last forty years. These include "The Buildings of Sir Thomas Tresham" (1883); "Architecture of the Renaissance in England" (1894); "Early Renaissance Architecture in England" (1901); "The Growth of the English House" (1909); "The Original Drawings for the Palace at Whitehall attributed to Inigo Jones" (1912); "Domestic Architecture of the Georgian Period" (1917); "The English Home from Charles I to George IV" (1918); "Haddon Hall," and a great number of papers in architectural and archæological periodicals.

Kettering and the surrounding district bear the impress of Mr. Gotch's art. His firm have been responsible for the erection of many notable buildings in Northamptonshire and elsewhere, including: Corby House, Clopton Manor House, Thornby Grange, Quenby Hall, The Gables, Peterborough, and other houses, St. Mary's Church, Kettering, elementary and secondary schools at Kettering, and for the County Councils of Northamptonshire and Bedfordshire; numerous imposing banks throughout the country for the London Joint City and Midland Bank, Ltd.; the chaste Alfred East Art Gallery at Kettering; and many war memorials at Kettering and throughout the country.

# The Ante-Rooms of a West-End Mansion

## DARCY BRADDELL, F.R.I.B.A., and H. DEANE, Architects

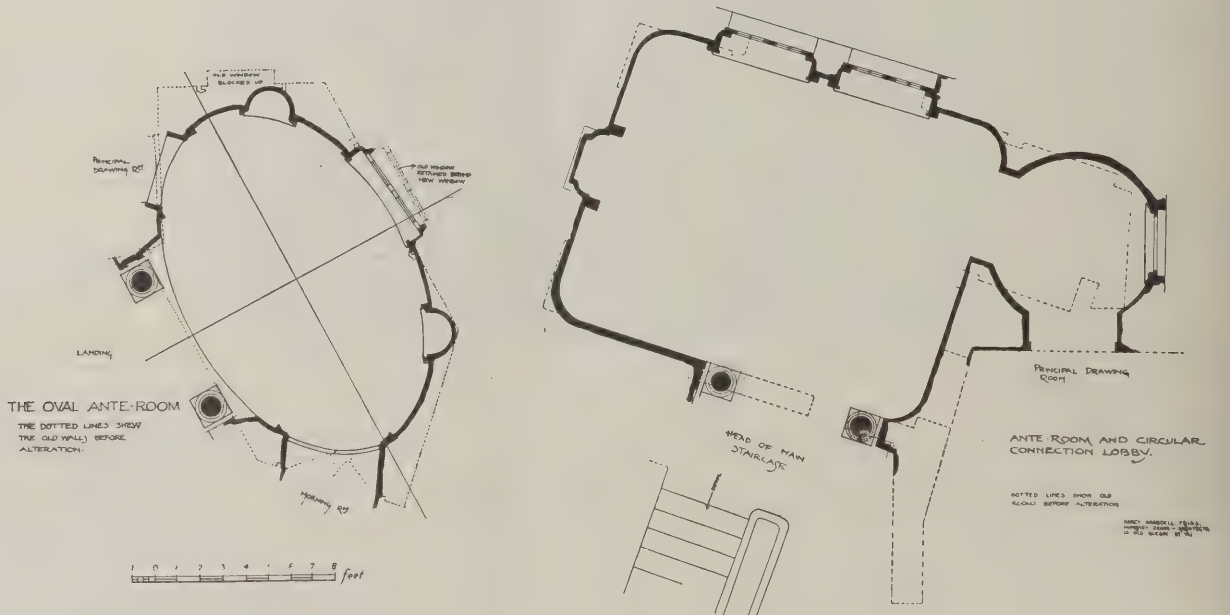
THE accompanying illustrations show two small ante-rooms in No. 1 Grosvenor Crescent, which have been designed and executed for Mrs. Richard McCreery by Mr. Darcy Braddell, F.R.I.B.A., and Mr. H. Deane. In order to understand precisely the problem facing the architects, it will be advisable to give some idea of the original condition of the first floor of the house. The main staircase leads on to a landing off which a suite of four rooms opened. Two of these rooms were large and two small. All opened into each other. On landing at the first-floor level the visitor was faced by the doorway of the first of the two small rooms. This was of no particular shape or style. Next to it and connected by a doorway was the principal drawing-room. Then came the second of the two small rooms, also of no particular style, and of even more impossible shape than its fellow. Finally, to complete the chain, came the morning-room, which was the second large room. The house occupies a corner site, all four rooms getting admirable light, the staircase, which is on the "blind" side of the house, being top light. The principal drawing-room had already been successfully decorated in the Louis Seize manner, the design used being frankly based on the famous music room of Marie Antoinette in the Petit Trianon.

The design aimed at was to form a chain of rooms all decorated in the Louis Seize style and all suitably arranged so that constant circulation could be obtained during any receptions that might be given. The larger of the two little rooms, which opened off the head of the staircase, was the more elaborately handled. The wall, with the doorway, was taken down and an opening formed by means of a pair of fine white statuary marble columns with Corinthian ca and bases of ormolu. Space was thus immediately effecte and the crowd at the top of the staircase found itself empt ing into a white and gold ante-room, or able by movi along the staircase landing to go the opposite w and reach the other end of the suite, viz., the mornin room.

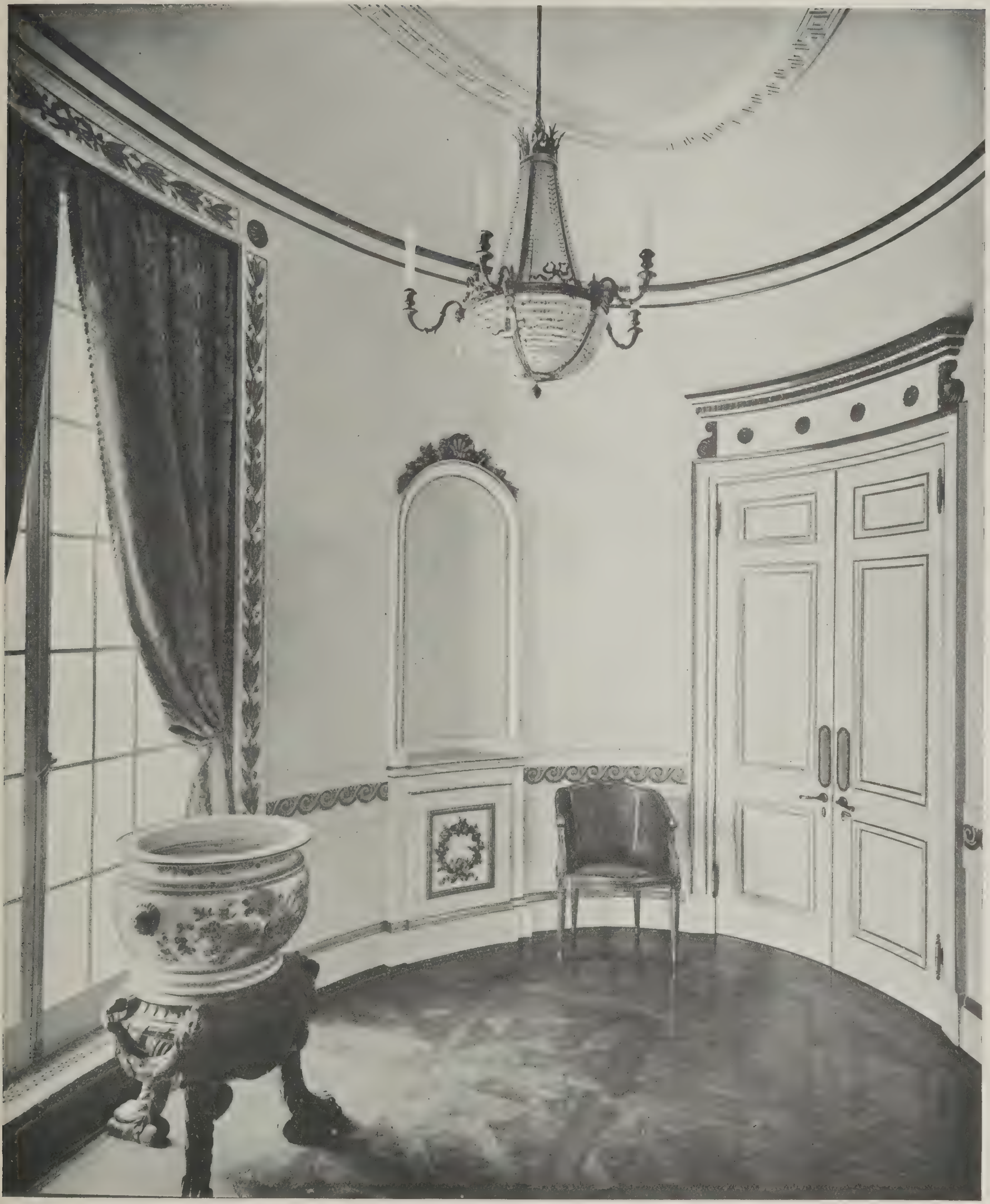
An interesting piece of planning can be seen in the fir of these two ante-rooms. This is the formation of a circul lobby where formerly had been an irregular many-sid excrescence. This lobby, the reflection of which can be se in the mirror over the fireplace, has a saucer-domed to and is very richly treated, but has no gilded ornamer The carving in the ante-room itself, particularly the festoo on either side of the fireplace, is charmingly executed. is all water-gilt and agate burnished. The gilding throug out this room is all water-gilding, a long and costly proce but well worth the trouble.

In the treatment of the other ante-room it will be se that an oval has been fitted in between the lop-sided wa of the old room. Here the decoration is somewhat simpl The approach to this room is identical to that of the oth ante-room, viz., through an opening of white Sicilian marb columns. Somewhat elaborate parquet floors are laid both rooms. The marble fireplace illustrated was made Paris.

The general contractors were Messrs. Bassett & Co., London; the sub-contractors being: Messrs. Davis Benne & Co. (heating); J. Whitehead and Sons (marble); Burtesca and Denelle (metalwork). The carving was executed Mr. Herbert Grimwood.

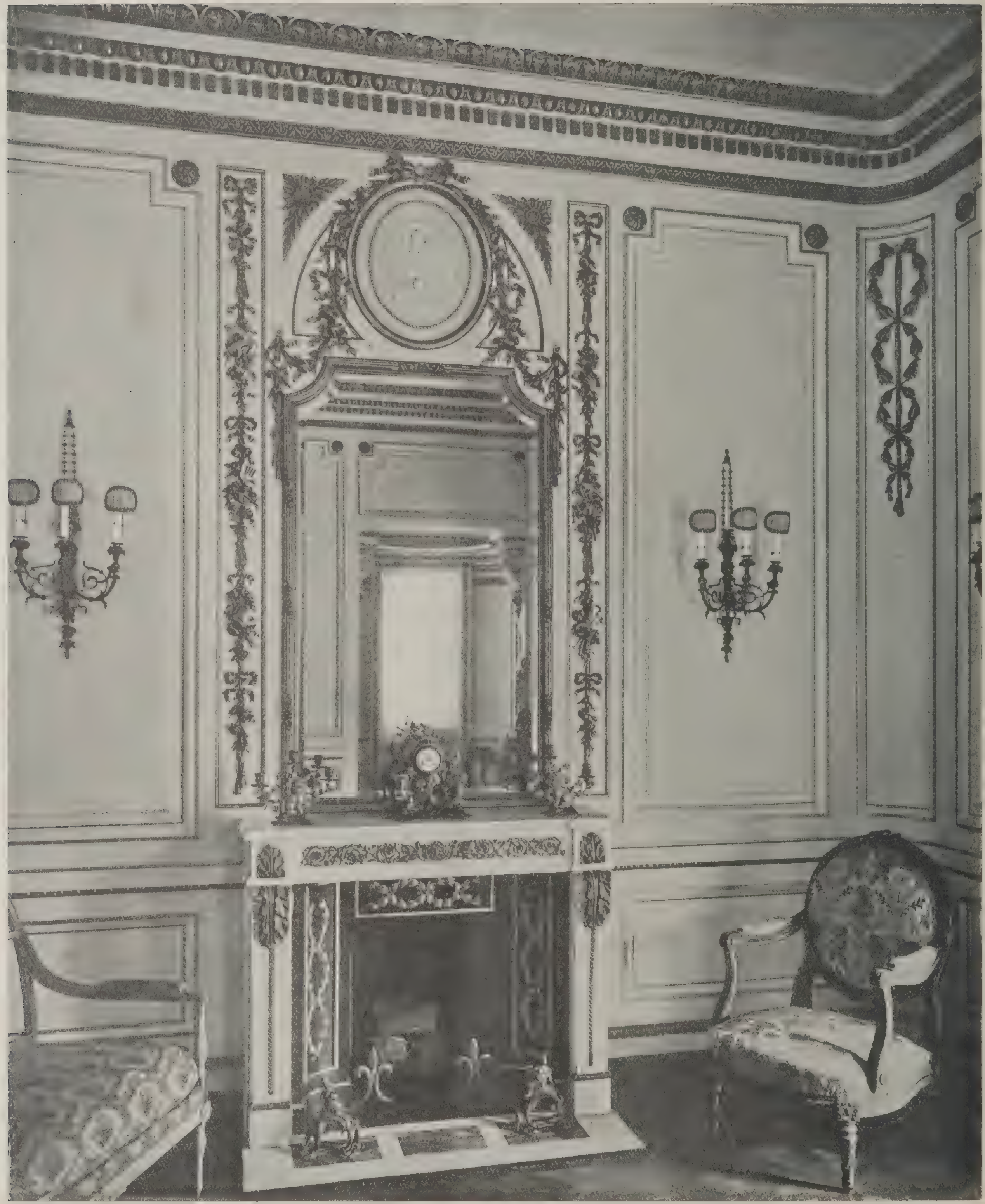

OLD WINDOW BLOCKED UP
PRINCIPAL DRAWING RM
OLD WINDOW RETAINED BEHIND NEW WINDOW
LANDING
THE OVAL ANTE-ROOM
THE DOTTED LINES SHEW THE OLD WALLS BEFORE ALTERATION.
MORNING RM
1 0 1 2 3 4 5 6 7 8 feet
HEAD OF MAIN STAIRCASE
PRINCIPAL DRAWING ROOM
ANTE-ROOM AND CIRCULAR CONNECTION LOBBY.
DOTTED LINES SHOW OLD ROOM BEFORE ALTERATION

PLANS OF THE ANTE-ROOMS AT NO 1 GROSVENOR CRESCENT, LONDON.



NO. I GROSVENOR CRESCENT, LONDON: THE OVAL ANTE-ROOM.

DARCY BRADDELL, F.R.I.B.A., AND H. DEANE, ARCHITECTS

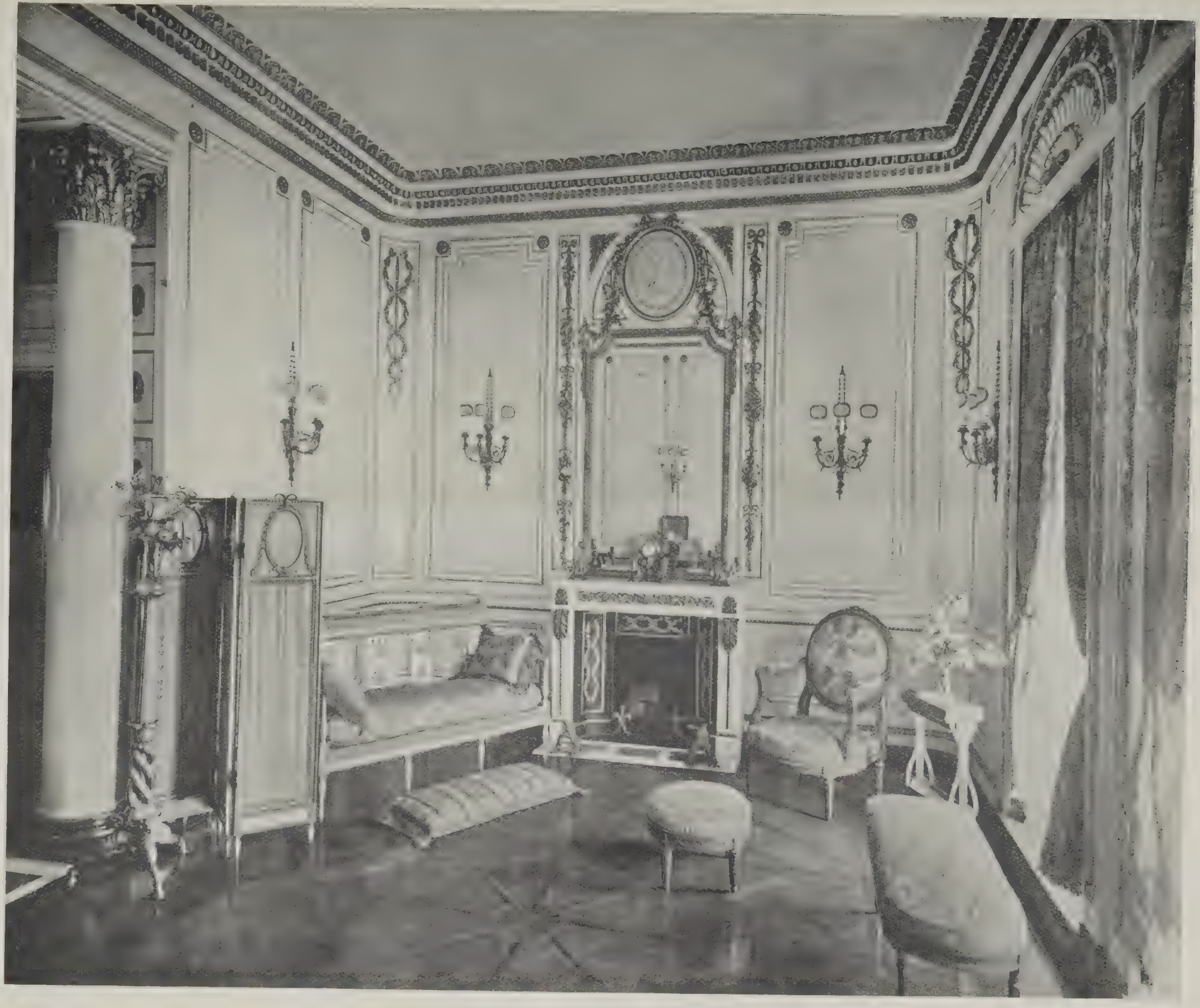


NO. 1 GROSVENOR CRESCENT, LONDON: THE FIREPLACE IN THE ANTE-ROOM.

DARCY BRADDELL, F.R.I.B.A., AND H DEANE, ARCHITECTS.

# The Ante-Room

Darcy Braddell, F.R.I.B.A., and H. Deane, Architects



This room is decorated in white and gold. The columns, of which only one is shown, are of white statuary marble, with Corinthian caps and bases of ormolu. A detail of the fireplace appears on the opposite page.

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# Shop Fronts

## By LESLIE MANSFIELD, F.R.I.B.A.

THE term shop front conveys to me that portion of an architectural façade which is inserted by the shop-keeper, primarily as a protection for his goods. It is usually done without any regard for e comforts of the shopping public and little or no respect r the remainder of the building. The shop-keeper says w the job is to be done, and his decision is controlled more ten than not by a passion for area in plate glass, the art display being left to chance. From his point of view ch problems as the nature of the goods to be shown and eir relationship when displayed to the man in the street, e scale, perspective, and the hundreds of other points all of small moment so long as his shop will be the atest thing.” Whether or not the shop front ensures goods becoming less faded, his window-dressing staff rrying out their job more easily, or the public being rigued into trading, are all considered to be of secondary portance.

### “The Trade Designs the Shop”

Shop fronts should be worked out by the application of principle of twice two are four in terms of : A—the trade cerned + B—the location of the shop + C—the habits the clientele = X—a shop front. The details, such as ether the front shall be of one material or another, and ether the glass should be blue or green, in fact, everything m beginning to end, should be arrived at after con- eration of the trade concerned and the problems to be lt with. In short, it is the trade that designs the shop, l not the trader. A shop front should be considered as a zed frame, or protection for the goods which the retailer to offer. It should be a complement to the display her than a competitor. The custom to-day of seeking ginality in all sorts of shaped and twisted compositions ich exhibit little real study of the problem or appreciation the general appearance of the street should be dis- raged. If the trader would pay more attention to ctive display then he would not require the assistance olished brass or fretted woods to attract his custom, and, dentally, our streets would be less tawdry. I realize t so long as there are ordinary human beings in the ld there will be a certain number who desire to be erent from their fellow creatures; but in order to arrive some basis for design I have suggested three points as rimary importance.

Iy experience has been confined to fish shops, and as the shop has no front in the accepted sense of the word, it simple matter for me to deal with. I do not agree with present custom of the open shop so favoured in the le. No article of commerce needs such careful protec- as fish, and I feel that the present tendency of the lic to do their trading on the pathway is wrong. While preciate the objection a lady has to entering such shops the fear she experiences lest her clothes be soiled, I k that the trader has the remedy in his own hands. there are a tremendous number of people who buy their in the big stores, I do not feel that the habit of marketing the side-walk is immovable. Undoubtedly fish should lisplayed inside the building and behind a shop front, the greatest opponent to progress in this direction is fish man himself. Tradition has bred a race of men who it difficult to ply their trade in another way than lly. Until they and the public have been educated to a rent frame of mind we must make certain concessions heir habits and customs.

the phrase “location of shop” I include its position street, its aspect, and its environment. It is the first impression that decides the customer, and if the shop does not register an appeal, the prospective buyer will pass by without realizing its existence. At one time the fish trade favoured the corner shop, but experience has taught them wisdom, and to-day they prefer display as a form of appeal rather than position, but if there is one thing that is still vital to them, it is the question of aspect, and I think this applies equally to all trades. The fish trade prefer the south side of the street, i.e. the north aspect, but this is unfortunate as more business is done on the sunny side. But a north aspect is necessary because fish deteriorates very quickly when subjected to bright light, and for this reason the fishmonger puts his blind down every morning regardless of the weather. This blind question plays havoc with the design if you are not careful.

To come to my third point—the habits of the clientele—I feel that display is the only factor which remains constant; it can be varied as desired. This not only applies to the fish business, but to every other trade. The methods employed by the housewife in Leeds when she wishes to buy fish are very different from those of the lady in Mayfair. In Leeds a fishmonger has to be in the street to tell the lady what she is looking for. In Mayfair he usually gets his order over the telephone, and sends such goods as he may have in his shop, or can collect from a friend round the corner. In a certain West Country town the man will buy the fish, taking what his friend the salesman recommends for the day, while in districts of London the lady will seek her prize among the goods in the fish-box, turning each over until she gets the right one. In other parts of this country they sell nothing but “cut-up” fish; but with the exception of the lady who hunts her game with her own fair hands the art of persuasion has been the leading factor, but this is now giving way more and more to the art of display.

The habits of the clientele have a great effect upon the width of frontage required (I am speaking of the fish shop), and the frontage available has equal effect upon the entrances. If you study the habits of shoppers you will find that there are a large number of people who stop and look at a shop, move slowly along the street, still studying the display and apparently contemplating a purchase, and who, if they have to turn round and go back to enter the shop, will drift on to shop elsewhere; consequently the trader loses a possible customer, and the customer perhaps a bargain.

### Standardization and Publicity

I do not think that it is possible to lay down hard-and-fast rules to govern shop-front design. The nature of the trade should dictate the form and construction, and these should be influenced by the habits and customs of people. I do not consider the practice of treating shop fronts differently is helpful either to the trader or the public; in fact, anything that tends to detract from the display of goods should be avoided. I know of one case where a retailer, apparently consumed with a desire for a brighter London, caused to be constructed a violet-coloured faïence front to his shop of draperies, and the result of this as a frame for highly-coloured jumpers is appalling. This craze for originality produces strange calamities. While I agree that there is a publicity value in the standardization for multiple shops, even if that standardization is bad, I deplore such efforts as an attempted reproduction of a country cottage complete with roof, tiles, and half timber. A careful study of the habits and customs of the public is a better business asset.

Good standardization is undoubtedly valuable, not only to a multiple concern, but also to definite trades. A great many of the multiple shops that we know by sight are the pure essence of practical experience, but unfortunately these practical men are sometimes devoid of æsthetic appreciation. I know that the position of a service counter in a tea shop means money, for the quicker a customer is served the sooner he goes and makes room for another, and I realize that a cash desk which does not control the exit is ineffective; but these are points in planning which do not seriously affect, although they influence the design of those types of shop front. In a fish shop, however, it is these very things, and the places in which you put them that makes a scheme, both from the practical and æsthetic standpoints. The value of straightforward treatment cannot be over-estimated. Ostentatious appeal to the passer-by only leads to disappointment and financial embarrassment for the shop-keeper. More good can be done by fine lettering and well-displayed merchandize.

Briefly, the difficulties to be faced in standardizing shops in such a trade as fish, particularly when dealing with a chain of existing shops, are as follows: First, the varied types of trade—high class, family, cutaway—and each of those is sub-divided again many times; secondly, every shop varies as to height, width, and internal and external colour treatment; every locality has its own kind of fish slab, its own type of man used to his particular type of business and method of doing it, and its own type of customer who is often opposed to changes.

I might mention many other difficulties, but these will suffice to show that anything in the nature of drastic change is impossible and that the process must be a gradual one. The characteristics of the trade must be retained, but so rejuvenated as to produce quite a gradual characteristic appearance, which will leave an impression on the mind of the shopping public so that they will recognize a branch of the business anywhere. This can be done quite effectively by the application of a simple and straightforward programme, upon which the following should be the items: A recognized trade mark; a recognized colour scheme; a standard fascia; a standard blind, and standard trade fittings. In the case of the fish trade, the price boards and price tickets. The programme should also include something particularly complementary to the goods for sale, such as flowers or greenery finished with great attention to display and tidiness. Thus you have the elements of standardization.

## A Bond Street Fish Shop

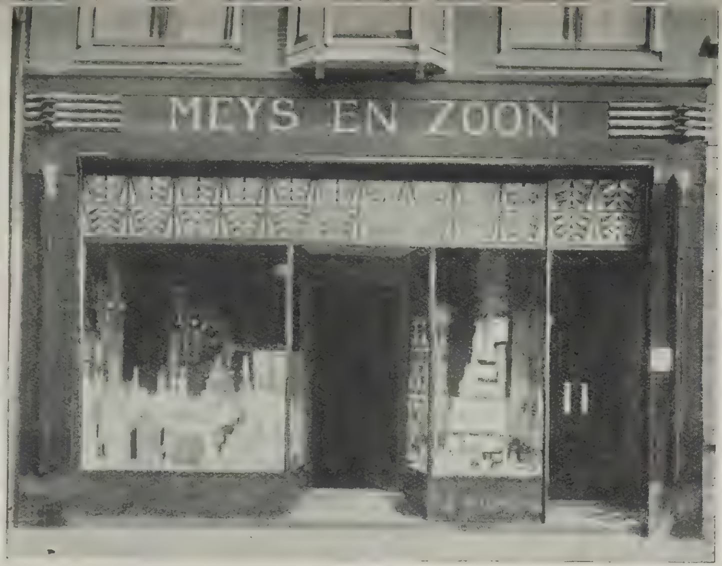
The retailer needs to study restraint in the things he does with the buildings that he occupies. This is not a question of high ideals, but one of practical and commonsense treatment. In working out the Mac Fisheries' shop in Bond Street, my clients placed no restrictions upon me. I was simply told to produce a modern fish shop. After studying the type of business, I tried to show that the most despised trade of all could be housed in premises fitted with the finest materials available, and the goods displayed under the most hygienic conditions and in a presentable manner. I am not unconscious of the criticism that was levelled at that particular shop, but the critics sadly missed the point. In dealing with the shop they were chiefly concerned with the decorative side of it and almost entirely ignored the practical. I was faced with one very big problem—that of having to produce a big and fine display in the limited space of a 12 ft. front. I wanted the public to come inside, and when they were there I wanted them to feel comfortable. Moreover, it was of vital importance to the shop as a business proposition that the salesmen were happy in carrying on their job. This produced a sort of dual problem; the customer had to inspect the goods displayed easily and without effort, and the salesmen had to serve conveniently and quickly; and over and above this it was important to deal with the goods in such a way that they were kept cool and clean. As a fish lies on a slab it continually exudes moisture, and I think I am right in saying that experts will describe this as a mil form of decomposition. At all events it is a fact that it this water which causes to a large extent the unpleasan smell. Obviously the solution of the chief problems of th shop lays in the form of display fitment which is adopted and in constructing these fitments I arranged for the good to be shown on a series of shelves, constructed in such way that the back portion of each shelf was free of th one under. This allowed for uninterrupted drainage. also arranged that the trays should rest upon coils, whic were refrigerated, with the result that the back and unde side of each tray housed a certain amount of plumbing which needed covering up. The back was dealt with b the insertion of mirror glass, and the trays themselve covered the horizontal coils. Thus the whole schem produced, as it were, a bank of display rather than a fla layer, a total area amounting to approximately 144 ft., c equivalent to an ordinary slab 12 ft. square, which wa impossible in a shop of the limited frontage I had to dea with.

The introduction of the glazed shop front was a novelty But it helped to protect the goods displayed in the shop and incidentally made the job of shutting up at night good deal simpler. This front was recessed in order t allow space for the two price boards, which are a traditio in a fish shop, and the front itself provided an opportunit for the introduction of the company's trade-mark i stained glass.

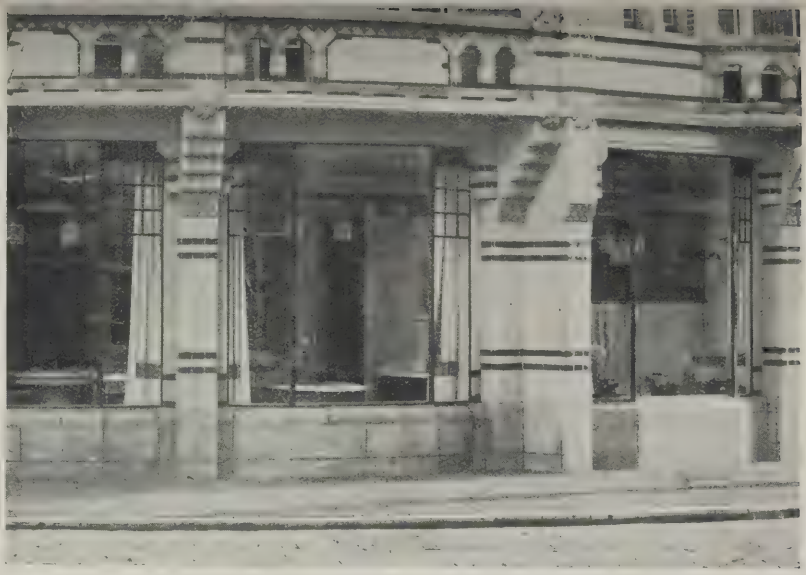
As to the internal treatment generally, I realized at th outset that such things as mouldings must be eliminate and consequently I had to rely entirely upon the selectio of material for my decorative effect. There is an enormou amount of colour in fish, so the walls and floors had to b in monotone. I used Subiacco marble, which is a very so brown colour. I felt that a decorative plaster ceiling carrying out the story of the trade, would not be amis but when this was finished the mass of colour in the displa cases needed some complement on the ceiling so I had th coloured and gilded.

I would like to say that all the way through the job tried to the best of my ability to adhere to the requiremen of the trade. A lift was necessary to take the goods to th basement, and this was contrived in the floor immediatel inside the door, and was covered with a doormat. Whe the lift is raised to take the goods at street level, the doo mat comes up with it as a top, and the whole frame form a protection round the opening so that at no time is possible for anything to fall. And to mention one othe point, namely the division between the shop proper an the cleaning shop at the back, I managed to find an oppo tunity for decorative display in the form of an enclose sink covered with metal grilles, upon which ice and fis could be shown. I could mention several other instanc where requirements of the trade produced decorati results, and on the hygienic side it is an interesting fa which I am not capable of explaining that whenev refrigeration is in action in this shop the atmosphere always a great deal fresher than without it.

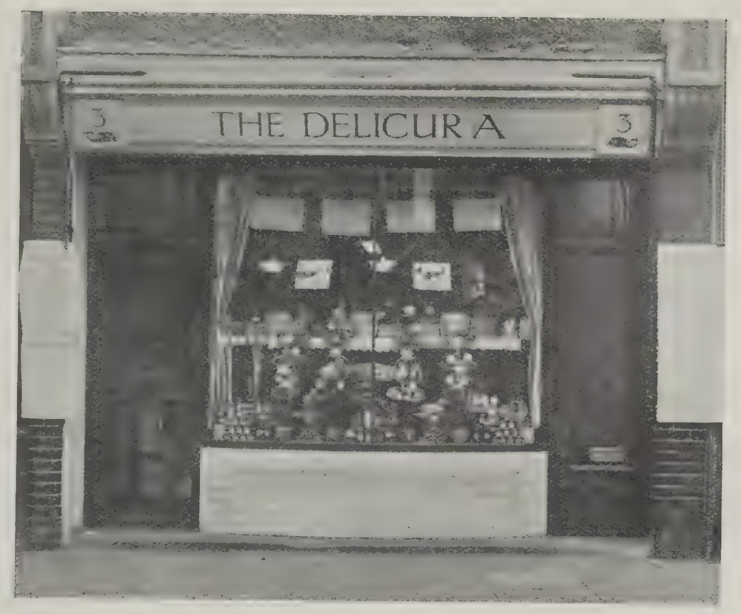
As a final word on the subject of shop fronts generall I would like to express my conviction that you cann design a shop front as an abstract thing. It is not a opportunity for æsthetic expression, but it is a chance obtain something decent by close adherence to the r quirements of any particular trade. This is a point whic I do not think many of the shop fitters appreciate. The evolve a type of shop front in character with their ow type of business and convert it as best they may to th size of opening provided by their client regardless the trade concerned, the locality, or the public. It possible to walk round any town in England and "spot" sho fronts made by many of the shop-fitting firms. It woul be better if one could recognize the business by the natu of its window rather than the firm who did the job. repeat what I said earlier—it is the trade which shoul dictate the form of construction and the form of con struction should be influenced by the clientele.



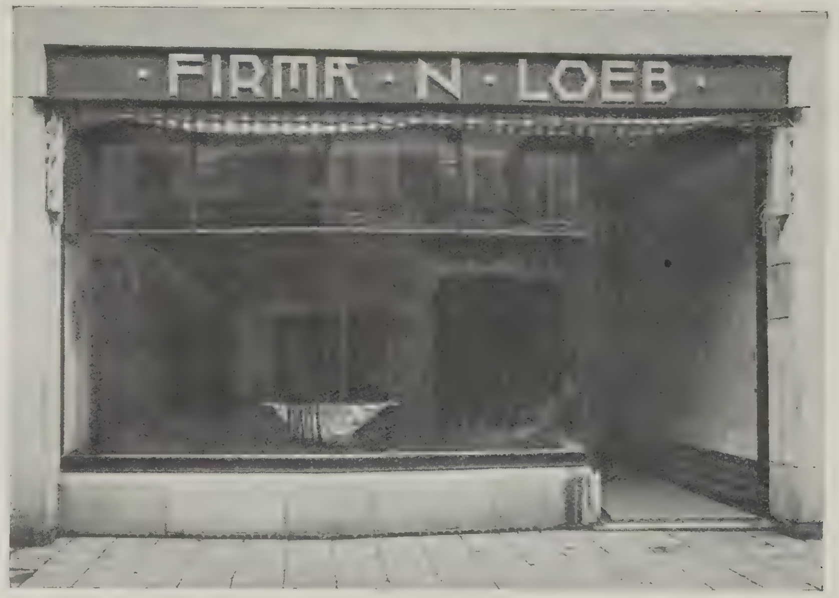
SHOP IN THE HAGUE, HOLLAND. L. H. A. de WOLF, ARCHITECT.



STEEL (PAINTED) SHOP FRONTS IN THE HAGUE, HOLLAND.



A SHOP FRONT AT KINGSTON. LESLIE MANSFIELD, F.R.I.B.A., ARCHITECT.



A "CRITTALL" SHOP FRONT IN THE HAGUE.

SOME BRITISH AND DUTCH SHOP FRONTS. *(See article on "Shop Fronts" which begins on page 1035.)*

# The British Architects' Conference at Edinburgh

NEARLY 300 architects were present at the opening of the British Architects' Conference in the City Chambers, Edinburgh, on Thursday, June 14, when papers were read on "Edinburgh: Its Rise and Progress," and "The Place of Architecture in City Development." An interesting discussion followed. The annual convention of the Incorporation of Architects in Scotland was combined with the conference. Mr. J. Alfred Gotch, F.S.A., president-elect of the R.I.B.A., occupied the chair in the unavoidable absence of Mr. Paul Waterhouse, P.R.I.B.A., who was unable to attend the opening of the conference.

## The Civic Welcome

In extending a civic welcome to the members, Lord Provost Hutchison said the profession of architecture was one which was of great importance to every community, and in Edinburgh it held a worthy and honoured place. In these days particularly, when the housing question was of such pressing importance, it was essential to have the benefit of the experience, knowledge, and advice of the members of the profession in the many problems and difficulties with which they were faced, and it was gratifying to know that that assistance was always willingly forthcoming.

Proceeding, he said: "The profession to which you belong has a long and honourable record, and in Edinburgh particularly its high ideals and aims have always been worthily maintained. The Royal Institute of British Architects, I believe, is a somewhat older body than the Scottish Incorporation which received its Charter last year, and which owed its initiation in 1916 to the late Sir Rowand Anders who was recognized as one of the leading architects of day, and who did so much for the dignity and well-be of the profession, and through whose liberality the Scott Incorporation has been so well endowed. Your organi tions, I understand, have been formed for the purpose uniting in fellowship the architects of the country for promotion of the æsthetic, scientific, and practical efficien of the profession; to promote and facilitate the acquirem of knowledge of the various crafts, arts, and sciences co nected with architecture, and to foster the study of natio architecture and encourage its development. Keep these objects and aims before them the British archite can look forward with every confidence to the future, a again let me say we very heartily welcome you here to-d and trust that your conference will have useful and fruit results."

The chairman, in expressing thanks on behalf not o of the architects of Great Britain, but of the whole of British Empire, for the very kind reception, said: "I am su those who know it, and those who do not, will soon ascert that it is one of the most romantic cities certainly in Gr Britain, and I am not certain that it is not one of the m charming and impressive cities in the whole of Euro On behalf of the architects I have to thank you for y kind welcome."

The Lord Provost, and several of the city magistrates w accompanied him, then withdrew, and the chairman cal upon Mr. T. P. Marwick, F.R.I.B.A., president of Incorporation of Architects in Scotland, to read his pa on "Edinburgh: Its Rise and Progress."

*Photo: Francis Caird Inglis*

PARLIAMENT SQUARE, EDINBURGH. (BUILT 1631 TO 1639).

ADDITIONS BY SIR ROBERT REID.

## Robert Adam, Architect.

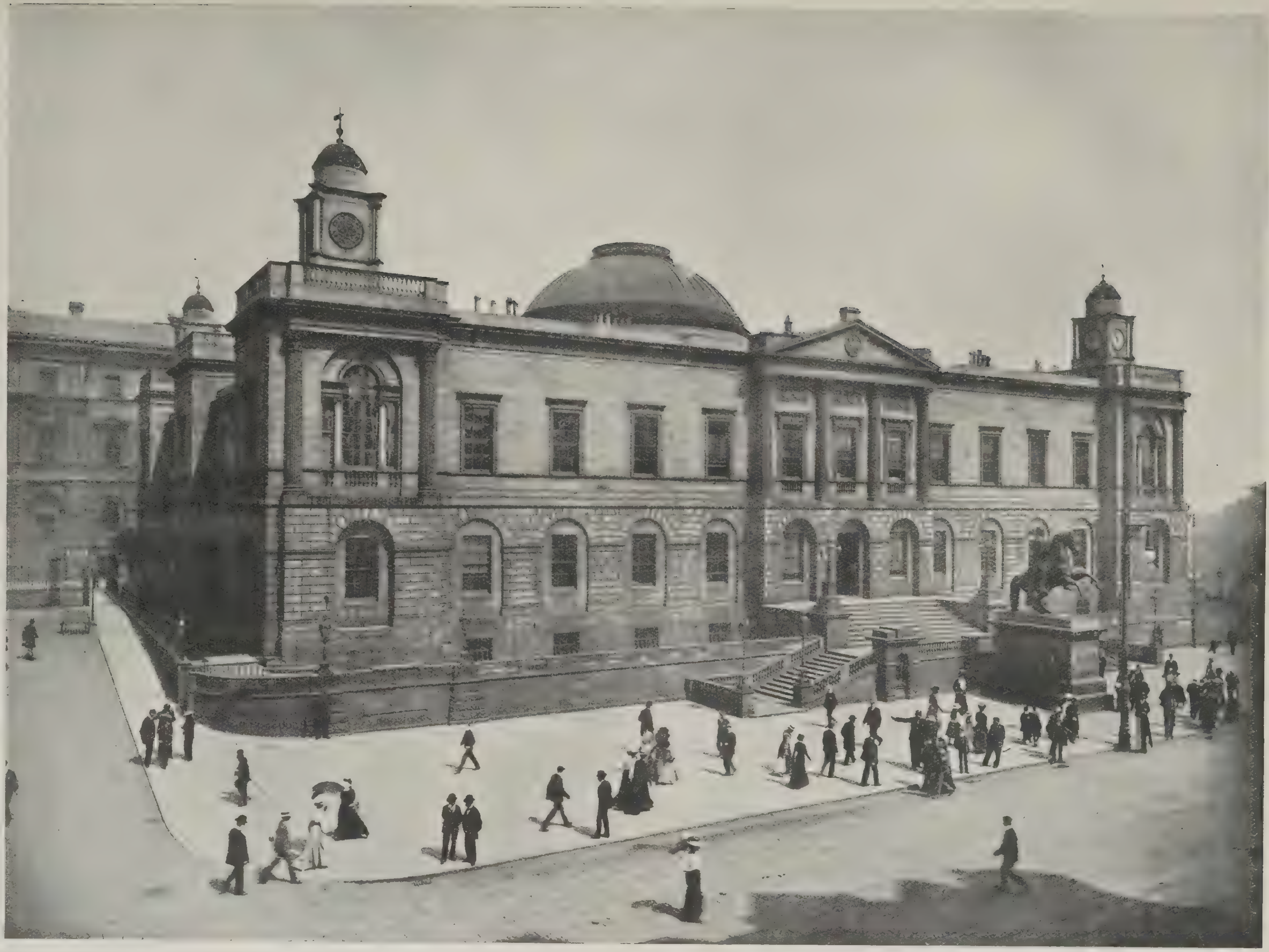


*Photo: Francis Caird Inglis.*

The Register House is regarded as the most complete example of Adam's public buildings. The foundation stone was laid in 1774 and the building completed about 1792. The back portion was subsequently carried out by Sir Robert Reid.

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## Edinburgh: Its Rise and Progress

In his paper Mr. Marwick dealt with the "Old" and the New" parts of the city. He explained that around the cky crest on which the castle stood clustered the huts of eir forefathers, while the natural ridge, about a mile in ngth, which stretched eastwards until it reached the lley 300 ft. below, in which the monastery of Holyrood timately came to be built, was the inevitable line of its owth.

In 1437 Edinburgh became the capital of Scotland, and mes II was crowned there. In 1460 a defensive wall was ilt. After Flodden in 1513 the area was again extended, d another extension was made in 1620. The city con- ued to grow in that restricted area, and it was no doubt stly picturesque and interesting, with its turnpike stairs, turrets, its quaint mottoes, its pious inscriptions, its ats of arms, its crow-stepped gables, and its panelled lls. But to-day where they still existed they spelt of the ril of disease.

With the Union there came a slow-growing desire for tterment. The citizens determined to burst the cincture ich girded in these congested masses of people.

In 1763 the North Loch was drained, and the North idge, which was to give access to the fertile fields to- rds the estuary of the Forth, was commenced. In 1772 was finally completed and opened. It was decided to ld a competition, with the view of endeavouring to tain the best lay-out for the ground to be built upon, and at by Mr. James Craig was selected and adopted in 1767. is scheme embraced the whole length of Prince's Street m east to west, and from Prince's Street to Queen Street rdens from south to north. George III was much terested in the scheme, hence the names of George Street, arlotte Square (after his Consort), and Prince's Street fter his heir). The plan consisted of a series of parallelo- ams, long vistas margined by uniform rows of houses, th gardens and squares.

By the year 1800 the whole scheme had been completed. e area north of Queen Street Gardens from Bellevue escent to India Street was then undertaken in 1806, all ns being matured by agreement between the various ners and feuars. This method was unfortunately aban- ned at a later date, and individual landowners developed their holdings independently. Co-ordination was essential if any satisfactory scheme was to be evolved for the development of a city.

In 1816 Mr. W. H. Playfair, the architect, prepared a plan for the lay-out of ground towards Leith Walk and Easter Road, but only London Road, Hillside Crescent, Royal, Regent, and Carlton Terraces were ever executed.

In 1768 Craig had little to inspire him in the way of town planning on special lines. It was true that Sir Christopher Wren, in 1666, one hundred years before, had designed a lay-out for the City of London immediately after the Great Fire. If it had been carried out it would have proved an immeasurable boon and saved millions of money. Edinburgh, however, was undoubtedly a pioneer in town planning on a large scale, although Bath had "Queen's Square" in 1729, and the "Circus" in 1764. It had been called "the greatest scheme of the age," but, of course, as they all knew, many ancient cities were specially planned. The plans carried out combined dignity, wide roadways, ordered buildings, long vistas, and tree-clad squares and terraces. Their practical realization, no doubt, influenced the town planning schemes of to-day.

Edinburgh Town Council was still faithful to past traditions. A consultative committee had been recently appointed to co-operate with them in the work of developing the city on right lines, to have its growth carefully and systematically regulated, to have faulty street planning prevented, and objects of historic interest preserved. There were two architects on this committee. By and by one hoped there would also be an advisory fine arts committee such as existed in New York and other American cities, to influence the production of worthy buildings and to see that all the accessories of a beautiful city were created and maintained.

## Architecture in City Development

Mr. H. V. Lanchester, F.R.I.B.A., President of the Town Planning Institute, then read a paper on "The Place of Architecture in City Development," in the course of which he said: In considering the modern city we must think first of city development and then of architecture, architecture basing itself on purpose and being clearly subject to the form development takes. Thus, in order to

*Photo: Francis Caird Inglis.*

THE ROYAL HIGH SCHOOL, EDINBURGH THOMAS HAMILTON, R.S.A., ARCHITECT.

reach the architectural aspect we must have a clear picture in our minds of the general type of organization we desire. The first need is that our towns should be orderly and efficient, meeting all requirements of economic production and sane living. These are basic requirements which will in the main dictate the type of design.

Our difficulties in the reformation of the city are not solely, or even primarily, the mass of undesirable material we have to deal with, but the inheritance of habit and mentality that is imposed upon us. Man changes his attitude of mind only gradually, and we are still in a large measure thinking in terms belonging to methods the results of which we simultaneously deplore. Our industrialists and economists, while admitting the need of remedial measures, are still unable to accept those of a more drastically reconstructive character. Despite a general acceptance of the proverb, "Prevention is better than cure," any solution that hints at control of industrial liberty is still likely to meet with strenuous opposition, and the town planner is not as yet at the end of his battle for a more logical organization in the future development of the city.

As without such organization the art of architecture suffers from every possible handicap, I make no apology for putting this aspect in the forefront of my argument, and for claiming that it is the one most urgently in need of our attention. When we look around we shall find that there is no need to be discouraged and that we may not be so far from our goal after all.

Under the name of zoning, not perhaps a very explicit one, although it has been generally adopted, we shall find that the control we seek is already, in most of its features, in operation in one important centre or another.

The New York Zoning Ordinance is stated to have prevented vast depreciation in numerous districts, while it has effected numerous savings in values amounting to many millions of dollars; and the St. Louis Ordinance is also said to have resulted in a very noticeable stabilization of values in several residential areas which, previous to the adoption of the zone ordinance, were declining or showin tendencies toward depreciation.

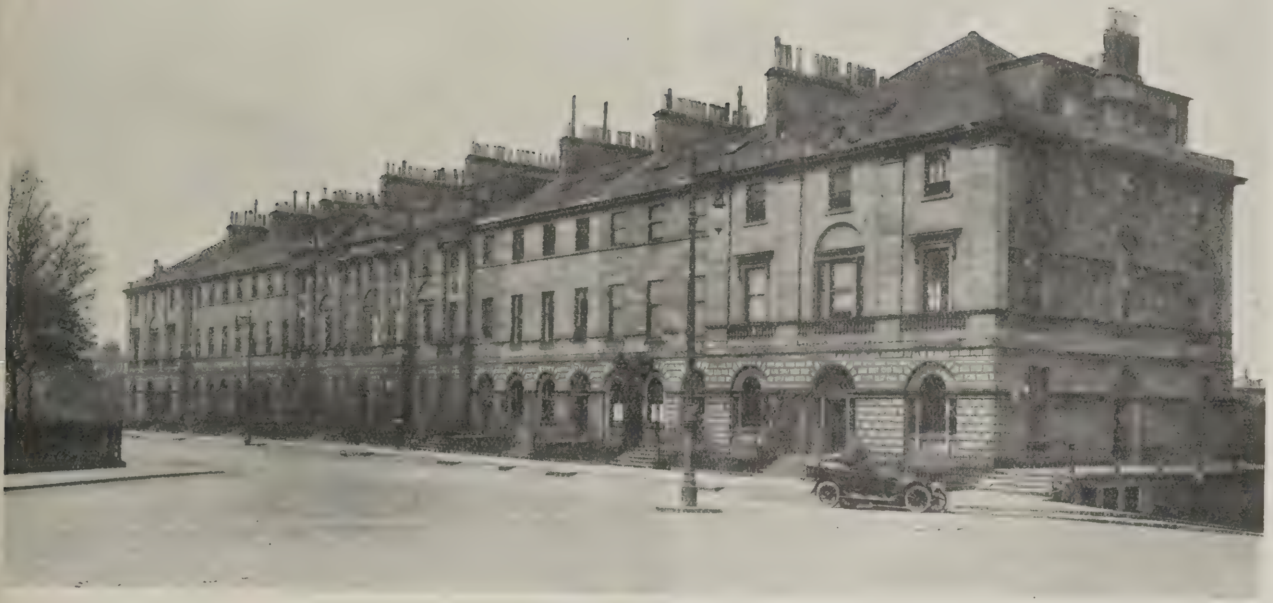
It seems to me only reasonable to claim that the pr paration of schemes of zoning is the step now of the mos importance in giving city development the direction tha will make it the appropriate nursery for good architectur We must all agree that one of the first conditions demande is that buildings shall have appropriate sites and protectio from an environment destructive to their effect. Thoug we may be able to admire a fine building, like a fine pictur wherever we find it, that is not architecture as it appeal to us from the civic point of view; we want the city to b fine, not to have to rake in the dustbin for some preciou gem, and the only way to secure dignity and beaut throughout is to prepare the road for it by providing general scheme which ensures consistency and order in a parts.

In a well-organized town nothing need offend; some part would be more interesting than others, but as there i never anything distasteful where structure or mechanis perfectly subserves its object, a town in which everythin complied with such a law would be basically sound. I over and above this its non-material demands were me expressively it might be considered as perfect. You ma think I have carried this attempt at simplification too fa as it is difficult to picture any city reduced to these term In all those with which we are familiar there are so man complexities to be reconciled, and so many demands fo compromise, that it will not be amiss to cast our eyes ove some of the matters that require attention if future development is to lead us towards the city of architectural beaut

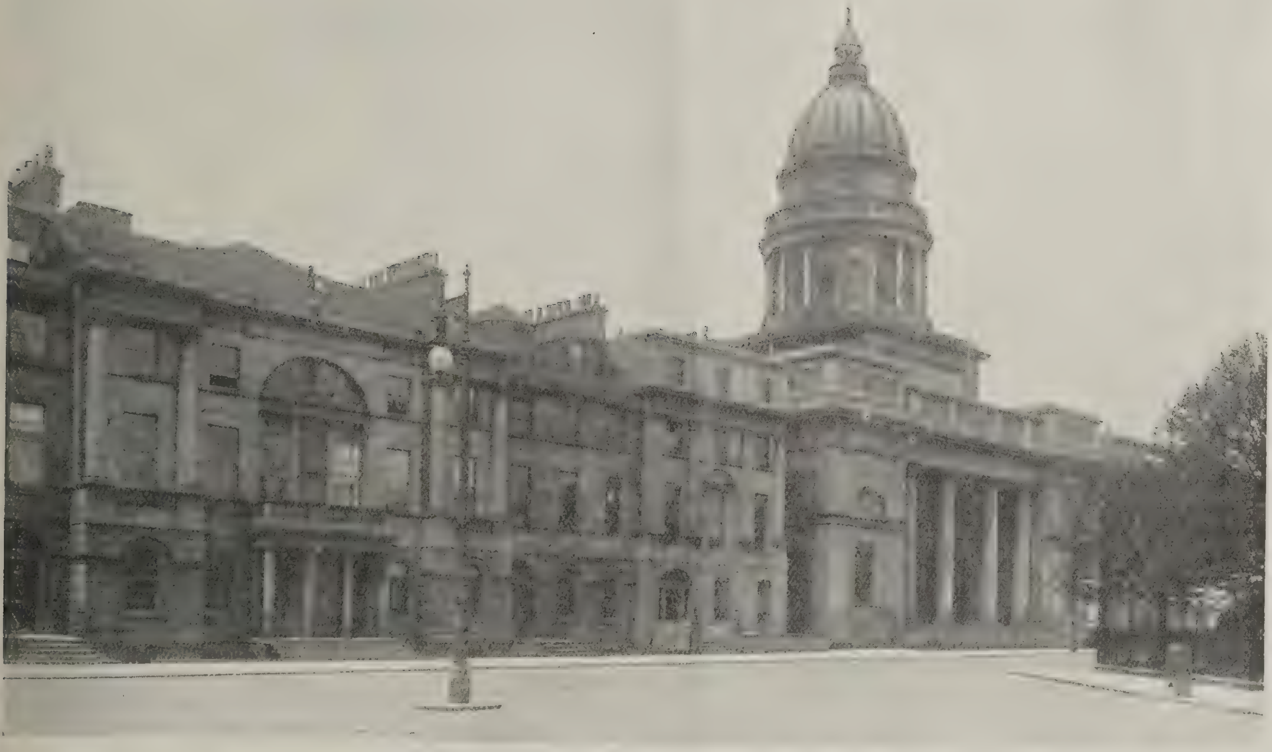
Design is an imaginative effort governed by a number c factors such as site, orientation, hygiene, economy, durability, and proportion, the last including the relativ importance of the components of a building as the basi of the composition; and though the traditions of the pas define what is regarded as "good taste" and may not b ignored, we cannot accept their domination of design to a

*Photo: Francis Caird Inglis.*

THE CITY CHAMBERS, HIGH STREET, EDINBURGH.



THE NORTH SIDE.



THE WEST SIDE. (CHURCH BY SIR ROBERT REID.)

Photos: Francis Caird Inglis.

CHARLOTTE SQUARE, EDINBURGH. ROBERT ADAM, ARCHITECT extent almost excluding the other factors. Owing to this attitude architecture became academic and in disrepute with men of direct and logical mind, who preferred any kind of building provided it met their requirements. This would have been healthy discipline had it been thorough, but there remained a sort of vague notion that a building ought to be "architected," and from this developed the "practical designer" who, without any sense of form and expression, slavered the buildings over with sham architecture and produced so much of the work that shocks us in our towns to-day. He was naturally vulnerable to the vagaries of fashion, and if we wander through our streets and suburbs we see these represented in various forms, all distorted and abounding in affectations.

With this lesson of past failures before us it will readily be accepted as of the first importance that the general character of the various forms of city development should be determined before attempting to visualize them architecturally. When speaking of this general character it must not be regarded as going beyond the allocations and organizations essential to economic requirements and the well-being of the citizens, for on passing this point the architectural aspect comes in as giving form to the planning and structures designed to meet these needs. Thus the provision of roads suitable in alignment and capacity to the buildings they serve is just as much an architectural question as the internal planning of a building; architects have been too apt to look upon their craft as limited to building works only, whereas it extends to all questions that affect the appearance of groups of buildings and their relation to the surroundings, so that the architect should be prepared to deal with every problem that arises in civic development, and even if some of these are not submitted to him for final decision he should at any rate be in a position to exercise a critical influence from his point of view. The form these problems may take will be varied almost to infinity, so that only one or two illustrative examples can be referred to at the moment. In dealing with development the first question that arises will be the allocation of areas for manufacturing, residential, and other purposes, as already referred to in the notes on Zoning, but closely linked up with this are the arrangements for transport and transit, in regard to which the architect has hitherto had very little to say. The result of this has been that these have generally been conceived in forms quite unnecessarily destructive to amenity and beauty. The earlier railway stations were designed by architects, but as this practice was soon abandoned we find as a consequence that in few places can we do other than deplore the forms that railway developments have taken. At the present moment there is a recognition of this failure, and a distinct demand that projected extensions shall be less destructive to the general amenity, so we may take courage and endeavour to prove that we can in the future give valuable service in this direction.

## Discussion

Opening the discussion following Mr. Lanchester's paper Professor Hughes, Glasgow, said it was not without some hesitation he made some comments on Mr. Lanchester's paper for he was their greatest authority on the subject, and he had given them most concisely the basic elements of town planning. As to the question of zoning: he did not consider that question without also considering the question of satellite zones. They had got to think of town planning, not in terms of ten years or generations, but in terms of centuries. They might devise an admirable scheme with the town split up in several zones—zones as residential areas, industrial areas, civic centres, and so on. That might be all very well for ten or twenty years, but in a hundred years or so they might find the perimeters of the circles would overlap, and the whole affair which they carefully organized and thought out may be spoilt. It seemed to him it was absolutely necessary that they should have some limit to the extent of their cities. They could not go on as they were doing, growing and growing. He suggested that they should consider zoning together with th question of restricting the areas to be covered by the cit as was suggested years ago by Ebenezer Howard, by plan ning satellite zones round about the city. Mr. Lancheste when he spoke of Edinburgh and Bath, said he though these were rather enlightened times. Personally th speaker did not believe our own country and age was wors than any other. James Craig's work in Edinburgh wa really a speculation on the part of the Corporation. The wanted to develop the land on the north side, and so the ultimately got this plan of Craig's. A little later Cra proposed another fine scheme for the development of th south side, but nothing came of that. Then in 1766 Joh Gwynne wrote his famous book on Land Improvement. H said City Fathers were absolutely hopeless in undertakin the arrangement of the planning of land, and when the did plan new streets they did not do so properly. He sai just the same sort of thing as they were saying at the presen time. If they looked at France at the beginning of th eighteenth century, the towns which were really planned a complete units were planned, not because the peop desired beautiful towns to live in, but purely for militar convenience. The other well-known examples, like parts o Paris, were more or less isolated places built by kings o princes for their own glorification. Take Bath. It was no the people who wanted a beautiful city to live in, but was the whim of one magnate. They ought to have desire to do everything they could for their cities in thes times. What he would like to ask Mr. Lanchester was he had any suggestions as to what to do next—how to s the ball rolling. The speaker thought we wanted civ associations in every town having a population of 50,00 or more—really active civic associations determined t push the thing through, and on these associations as man architects as possible. Before Chicago was carried out i business men found it necessary to advertise their schem thoroughly. They published a little book on it, they ha lectures in the schools, and illustrated it in the cinema tograph theatres. They must make the people at large in terested, and realize the importance of living in an efficient planned and built city. Certainly he suggested they shoul do something in the way of architectural education. Mo stress might be laid on the importance of designing buil ings, not to be nice in themselves, but to form a prop part of the big schemes for planning a town.

Mr. E. P. Warren, president of the Berks, Bucks, an Oxon Association of Architects said it seemed to him tha in town planning there was such a thing as overdoing i In the beautiful towns of all countries a very great deal the charm might be owing to the natural history of i formation. In Edinburgh they had a site which nobod could have planned. Like Topsy, Edinburgh had ju "growed." If they took the High Street of Oxford, th curve of that street was inimitable. Mr. Lanchester sa good buildings should have good sites. Certainly, but the could reverse that maxim and say that good sites deserv good buildings. The necessity was for all sites, if possibl to be appropriate to the particular locality in which th site was planned. If they were going to plan a new tow to grow into a great city, they must leave a great deal f future developments. In these days civic, commercial, an personal needs were always changing. The change wa rapid, therefore he thought in planning a town they mu not be too definite.

Professor Adshead, Professor of Town Planning, Unive sity of London, said we were in the throes of great roa schemes and widenings. There was a tendency to talk to much about widening streets at the present time. It wa up to the architects to lead the public to the policy of pr venting motor traffic dashing rapidly through all our o towns. If our architects were to adopt the principle having great roads round towns, and the prevention of th pulling down of narrow and historic streets and building he thought that would be wise. This materialistic enginee ing way of sacrificing everything for transit was only phase in modern evolution which they would regret

y gave way to it too much. They were also in the throes
large town development schemes and the administra-
n of town planning Acts, which were all proceeding with
ulations and other matters of administration, and
idly leading us back into the old by-law methods. He
nted to warn the architects that the more settled the
ninistration of town planning became through an
t, the less lasting and the less artistic would it be.
rough all the rigmarole of by-laws the architects must
d the imagination of the people in seeing how these
ts were to operate. Unless they did so they would have
ir towns as hard, as crude, and as regular as the old
-law streets of half a century ago.

Major H. C. Corlette, O.B.E., F.R.I.B.A., said
at Mr. Warren had asked in the course of his remarks
at must they do to-day? The speaker thought that
tement was really practically the crux of the whole
ation. Professor Adshead had said something which
de them think what they should do. What they had to
so far as he could see was to impress the public authori-
s with the importance, the relative importance, perhaps,
what architects had to say in connection with city
velopment. It was not merely a question of city develop-
nt. It seemed to him it affected political questions, and
larger outlook they had with regard to all those affairs,
more they were likely to help those who had practically
final word which would decide how the future was to
developed in relation to the grouping of towns. Did
not mean that what they as architects wanted to-day
s much greater opportunity to state what they thought
ut the necessities of the community as a whole, and
t conferences such as this one at Edinburgh ought to
held, not too frequently, but ought to be held quite
frequently. They ought to take every advantage of the chances they afforded to get members of public bodies to attend so that they would hear what they had to say on some of those subjects that affected affairs generally. The public were not sufficiently interested in architectural questions and he was not sure that they could blame them for not being interested. He felt it was incumbent upon him to come there because Australia had asked for somebody to represent her at that conference. If they wanted to make their opinion felt, they had got to have these conferences. They had got to take a much greater part themselves in public work, and if he might say so, he thought if they could only make up their minds that they were going to have one single strong and united body, everything that they might say on these subjects would be listened to, and should be acted upon.

Professor Patrick Abercrombie, A.R.I.B.A., Professor of Town Planning in the University of Liverpool, said that he wanted just to say in reference to Mr. Marwick's paper what an astonishing performance that appeared to him to be. To visualize, to make vivid before one's eyes the whole of the history of a city like Edinburgh in one short paper was an amazing achievement. They would pardon him for referring to what struck him as one omission. It was an omission that seemed to be frequently made in meeting with Edinburgh people and in talking about Edinburgh. They had here, it was true, an amazing number of magnificent features in their city, but there was one feature they possessed which out-topped them all, and it was a feature that Mr. Marwick had not actually alluded to. Edinburgh contained one feature that they could not find in any other town that he knew of, and it always struck him anew with fresh wonder and with fresh beauty when he visited

WROUGHT IRON GATES OF NATIONAL SCOTTISH MEMORIAL TO KING EDWARD VII, HOLYROOD PALACE, EDINBURGH.
GEORGE WASHINGTON BROWNE, ARCHITECT. J. STARKIE GARDNER, CRAFTSMAN.

the city—Arthur's Seat. It did seem remarkable that if the two papers they had heard to-day were really the result of chance, they were most appropriately associated. They had the particular first, the actual town with its history and architecture, and then they had the general dealt with by Mr. Lanchester. It was a most fortunate coincidence, if it were nothing more than a coincidence. Mr. Lanchester took them back to the cave-dwellers, but Mr. Marwick did not go back so far. Yet both papers were exactly complementary, and he thought they had given the right basis for the consideration of this question of the relation of architecture to the future development of their city.

Mr. Herbert A. Welch, A.R.I.B.A., said he would like to add his tribute to Mr. Marwick for that very delightful paper which he had given them, and to which they had listened with such intense interest. He was a little concerned, he said, not only with Professor Adshead's remarks, but also with the warm reception it received from those present when he suggested that the future development of towns must be considered from the point of view of taking wheeled traffic outside rather than of bringing it within. It struck him that was a most excellent theory, but how could that possibly be brought into effect in practice? They must get into towns, otherwise their communications were bad. The essential communication was in the heart of a city. They could not stop people from getting within their town otherwise their communication was bad. Taking them round was not a cure.

Mr. Lanchester, replying to the discussion, said that with regard to those speakers like Professor Adshead and Mr. Welch, who had taken the range of his paper beyond its original idea, he was grateful to them for expanding the subject, but he felt he had got enough on his hands without carrying it any farther. There was a point raised by the first speaker in regard to civic associations. He absolutely and entirely agreed with him, that every important place, and, perhaps, even less important ones, should have a civic association. He did want to emphasize what he intended to emphasize in his paper. The first need of every city when they got a civic association was to understand before they did anything. They must have a basis for their imagination, and by understanding exactly what the trend of the city was going to be, they found the basis on which to build their conceptions. He thought Mr. Warren rather misunderstood him when he (Mr. Warren) said there was one point that he deprecated—provision beforehand—because a city must grow to some extent haphazard. Well, the speaker thought if they studied their city they were better prepared for change in ideal than if they had not. That was the only point. They should not rest supine an say things were bound to change so much that it was bett not to do too much. He did not say do too much, bu understand as much as possible, and then they would quicker to realize if the circumstances were changing, an the city they had got in their mind was to be something tha was not hitherto in their mind, but something rathe different and more extended, more scattered, more of th form of the group city. What he felt was that the firs need was to know as much as possible in order to see wher they were likely to be led.

Mr. Arthur Keen, F.R.I.B.A., honorary secretary of th Institute, said they owed a vote of thanks to the writer of those two admirable papers that they had just listene to, and he wished to move that their thanks be accorde to them. The question had been asked, What were they t do, what steps were they to take? Well, he thought tha what they as architects ought to do was to arouse th interest of the public in this matter of town planning whic had gone out of the hands of the aristocracy into those o the democracy, and it rested with them to educate them selves and this democracy, to make the people interes themselves in this matter of town planning, to realize ho important it was and how much depended upon it. I they could they should make the people understand o what rested the beauty of cities, how important it was an how much could be secured in the future, and it seemed t him that such papers as they had heard that mornin should be given to the general public. He thought the would find that the general public would be extremel responsive. They were very ready to be instructed in thes matters, and any work that could be done in this way wa extremely valuable. A few weeks ago, in connection wit the Wren celebrations in London, he had occasion to sho a number of people through churches that were built b Sir Christopher Wren, and he was astonished to observ how interested they were. They were eager to come again and it seemed to him it was always like that. If any lectur was given to the general public on architectural matters there were always many interested, and he believed the would be far more interested in this matter of town plan ning if the essential points could be delivered with specia reference to the place in which the lecture was being given The people ought to be interested in town planning in thei own city, led to understand its possibilities and what th danger was if those possibilities were not being kept i mind all the time. He had very great pleasure in proposin a vote of thanks for the most interesting papers they ha listened to.

This concluded the formal conference business.

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# The R.I.B.A. Banquet at Edinburgh

## Mr. Waterhouse on the Council Elections

THE banquet, which was an outstanding social success, was held in the Freemasons' Hall, George Street, on Friday evening. Mr. Paul Waterhouse, P.R.I.B.A., presided over a distinguished company numbering over two hundred. Among those present were :—

Lord Alness, Lord Justice Clerk.
Lord Sands.
Bailie Watson.
Sir James Balfour Paul.
Sir Robert Philip, President of the Royal College of Physicians, Edinburgh.
Mr. T. P. Marwick, President of the Incorporation of Architects in Scotland.
The Rev. Professor Milligan, Moderator of the Church of Scotland.
The Rev. Dr. Wallace Williamson, Dean of the Thistle.
Mr. J. Alfred Gotch, F.S.A., President Elect of the R.I.B.A.
Sir Frederick C. Gardiner, Lord Dean of Guild Forrest.
Dr. George Macdonald, Secretary, Scottish Education Department.
Mr. James L. Caw, Director of the National Galleries of Scotland.
Mr. Andrew Grierson, S.S.C., Town Clerk of Edinburgh.
Mr. E. J. Partridge, President of the Society of Architects.
Mr. Arthur Keen, Hon. Sec., Royal Institute of British Architects.
Principal Laurie, Heriot-Watt College.
Sir Banister and Lady Fletcher.
Sir Robert and Lady Lorimer.
Mr. W. T. Jones, President of the Northern A.A.
Mr. E. P. Warren, President of the Berks, Bucks, and Oxon A.A.
Mr. Francis Jones, President of the Manchester Society of Architects.
Mr. H. V. Lanchester, President of the Town Planning Institute.
Mr. Percy Thomas, President of the South Wales Institute of Architects.
Mr. James Lochhead, Presi- dent, Glasgow Institute o Architects.
Mr. T. Aikman Swan, Presi- dent of the Edinburgh A.A
Mr. C. J. Soutar, President Dundee Institute of Architects.
Professor Baldwin Brown, Hon. A.R.I.B.A.
Mr. Ian MacAlister, Secretar R.I.B.A.
Mr. W. Glassford Walker, Se- cretary, The Incorporatio of Architects in Scotland.
Mr. Herbert A. Welch.
Mr. William Woodward, and Mr. A. Lorne Campbell.

fter the loyal toasts had been pledged, "Our Guests" s proposed by Mr. J. Alfred Gotch. Bailie Watson ponded on behalf of the City of Edinburgh, in the un-idable absence of Lord Provost Hutchison.

ady Fletcher, who also responded, said that she could but be conscious that they were the guests, not only of R.I.B.A., but also the guests of Bonnie Scotland. believed, after a long experience of conferences, that y were very good things when they were not Government ferences. She thought a conference of that kind would p towards a solution of difficulties. There was the word istration. The difficulties of registration had split every ned society, including the nurses, but they had all come a solution in the end, and she thought that doubtless y would do the same. On the more personal aspect of matter she thought from the fact that she had been ed to take part in replying to the toast of "Our Guests" vas clear that their Council had moved with the moving es. It had wisely decided to recognize the soul in the nal feminine and she was greatly honoured and pleased t she was not asked to reply for the ladies. She did not k they need be alarmed about the competition of nen. At the present time she did not think there were re women architects recognized than there were women nbers of Parliament, and men apparently did not con-r them to be great competitors there. In fact, the only ng she could see was their interest in observing how the nen M.P.'s dressed. So far as women architects were cerned, they would all be asking what kind of working hes they will wear, not what kind of houses they will ign. She was very glad to have voiced the thanks of the nen and to respond to that toast of mixed foursomes.

he Rev. Dr. Wallace Williamson also responded.

ord Sands, in proposing the toast of "The R.I.B.A.," l architects were striving after two ideals—utility and uty. It was an interesting question whether these two e coincident. It was quite easy to make them coin-nt if you made beauty synonymous with utility. That an easy thing, but it involved a certain abuse of lan-ge. If you saw a singularly ugly house there was no presumption from the ugly exterior that internally it was a most convenient and commodious house. On the contrary there was a certain presumption that it was not so, because the architect who designed such an ugly exterior was not very likely to have designed a comfortable and commodious interior. But whilst that was so, and whilst one could not affirm that utility and beauty necessarily go together, he thought that one must recognize that the necessity to adapt a building for certain purposes may furnish inspiration in the creation of the beautiful.

Mr. Waterhouse, in replying, said it was not for nothing they, as men of England, joyfully accepted the invitation to have the conference in that city—they knew where good fellowship was to be found, good fare, and goodwill, and had come there to enjoy those things. The Scots sometimes come south to share their toil, their remunerative toil. He came to Scotland joyfully to share their pleasures. He was very proud to have been the President of the Institute. A man would be a fool if he were not proud to have occupied such a position. It had been a special gratification to him to realize that their Incorporation had pulled itself through during his presidency. He could not say that, personally, he had had much share in the pulling through, though he was able to give a push to a boulder which he found in the solicitor's office. "In doing honour to us," said Mr. Waterhouse, "you have at the same time recognized, through the R.I.B.A., the supremacy of Britain for the moment." Nobody could quite know how big an affair the R.I.B.A. was unless he had been a president or one of the secretaries of the Institute. The man who stood for the moment as president was in the position of being virtually the president of a republic on which the sun literally never sets. From all over the world came correspondence. He was about to be succeeded by one who was, he might say, more lion-like than he (the speaker) was. At all events, he was more the colour and size of a lion. He desired to commend Mr. Gotch very warmly to them. He (Mr. Waterhouse) happened to be very much interested in architectural education. He was going to spend the next week in examining Scottish schools, and knew beforehand that he was going to see good

DRYBURGH ABBEY, THE TOMB OF SIR WALTER SCOTT work, good teachers, and diligence. Education in architecture could not go on without the cordial goodwill of the architects who practise in the places where the education is going on. Nowhere more than in Scotland was that goodwill seen so abundantly. It would not have escaped their notice that there had been an election. "You will treat me, I hope," said Mr. Waterhouse, "merely as a fellow voter for the moment. It is quite an embarrassing situation, and I hardly know where to begin, but I am going to begin with congratulations. I do so for this reason, not because I have taken sides or displayed any animosity, or that I want any animosity in which anybody would take sides. That this Institute should have parties within it is not only unreasonable, but absurd, because we have only one object, the advancement of architecture. Of course, differences of opinion must arise as to how certain results are to be achieved. What I want to say is this, and I say it without casting any reflection on anybody's conduct or character, that I believe we shall never attain any influence whatever in our great and glorious Institute unless we fervently and stedfastly make up our minds that we shall always fill our Council and the presidential chair with persons who we think are reasonably representative of the forefront of architecture. I know it is a case of glass-houses for me to talk like that, having been a member of Council for so many years, and having occupied the presidential chair, a post which, I may add, I never sought, though it was a great honour to have filled it. I am sure you don't mind my speaking in this way. I have it so very deeply at heart, and hope that in the future—I say this without any reference to any person, including myself—we shall make it our primary object to see that our Council is filled with men of known position in the world of architecture. It may occur in the future that there is a wish to put in persons representing minor matters on any small question in dispute. That will not succeed. The Institute is too big a body for that kind of thing to be expected to succeed. Remember it is world-wide, remember it covers Britain. We must make perfectly sure that we put men there whom we feel will represent not a particular view on a particular subject, but architecture. Before sitting down let me add a word about the Incorporation of Architects in Scotland. I wish it the longest possible life. Every kind of prosperity, every happiness, and every success."

Lord Alness, in proposing the toast of "The Incorporation of Architects in Scotland and the other allied Societies," said he was told that the Scottish Society had a membership of nearly 600, with chapters in all the great cities of Scotland, and that it was steadily increasing in vigour and in influence. There was just this to be added, that owing to the munificence of Sir Rowand Anderson, whose name was familiar to all, the society had been enabled to vote several thousand pounds to architectural education, and no man could gainsay or exaggerate the importance of that topic. But the toast was not merely parochial; the second branch of it related to the other allied societies, and gave an imperial aspect to the toast. If they asked him where these allied societies were to be found, he thought the answer would be in every corner of the British Empire. Australia, New Zealand, and Canada have already contributed their quota, and to-day he understood that South Africa and Singapore were being enrolled as members of their great organization. That was a triumph of federal organization.

Mr. T. P. Marwick, President of the Incorporation of Architects in Scotland, replying, said that the Incorporation, though young in years, had already well over 600 members. They had heard of the gift to them of a home suitably equipped and endowed. They would exercise all their knowledge, skill, and energy in the endeavour to do good and useful work, and to achieve the objects the donor had at heart. They had dedicated over one-quarter of their entire capital to educational purposes. They had, in conjunction with the other beneficiaries, assisted in the publication of the recently-issued beautiful book of measured drawings of Scottish Domestic Architecture. They were working in conjunction with the Board of Trustees for the National Galleries of Scotland in the publication of tl National Art Survey Drawings. They purposed, if possibl proceeding with the completion of several hundred dra ings partly prepared, and such additional drawings might be required to complete the survey of every impo tant historical and architectural monument in Scotland. other fields of endeavour they were trying to do good wo for the community and for the advancement of the art architecture. They were taking preliminary steps to obta a university degree in architecture, and matters were w advanced for this in Glasgow. In the Edinburgh chapt a special committee would suggest a series of existi classes in the university, Heriot-Watt Technical Colleg and the College of Art, so as to form a school of architectur The Incorporation was also anxious to assist in closing tl door to the practice of architecture by the unqualifie In the United States of America a very marked advan in architectural talent had taken place, largely owing to tl foundation of schools of architecture, and the stimulati of public interest. They wanted to travel along simil lines.

Architects wrote the history of a nation in stone. Th erected the milestones on the highway of civilization ar progress. Their work affected the health and æsthet education of the people and endured for generations eith to elevate or degrade public taste. Publicity stimulat interest, and their success in the long run depended up public interest. Architectural work of importance w surely worthy of as much attention as a prize fight, football match, or a horse race. So long as men of co spicuous talent were unappreciated, and their most earne efforts passed by without intelligent criticism and reco nition, they would be discouraged and mediocrity wou abound. There was no stimulus to excel, whereas the was no limit to the benefit due acknowledgment of me may accomplish.

One loved to see praise and pleasure given to the wort while they were living to enjoy them. Post-mortem eulo was of as little avail as laying wreaths upon unresponsi sod. The dead neither heard nor saw. Let them, therefo bring out their alabaster boxes now, and so hearten a encourage those who did well, that they might go on a do better. Look back 156 years and they would see th the enlightened public in that city in 1767 were in advan of the public of to-day. They knew and appreciated go work so highly that they actually gave the Freedom of t City and a gold medal to the architect who won the co petition for the lay-out of the New Town. The present-d apathy of the public was so great that such happenin now were inconceivable.

Talking of 1767 recalled the fact which they had alrea heard that their present enlightened corporation h appointed a Consultative Committee to co-operate with t Town Planning Committee of the Council in the work city development on right lines. He hoped that acti would be followed in due course by the appointment o Fine Art Advisory Committee such as existed in New Yo

Mr. Francis Jones, President of the Manchester Socie of Architects, who also replied, said that they all kn that the elections had resulted in a clean sweep of t old Council. It was now up to the new Council, all of the to get inside the Institute that unity which would preve any repetition of what had occurred in the past two yea The Royal Institute represented not only the combin allied societies of England, but also the combined alli societies of Scotland as well, so that they had the wh body of British architects in the Institute, and in th body they had to preserve a united front, or else th would do no good.

Three cheers were given with great warmth to the r tiring President, and Sir Robert Lorimer, in proposing vote of thanks, paid a notable tribute to Mr. Waterhou for his great services to the Institute during his two yea of office.

*A list of those who attended the Conference is given page* 1057.

# Experiments in Cottage Building.—I

## By WALTER R. JAGGARD, F.R.I.B.A.

*This series of articles describes some experimental work carried out at Amesbury. It is probable that some of the unusual methods of construction adopted might be used in the erection of rural cottages, holiday bungalows, garden houses, and other buildings. In this direction there is ample scope for experiment by the architect.*

N spite of the well-meaning efforts of many committees, much experimenting, and the deluge of literature on housing which has flooded the country since Armistice day, we are still not even within measurable tance of the "Ford" (cheap) house. It is, moreover, be feared that, owing mainly to an almost complete k of co-operation and to the diversity and general dequacy of the investigations carried out, this work l have but small effect upon the normal methods of struction usually adopted in buildings, even if one ld anticipate with some certainty that in future local lding by-laws would be made much more elastic and dern than they have been in the past.

t is well, however, that such results as are obtained uld be placed on record, and receive such attention as ir intrinsic value would appear to merit, and it is with s object in mind that this short series of articles have n written describing some experimental work carried at Amesbury. It is hardly possible to anticipate that ises will be built in any numbers in the methods there pted, but it is probable that some of the unusual methods construction might very well be made use of in the ction of rural cottages, holiday bungalows, garden ises, outhouses, etc., and there is, in this direction, ample pe for experiment by the keen and skilful architect, lder, or landowner.

Brickwork is, and probably always will be, the staple terial for the walls of the majority of rural cottages, its charm, in many directions, cannot be gainsaid. nany cases brickwork will prove to be not only the best material, but also the cheapest, but there are many places, remote from brickfields, railways, or easy means of transport, where other and more local material would be cheaper and equally efficient.

AT FULFORD.
AT PINHOE.
W.R.J. 1923.

COB WALLED BUILDINGS NEAR EXETER. DEVON.

COTTAGES AT COLDHARBOUR. AMESBURY. WILTSHIRE.

Concrete immediately occurs to one's mind, and there is, in the future, a very large field for the development and exploitation of concrete building, since a more or less suitable aggregate is nearly always obtainable in any district; but it must also be remembered that the cement or lime may have to be transported from other districts. The properties of Portland cement concrete are, of course, well known, but it occurs to one that under the present building regulations a great deal more strength is put into the walls of rural cottages built of concrete blocks than is really required. Similarly, it would seem desirable to ascertain more clearly than is at present known to what extent a lime concrete, of relatively poor quality, could be made available for cottage building.

Types of walling which have the seal of antiquity, and which, though never entirely dropped, have been largely replaced by brickwork, are common in many parts of Britain. The cob walls of Devon, the chalk walls of Wiltshire, and the clay-lump walls of Norfolk, may still have something to add to our solution of the rural housing problem; and from this point of view the experimental cottage building at the little town of Amesbury, about nine miles from Salisbury, in Wiltshire, may not be without interest, and some of the following notes are taken from the report of the department concerned in their erection.*

There can be no doubt that as regards cottage building the use of a local material is generally right. We all acknowledge the charm of the half-timbered Sussex cottage, built of, and nestling amongst, the oaks of that delightful county; or the sense of fitness of the stone-built walls and roofs of the Cotswold cottages, set amidst their stone-scarred hills; nor do we hesitate to admire the chalk and flint cottages of Wiltshire, or the snug and homely cob-walled farmhouses of Devonshire, with their great ingle-nook fireplaces and dominating chimney stacks.

In preparation, therefore, for the work at Amesbury, an enquiry was instituted as to whether any traditional methods still existed in relation to the building of walls with earth materials apart from the use of stone, brick, timber, and concrete. The results of that investigation are

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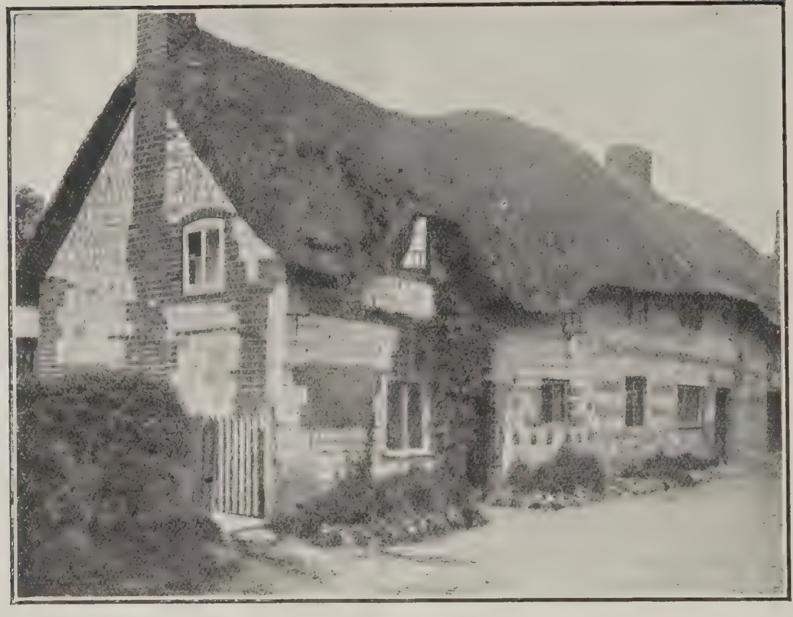
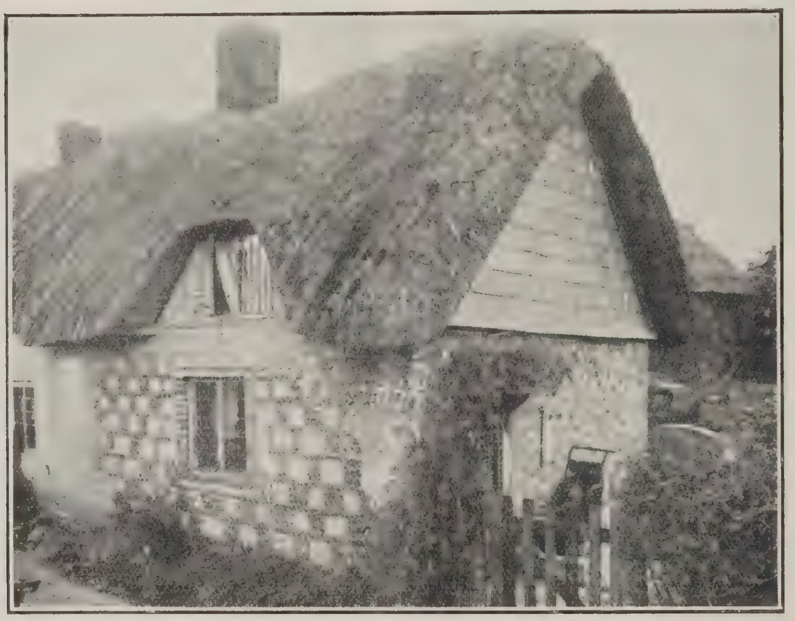
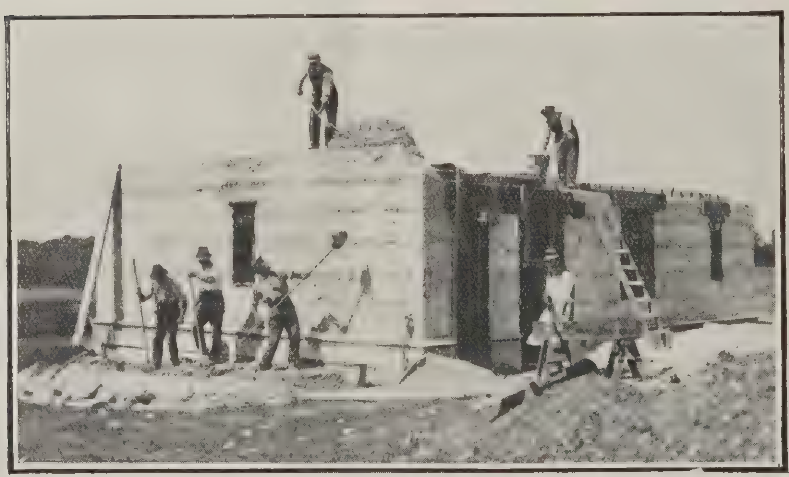
* Experimental Cottages. A report on the work of the Department of Scientific and Industrial Research at Amesbury, Wiltshire, by W. R. Jaggard, F.R.I.B.A. H.M. Stationery Office. 5s. net.



CHALK BLOCK AND FLINT COTTAGES.



DIAPER WORK IN CHALK BLOCK AND FLINT.



TRADITIONAL METHOD OF MUD-WALL CONSTRUCTION.

AMESBURY COTTAGES AND TRADITIONAL WALL CONSTRUCTION.

*(From "Experimental Cottages.")*

ly embodied in a further report on "Building in Cob and sé de Terre." *

Mr. J. L. Manson, B.Sc., in his notes in this report, states at probably the earliest form of covering for a human elling was a wattlework of interwoven branches and igs, and that this was subsequently improved by cover- with earth or clay; thus was produced the method of nstruction known to-day as "wattle and daub." Later, imber frame formed the skeleton of the house, and clay l sticks were used to fill the spaces, and was afterwards vered on both sides by a plaster of lime or clay, or both, l sand with broken and pounded tiles. In half-timber rk the panels were filled with whatever material was ndiest, sometimes brick, but often hazel twigs, criss-ssed to form a centre, and then covered with daub, ich was scratched on the surface to form a key for a n floating coat of plaster, the better to resist wind and n.

Vattle and daub is known in Lincolnshire as "daub l stower" or "stud and mud" in the north country; ce and stower," "raddle and daub," or "red and dab" Lancashire and Cheshire. In Newcastle-on-Tyne the ient fraternity of bricklayers were called "catters and nbers," and the "cats" were pieces of clay and straw rked together into fairly large rolls and laid between upright wooden posts. The ancient round houses of land were constructed by making two basket-like inders, one within the other and about a foot apart, and king mud between them, and the Highland creel houses ast century were of similar construction, although they e not circular on plan.

he natural clay between the wattle work, when matured solidity, would show that the wattle work was not essary, and thus would be developed the cob walls, once widespread over the British Isles.

The Century Dictionary" defines "cob" as "a compost puddled clay and straw, or straw, lime and earth"; and terms "clom," "clob," and "korb" are older forms of word; the last-named means basket-work, and would m to indicate its wattle-work origin. "Clob" and eam" are forms of widespread Teutonic words for earing on and plastering.

In Loudon's "Encyclopædia of Architecture" there is a description of cob construction in which it is stated that "the more loamy the clay the more suitable," and that "the solidity of cob walls depends much on their not being hurried in the process of making."

Mr. Tuycross, in a letter to "Country Life" (March 14, 1914), states that the town of Naseby, until the year 1850, consisted almost entirely of mud buildings. He mentioned that the method of building was similar to that used in Nigeria for mud huts. There is also evidence that the walls of mud-built cottages in the New Forest were formed of clay mixed with chopped straw, and packed between hurdles, which were afterwards removed when the clay had dried out.

From further investigations which have been made there is ample evidence that cob buildings, when carefully constructed of suitable material, are reliable and efficient, their thick walls tend to maintain an equable temperature within, and they are stated to be warm and comfortable in the winter, and cool and pleasant in the summer. It is almost impossible to state the life of a cob building, since actual records of their erection do not exist, but the old barn at Great Fulford, near Exeter, is known to be over 200 years old, and during the last forty years has had no external protective covering, but is still in a perfect state of preservation.

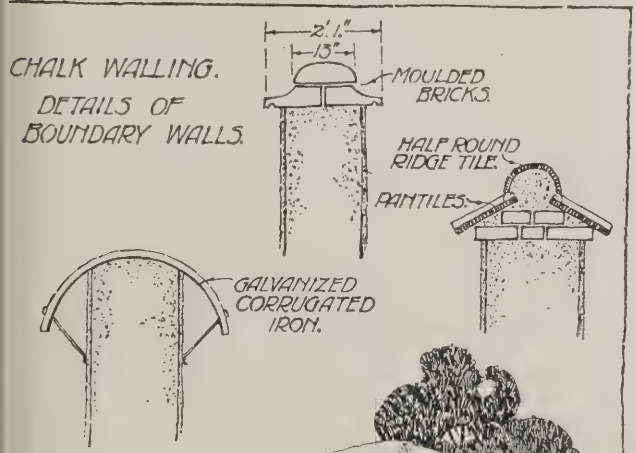
That cob buildings can be made attractive externally many of us can attest, who have wandered in the by-ways and shaded lanes of Devon, and it is an undoubted fact that they command not only the respect, but also the love of many a stalwart "Man of Devon," who was born and brought up under the thatch of an old cob-walled farmhouse.

In Wiltshire and parts of Dorset, chalk and flint abound, and have been used from time immemorial in the construction of buildings. As quarried blocks it was used for the filling of the vaults of Salisbury Cathedral, and two illustrations on the opposite page show its humbler application in cottages at Amesbury. In one of these cottages the chalk blocks are used as wide bands, and are contrasted with other bands of flint and brick, and in the other as a chequerwork of alternate blocks of chalk and panels of snapped flints. This diaper work is not, of course, confined to Wiltshire, but appears very frequently in many of the fine Norfolk and Suffolk churches, where the flints are mostly contrasted with stone blocks and flat tracery. It will be noticed that brick is often used to form the jambs of windows and doorways, and the amount of variety of texture which can be obtained by the use of these materials is altogether charming, and is also greatly enhanced by the comfortable look of the thatched roofs.

Quarried blocks of chalk, however, are not easily obtainable, at least in Wiltshire, and would necessitate quarrying from some depth, as the upper stratum of the chalk is, more or less, shattered. A method of wall construction therefore obtained which made use of this broken chalk, and which is very closely allied to cob walling.

Many Wiltshire cottages were built of chalk, but owing mainly to restrictive building regulations, and the dearth of skilled chalk wallers, and also to the increase of transport facilities, very few modern buildings are being so built. On the other hand, boundary walls are still frequently built of chalk, and many of the details of their construction are interesting and unique, as may be gathered from the sketches (this page).

The two materials, viz., Devonshire cob and Wiltshire chalk, have much in common, and the method of building is practically identical. The former has a basis of clayey earth, while the latter consists of broken and pulverized chalk. In both cases the material for the walling is obtained by digging a quantity of earth or chalk from around the site, dumping it upon the levelled ground near the walls, straw and water are then added, and the whole is well trodden by the feet of the men. A foundation is prepared by building a wall about 2 ft. thick, composed of



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Building in Cob and Pisé de Terre. Building Research Board. Special Report 5. H.M. Stationery Office. 2s. net.

flints, and sometimes brick or rubble stonework, and is usually carried about 9 in. above the ground, although in some cases to the height of the lower floor window-sills. It is there finished to a plane surface, and the waller stands thereon, armed with a three-pronged fork, somewhat like a trident. He receives a mass of the prepared material, handed to him upon the fork of his assistant, and places it in position on the wall with his own tool. A layer varying in thickness from 18 in. to 2 ft. is thus obtained, and the waller pares down the faces with a flat-backed spade as the courses are completed. The layer is carried right round the building, and by the time the waller has returned to his starting point the wall is sufficiently solid for him to commence upon the next course. Around Amesbury this is known as the "Winterslow" method, and its application is shown in the illustration on page 1051.

In the second report, previously referred to, Mr. P. W. Barnett, A.R.I.B.A., gives some interesting notes on what is known as the clay-lump walling of Norfolk. This type of walling seems to have been confined to East Anglia. The material used is very similar to the Devonshire cob, although in some parts a considerable proportion of chalk has been incorporated. It is prepared by digging the clay from as near the site as possible, forming it into a circular "bed," adding straw, sedge, or twitch grass, in lengths of about 9 in., and water. The mixture is turned over with a rake with four long prongs, and usually "trodden" by a horse, until the straw is properly distributed, and the clay of even consistency, and sufficiently plastic. It is th pressed by hand into bottomless wood moulds, which a lifted off as soon as the material is sufficiently set to retai its shape. The usual dimensions are about 18×9×9 i for large lumps, and 18×6×6 in. for the smaller one They were often made one year, and used the next, a though some modern work has been done with blocks aft weathering for only one month. The blocks are bedded i clay mortar and commence upon a foundation wall brick, flint, or rubble stonework, about 2 ft. high.

Some excellent old buildings with clay-lump walls sti exist. A farm-house at Tottington is said to be abou 200 years old, and although in poor repair, the clay-lum walls appear quite sound. A row of old cottages in Harlin have similar walls, but are covered with panelled o plaster, while the council school at Harling, once the Co Hall, is about 100 years old, and as its protective coat h been kept in good repair, is an excellent example of th type of building.

New work is being done at the villages of Watton, Ha ling, Gorboldisham, and elsewhere, and Mr. C. J. Skippe F.R.I.B.A., has erected some very successful cottages these villages. It is stated that the larger blocks co about £20 per 1,000, and the smaller sized £15; the lar block is equivalent to twelve-standard bricks, and abo 300 blocks, or the equivalent of 2,400 bricks, can be lai in plain walling, by a man and a boy in one day, a highly skilled labour is not required.

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# The R.I.B.A. Elections

## The New Standing Committees

APPENDED are the results of the election for the Standing Committees of the R.I.B.A. For purposes of comparison we also give a list showing those elected for the Standing Committees last year.

The list of those elected for the Council appeared in our last issue.

The report of the scrutineers was read by the secretary at the fifteenth general meeting (business) held on Monday of last week under the presidency of Mr. Paul Waterhouse. After the president had declared that the officers, members of Council and Standing Committees had been duly elected, Mr. H. G. Fisher made a protest in the following terms:—

"In view of a possible appeal having to be made to the Privy Council with regard to the conduct of this election, I wish to enter my protest as a corporate member of the Institute against the adoption of the resolution."

The president pointed out that there was no resoluti before the meeting, and that his duty was simply to decla that the officers, etc., had been elected. Mr. Fisher su sequently handed his protest to the secretary.

During the meeting the deaths were announced of Ambrose Poynter, Bart., Mr. A. E. Sawday, and M Frank Darling.

The next meeting of the R.I.B.A. will be held on June at 8.30 p.m., when the presentation of the Royal Go Medal to Sir John James Burnet, A.R.A., R.S.A., will ta place.

By the kind permission of H.M. Office of Works the A Standing Committee has arranged a visit to the Pensio Building, Acton, on Saturday, June 30. Members a Licentiates desiring to take part are requested to noti the Secretary not later than Thursday, June 28.

### The New Standing Committees

**ART.**

**Fellows.**

Adshead, Professor S. D.
Cave, Walter.
Davidge, W. R.
Downing, H. P.
Harris, E. V.
Lanchester, H. V.
Newman, F. W.
Ricardo, H. F.
Simpson, Professor F. M.
Webb, M. E.

**Associates.**

Bucknell, L. H.
Farey, C. A.
Hepworth, P. D.
Lovell, P. W.
Tait, T. S.
Waterhouse, M. T.

**LITERATURE.**

**Fellows.**

Briggs, M. S.
Corlette, Major H. C.
Creswell, H. B.
Fyfe, D. T.
Gotch, J. A.
Hall, E. S.
Spooner, C. S.
Stratton, A.
Tapper, W.
Townsend, C. H.

**Associates.**

Bradshaw, H. C.
Cowles-Voysey, C.
Drysdale, G.
Edwards, A. Trystan.
Slater, J. A.
Worthington, J. H. (Manchester).

**PRACTICE.**

**Fellows.**

Ashley, H. V.
Clarke, M.
Forrest, G. T.
Grayson, G. H. (Liverpool).
Hunt, Wm. G.
Jones, F. (Manchester).
Keen, A.
Milburn, T. R. (Sunderland).
Perks, S.
Scott, W. G.

**Associates.**

Cockrill, G. S.
Cubitt, H. W.
Elkington, G. L.
Scott, J. D.
Welch, H. A.
Woodward, C.

**SCIENCE.**

**Fellows.**

Bennett, T. P.
Crompton, W. E. V.
Dixon-Spain, T. E.
Farrow, G. R.
Hooper, F. G. F.
Jaggard, W. R.
Munby, A. E.
Pite, W. A.
Smith, Professor R. E.
Unwin, R.

**Associates.**

Angel, R. J.
Bagenal, H.
Burrows, H. W.
Emerson, H. V. M.
Markham, J. H.
Sayer, H. R.

### The Old Standing Committees

**ART.**

**Fellows.**

Lanchester, H. V.
Lutyens, Sir Edwin L.
Ricardo, Halsey.
Reilly, C. H.
Adshead, S. D.
Cave, Walter.
Simpson, F. M.
Knott, Ralph.
Richardson, A. E.
Walcot, William.

**Associates.**

Farey, Cyril A.
Tait, T. S.
Bucknell, L. H.
Waterhouse, Michael.
Lovell, Percy W.
Welford, Arthur.

**LITERATURE.**

**Fellows.**

Briggs, Martin S.
Corlette, Major Hubert C.
Fletcher, H. M.
Statham, H. H.
Townsend, C. Harrison.
Stratton, Arthur.
Fyfe, D. T.
Hall, E. Stanley.
Ambler, Louis.
Spooner, Charles S.

**Associates.**

Worthington, J. Hubert.
Slater, J. Alan.
Bradshaw, H. Chalton.
Drysdale, George.
Cowles-Voysey, C.
Ansell, W. H.

**PRACTICE.**

**Fellows.**

Perks, Sydney.
Keen, Arthur.
Clarke, Max.
Slater, John.
Scott, W. Gillbee.
Forrest, G. Topham.
Joseph, Delissa.
Hunt, Wm. G.
Ashley, Henry V.
Collard, A. O.

**Associates.**

Cubitt, Horace.
Cockrill, G. Scott.
Scott, J. Douglas.
Solomon, Digby L.
Emerson, H. V. Milnes.
Welch, Herbert A.

**SCIENCE.**

**Fellows.**

Pite, W. A.
Searles-Wood, H. D.
Munby, Alan E.
Adams, H. Percy.
Smith, R. Elsey.
Unwin, Raymond.
Crompton, W. E. Verno
Hooper, Francis.
Shepherd, Herbert.
Daubney, C. A.

**Associates.**

Angel, Robert J.
Burrows, Henry W.
Markham, John H.
Sayer, Harvey R.
White, Theodore F. H.
Woodward, Charles.

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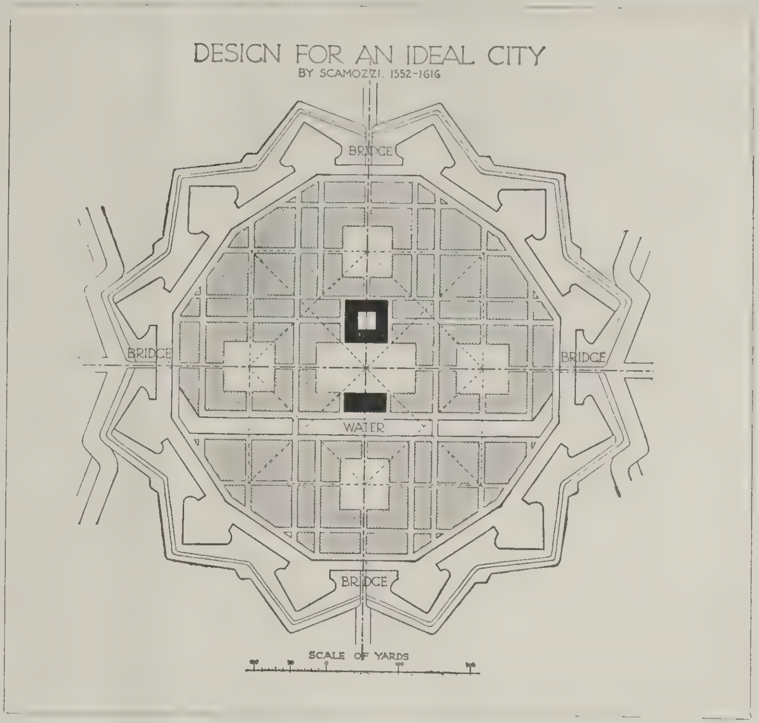
# The Ancient Art of Town Planning*

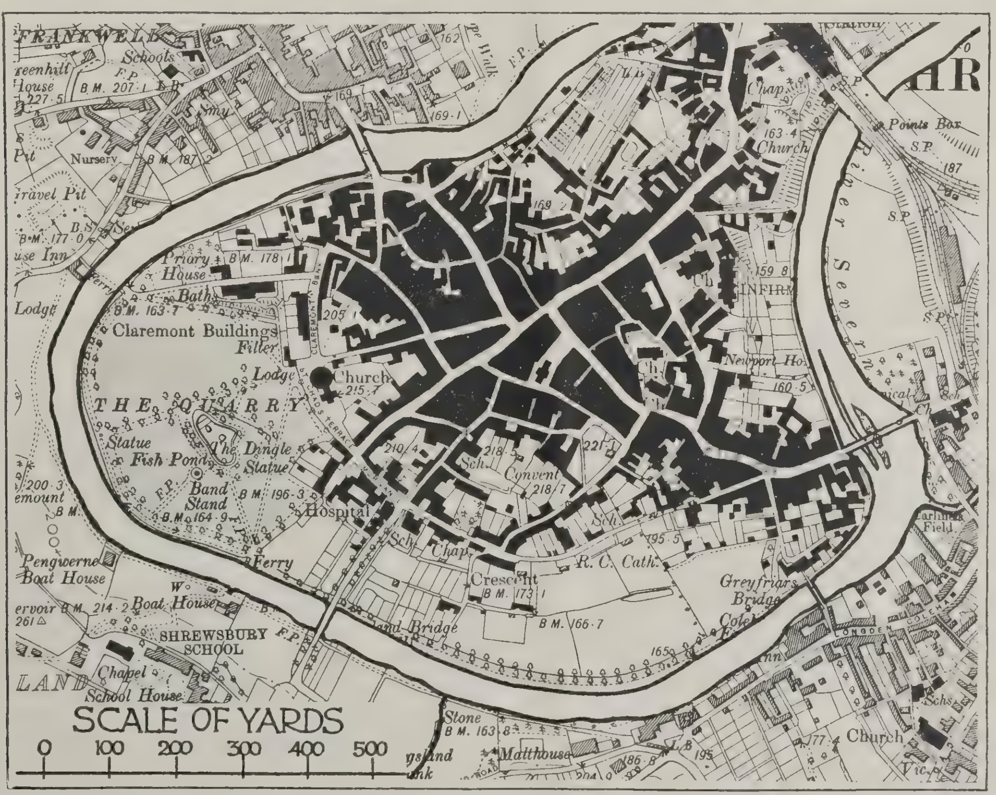


DESIGN FOR AN IDEAL CITY. BY SCAMOZZI.

Note the axial lines and geometrical setting out.

) many persons the phrase town planning suggests an entirely new activity, something indeed which ften vaguely connect in their minds iew political theories—an ideal of naires; and even those who regard ourably think of it as something has been introduced within the vo decades. Actually it is a recru- ce of one of the oldest pursuits of nd; so soon, indeed, as men ed into definite organizations for l protection, and for trade, they ed their congeries of dwellings on nt lines. All through the ages the ce has never altogether been lost f, although it has been so obscured to have received any recognition he people at large. Such an age is ie through which we have just . The industrial revolution blotted ery sense of communal responsi- from most men's minds and ed a chaos which it will take many tions of patient endeavour to to orderliness.

n planning can be definitely traced Egyptian times, and in our own y the name of Edward I will be remembered by those whose hes are not limited to school books as that of the monarch id the foundations for the subse- development of many of our towns l-considered lines. "It is, perhaps, no mere coincidence," write the authors of this book, "that in his reign Gothic architecture came to its highest perfection, that the science of mediæval fortification reached its final stage and, above all, that the first English houses, as distinct from mere dwellings or strongholds, were constructed." In many of our lesser towns, evidences of their first planning are still traceable. Shrewsbury, Salisbury,



SHREWSBURY.

An example of the selection of a strategic position (at a loop in a river) for the site of a town. The map shows how the direction of the main streets and the growth of the town have been influenced by the nature of the site.

*(From "Towns and Town Planning Ancient and Modern.")*

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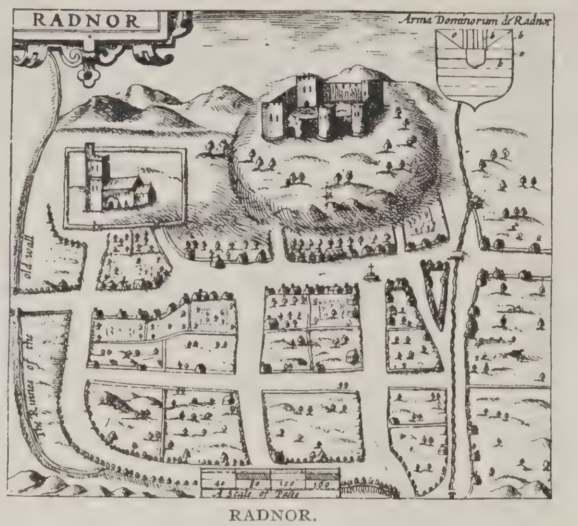
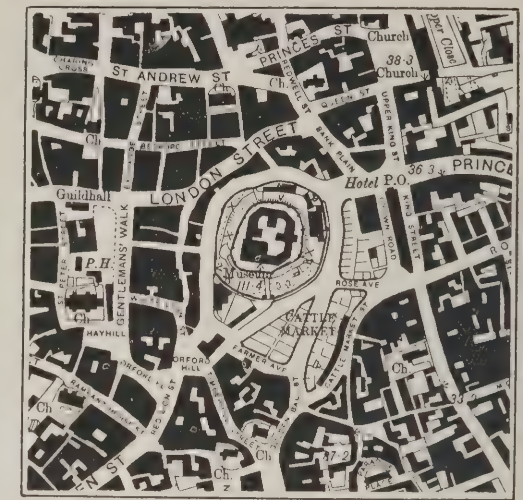
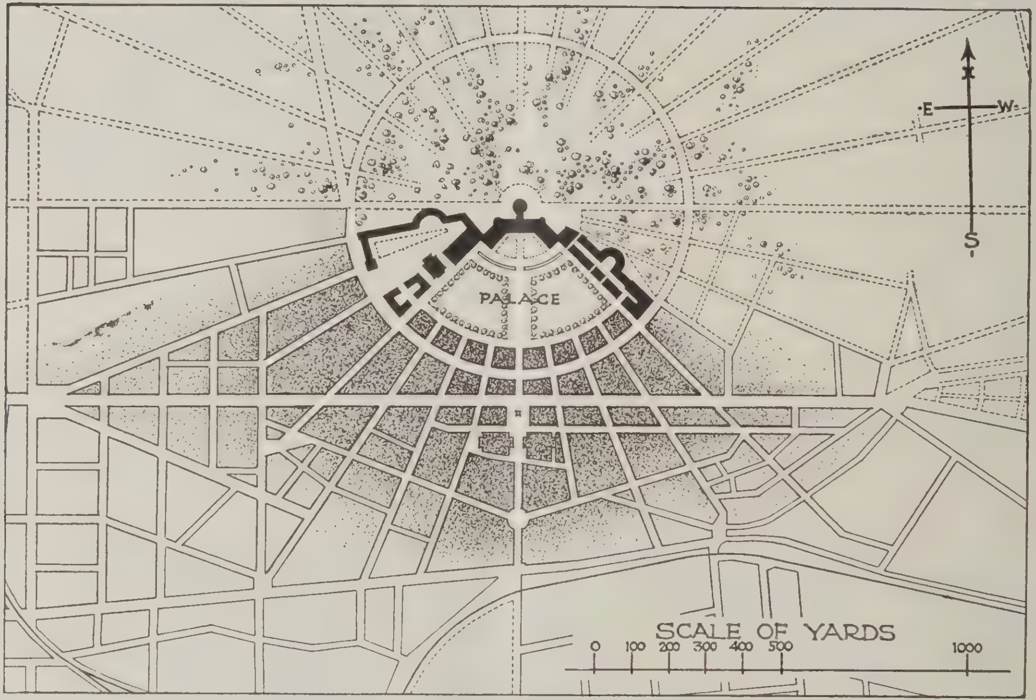
wns and Town Planning Ancient and Modern." . Hughes, F.S.I., A.R.I.B.A., and E. A. G. , Hon. M.A. Oxford: The Clarendon Press. . net.



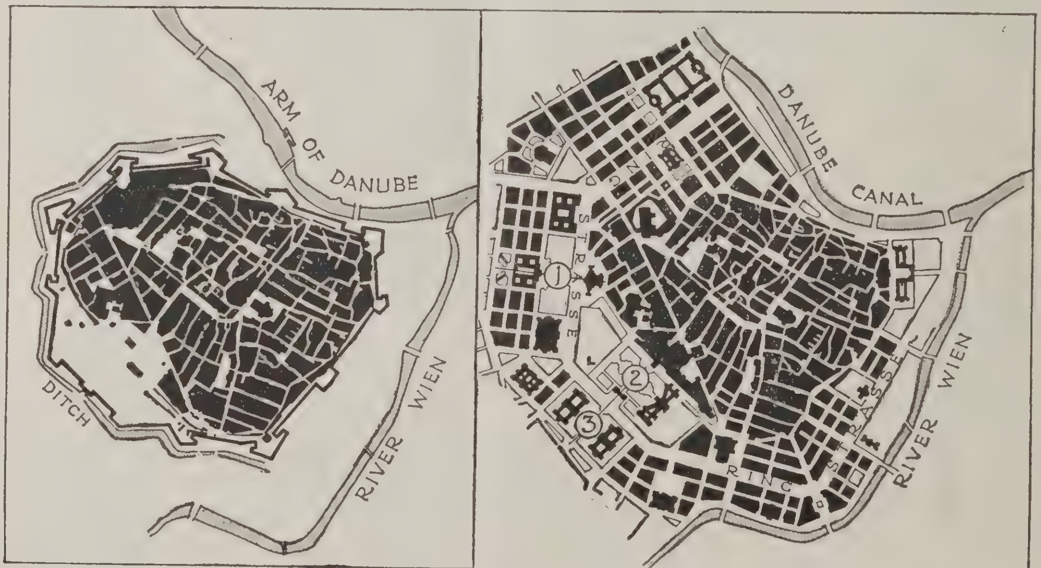
RADNOR.
From Speed's "Theatre of the Empire of Great Britain." 1611.



NORWICH.
The plan of the city shows vestiges of the mediæval streets which circled round the protecting walls of the castle.



KARLSRUHE.
The original area of this town as laid out in the eighteenth century on a radial plan in front of the palace is shown in grey.



VIENNA.
On the left, the inner city before the removal of the fortifications (1857). On the right, the inner city after removal of the fortifications (1887). (1) The Town Hall, Houses of Parliament. (2) The Imperial Palace. (3) Museums of Natural History and Fine Arts.

SOME TOWN PLANNING SCHEMES OF THE PAST.
*(From "Towns and Town Planning Ancient and Modern.")*

narvon, and Conway are typical ex- ples, each of which offers a field for eresting research.

n the first chapter of this book the hors trace the phases through which practice of town planning has passed various countries; they show how the al of an orderly and beautiful city never been absent from the thoughts nan. The book then passes on to the ns and villages of Britain. The ler is shown the different types of elopment which arose through a iety of influencing causes. At Chiches- the Roman origin is clear; at Shrews- y the loop in the river is the deter- ing factor. Bygrave, near Baldock, is typical of the Anglo-Saxon arrange- nt of dwellings in relation to the nor. Carnarvon is a type of bastide oduced by Edward I from France, in ch defence dictates the form.

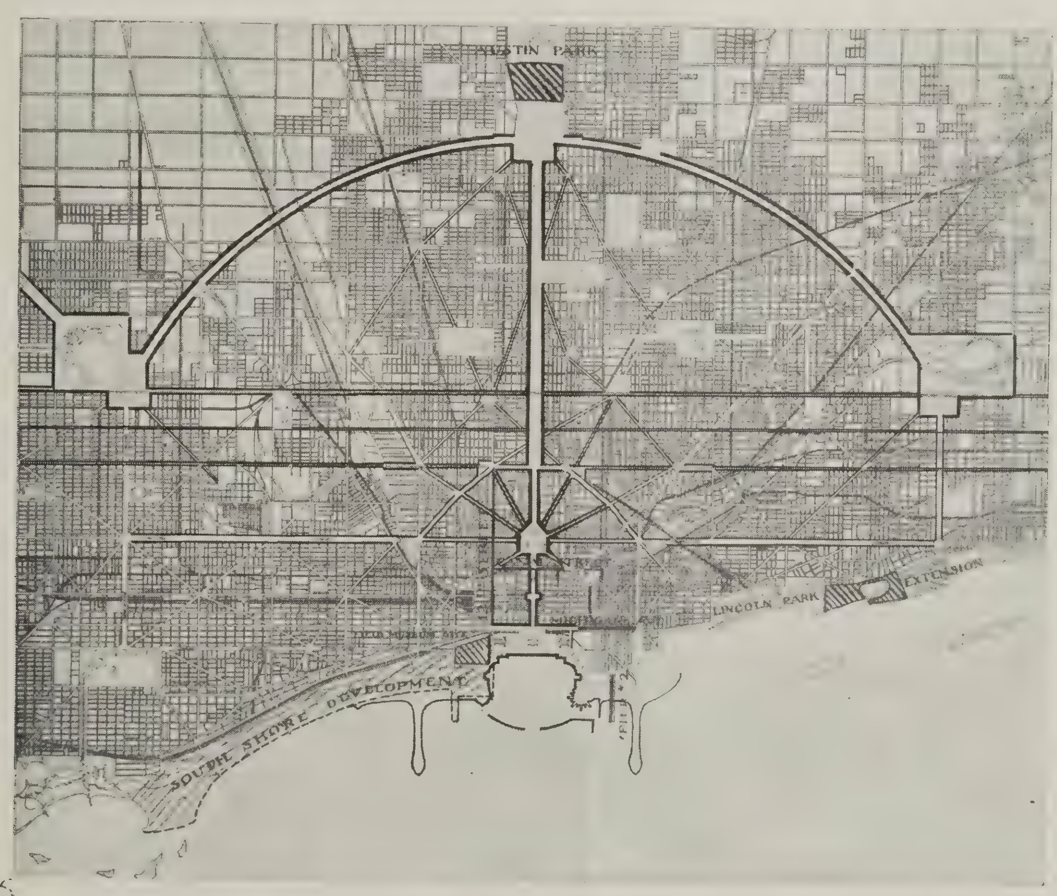
he eighteenth century was, as we w, a period of great town-planning vity; Craig at Edinburgh, Wood at h, Grainger at Newcastle-on-Tyne, Nash and Adam in London. (By the , surely Robert Abrahams was the itect of the County Fire Office and Nash as the authors state.) It was r that period that town planning ppeared as a national activity, to rge later in a slightly different guise, in the interval the torch, even in land, the home of the industrial lution, was never wholly extin- hed. Regent Street was built in , Abraham Combe founded his com- ity at Orbiston in 1828, Sir Titus founded Saltaire in 1851, Lord erhulme, then Mr. W. H. Lever, founded Port Sunlight in 1888, and in 1898 Mr. Ebenezer Howard published "To-morrow." In the eighteenth century, however, the prime consideration was not so much the common welfare as urban splendour. But during the nineteenth century the torch was kept alight by men who realized that a town must be more than a whited sepulchre. To improve the conditions under which the poor lived was even more important than the construction of a few fine streets. (Nero, one of the greatest Roman town planners, realized this too.) And so the problem has emerged to-day infinitely more complicated owing to the complexity of modern life and of our organizations, and owing to the realization that town planning must embrace it all. It is no longer a matter of walled cities, of defence, of fine thoroughfares, of squares of noble houses, or even of housing workers in relation to factories; it is something in which all these and much else have their place.

Town planning has always been a subject of legislation, but the present phase in England may be said to date from Mr. John Burns's Town Planning Act of 1909. Actually a study of other nations will show that England was far behind in the matter of legislation; just as Sweden was the first to realize the necessity of assuming control over town development, for in 1874 she passed the Bill which has become the prototype of subsequent European legislation; and it should be further productive of national humility to realize that already in 1914 the French Government had passed an Act which made the preparation of a town-planning scheme obligatory on all towns having a population of over 10,000, while our own Act was not passed until 1919, and then it only made the preparation of a scheme compulsory for districts with a population of 20,000.

The book enables an instructive comparison to be made between the methods adopted in different countries, and concludes with a chapter "The Future." Here, however, it is covering ground that will be more familiar to most readers. True, it is a matter that cannot be overemphasized; on the other hand, we would rather that the authors had amplified their historical matter and been content to have ended their work at the present time, not because these remarks are not of value, but rather because the historical aspect of town planning has been somewhat neglected and in the course of their researches they must have gathered together a mass of further material worthy of inclusion. We have one more criticism—it concerns itself with the dust wrapper. Just in so much as clothes make the man, so binding makes the book, and the dust wrapper is the overcoat, and this one is in no degree indicative of the dignity of the binding or of the matter which it shields.

The book, we must add, is most profusely and clearly illustrated with more than a hundred full-page and text blocks, including plans, photographs, engravings of the utmost interest. It is a book that will appeal to all, but particularly to those who wish for a rapid and coherent survey of that most ancient of all arts: the art of town planning.

H. J. B.



CHICAGO.

Plan showing the proposed developments and improvements, of which some of the more important are indicated by thickened line. The main points in the scheme are the perfection of existing street systems, the simplification of the railway system, and the provision of parks, playgrounds, and forest preserves. The cost of the small portion of the work now completed or in hand is 90,000,000 dollars.

(*From "Towns and Town Planning Ancient and Modern."*)

# Contemporary Art

### *The Grosvenor Gallery.*

Portraits by Gerald Kelly, John Wheatley, Ambrose McEvoy, and Glyn Philpot give distinction to the summer exhibition. The "R. P. Watt" of the latter, a young man in flannels, is painted so simply and has so unaffected an air that it is altogether charming and serene. The two by John Wheatley require some study, for the artist is using a new method somewhat startling to those who realize the exactitude of his etchings. To realize their value they should be viewed from afar. Oswald Birley is dashing as usual in the portraits he sends, and so is Barnard Lintott in a very pleasing study of Mrs. Forrest Travis. A new note in portrait groups is struck by J. Archibald Wells, whose pictures are as entertaining as old colour prints and as naïve. Algernon Talmage's portrait study of two girls in striped, wind-blown frocks—"On the Dunes"—is very jolly. Beatrice Bland has two accomplished paintings; James Henry in his "Moorland Village" is very pleasing; Hughes-Stanton's "Equihen, Pas de Calais," is one of the best landscapes he has exhibited lately, and A. Reginald Smith contributes a delightful water-colour drawing—"Muker."

The sculpture, if small, is important. There is a woman's head by Henry Glicenstein which shows this fine artist in a somewhat more modern phase than is usual; Whitney-Smith has another of his Gold Coast studies of girls, "Abi," showing his always true modelling; Nena Jackson's "Rimah" is horribly ugly and attractive; Ethel Walker's modelling is improving, as evidenced in "Gabriel van Schnell, Esq."; and Kathleen Hilton Young's "Colonel Lawrence"—that much be-portraited personage—and "Woman and Child" are good.

### *The Medici Society's Galleries.*

Twentieth - century printed books, mostly produced for commercial purposes, to the number of 422, make an impelling bid for the notice of connoisseurs of printing and collectors. There is no doubt that publishers and societies, not to include art presses and private printers, have made enormous strides in taste, and it is pleasant to realize that men of business know now to some extent that things that look well sell the best. It is not for the connoisseur, but for the man-in-the-street, of course, that this is primarily intended, but the former's taste will recognize first this development, while the great number of the exhibits points to the fact that men-in-the-street must now exist in numbers that will make a comely edition pay at least as easily as a clumsy one.

### *The Mansard Galleries.*

Here, too, there is ample evidence of a greatly increased taste. Messrs. Heal have collected specimens of decorative and household glass from England, Scotland, France, Italy, Sweden, Holland, Palestine, Czecho-Slovakia, and the United States, and have made a most invigorating show. There is a set of transparent table glass with a gilt rim and a scroll of flowers to each piece, made at Stourbridge, which cannot be beaten for daintiness; there is a group of iridescent glass from Czecho-Slovakia which is absolutely brilliant; the Swedish colour is unpleasant and the Dutch is not much better, but the quality of both is admirable. The Venice and Murano glass makes a brilliant exposition of blown-glass, and its traditional simplicity is wonderfully maintained.

### *St. George's Gallery.*

Evidences of the great scheme of decorative painting in the State Capitol of Pennsylvania at Harrisburg is furnished by Violet Oakley's studies, drawings, and sketches, and by the reproduction in colour of the finished works in the great folio volume written by the artist and published under the title of "The Holy Experiment." Her work at the Capitol has been done in continuation of that commenced by Edwin Abbey, and comprises fifteen panels in the governor's reception room, and nine larger ones in the Senate Chamber. They approximate to Abbey's work, and are illustrative of scenes in the "Founding of a State" and the "Life of William Penn," and the "Creation and Preservation of the Union."

### *The Little Art Rooms, Adelphi.*

Harry Morley vindicates his paintings as decorations in more than one fine piece of oil work; his water-colour drawings are altogether different in style and altogether attractive and clever; his etchings are excellent. He proves himself in the thirty-five paintings and thirteen prints an unusually gifted and versatile artist with thought at the back of all his work.

### *The Twenty-one Gallery, Adelphi.*

The fifteen small pieces of sculpture by John Bickerdike denote a contemplative mind in their author and a love of craftsmanship. He cuts freely in walnut, oak, mahogany, statuettes and reliefs, and in marble a portrait head, while his modelled heads in bronze have a charm all their own. As a disciple of the creed of *en taille directe* he is to be warmly welcomed as a London exhibitor.

### *The Brook Street Galleries.*

Alex Maclean sees and paints everything blue: landscapes and seascapes by day and by night, and the effect is very pleasant.

### *The Beaux Arts Gallery.*

A number of the pictures by Augustus John recently exhibited at the Alpine Gallery, including the now notorious portrait of "Suggia," have been removed to a new gallery at No. 1 Bruton Place, Bruton Street, Bond Street, a charming room with open-beamed roof and delicious light for pictures.

KINETON PARKES.

### *Royal Society of Portrait Painters.*

At a general meeting of the Royal Society of Portrait Painters, Sir William Orpen, K.B.E., R.A., was elected president, in succession to the late Sir James J. Shannon, R.A.

### *New Showrooms.*

Messrs. Galsworthy, Ltd., have opened new showrooms at 16 Newman Street, Oxford Street, where they are exhibiting a large variety of metal and glass electric fittings and door furniture in oxidized metal. Shortly they will install a metal staircase made at their works, the design of which promises a handsome feature.

# The Central School o Arts and Crafts

The post-graduate aspect of this adm able institution is well shown in the w now on exhibition; its organization un Principal Burridge is completely v dicated. It is a school for professio workers, and would-be professio workers; its students know what th are about, and their admission depe on a stringent examination of their ai and character. Character comes out their works, which, in most cases, are that advanced description which bord on accomplishment and occasiona passes the border; witness the cera figures of Stella Crofts; their applicat in the case of a chimneypiece; the r hogany chest of drawers by W. Hollow and some of the bookbindings and met work. This does not come about f tuitously, it is due entirely to the syst adopted in the school, which is based the study of Nature.

The drawings from the life, the rest of J. A. Grant's and B. Meninsky's ca- ful teaching and those made at the Z and Natural History Museum under th master of animal and bird forms, Vanderlyn, form the basis upon which truth of the productions in metal, wo clay, textiles, leather is built. The sec of the whole thing lies in this: that school is not concerned with the study art, but of Nature, upon which art pends for its vitality. It is further co cerned more with the artist than with for its object is to bring out the lat talent of its students, and by no means make them imitate old forms, howe admirable those may be. New for based on old truths, I should thi might be a suitable slogan.

The modelling section is impressive, might be expected from the teaching Alfred Turner, who, with all his resp for the academic, is still human eno to know that man was made before image was carved. There is some adm ably studied sculpture, and from the cr point of view the exhibits illustrat *cire perdue* and sand casting are excelle Allied to these are the ceramic secti the wood-carving and the repoussé wo in which there are some good exampl In the engraving department there lithographs, woodcuts, etchings, a sheet music, and in the lettering a writing some charming examples, as w as in illuminating. The posters form imposing display, amongst which some things of promise.

The department of architecture pro is not so strong, but the technique presenting designs and drawing plans good, and the designs for small banks a petrol stations show some feeling. S dents are encouraged to prepare wh designs for the furnishing of rooms, cluding the subsidiary features of fur ture, textiles, structural features, met work, and so on, and exhibit taste a sometimes originality.

In all departments the bent of student is the first consideration, a when this is discovered it is encourag and the attempt made to cultiva originality. This exhibition proves th the attempt is not always made in va The exhibition is open free during J and July.

KINETON PARKES

# Architects and their Guests at Edinburgh

*Among the architects, their guests and others who attended the Edinburgh Conference were the following:—*

ercrombie, Professor P., nd Mrs.
head, Professor S. D., nd Mrs. and Miss.
on, J. P.
our, John.
ott, James A., and Mrs.
aur, J. A.
lie, Wm., and Mrs.
lie, Wm.
our, Andrew, and Mrs.
nes, Major H.
g, John.
kadder, R.
wn, D. M.
wn, Professor Baldwin.
wn, Wm.
vne,G.Washington,R.S.A.
kland, Herbert T., and iss.
ans, James D., and Mrs.
pbell, A. Lorne.
lewood, G. E.
holm, D. J.
ette, Major Hubert.
ley, H. R. A.
g, George.
gie, James H.
bie, Frank.
ningham, J. C.
aymple, H. A., and Mrs.
uests, Mr. and Mrs. mes Ellis).
dson, William.
, F. W.
, R. Burns.
en, F. M., and Mrs.
ch, Chas.
, James B., A.R.S.A., d Mrs.
rds, F. E. Pearce, and s. (guest, Miss Edith ylor).
g, Chas. T.
ey, J. Graham.
ey, J. McLellan.
son, R. W.
her, Sir Banister, and ly.
way, D. W.
, Hugh.
Gibbs, Edward M.
Gillespie, James.
Gotch, J. Alfred.
Grant, Alex.
Grant, John P.
Gray, Geo. H. (Hon. Secretary, Northern Architectural Association).
Grayson, Hastwell, and Mrs., and Miss R. C.
Halley, William B.
Hardie, Robert L.
Harwick, Craigie.
Hays, J. Wilson.
Henry, J. Macintyre.
Hicks, H. L.
Hinde, E. Percy.
Hodgson, Victor T., and Mrs.
Holt, Richard.
Howling, G. J.
Hubbard, Harry.
Hughes, T. Harold, and Mrs.
Irvine, Theodore K.
Jerdan, John, and Mrs.
Jones, Francis (President, Manchester Society of Architects), and Mrs.
Jones, Ivor P. (Hon. Secretary, South Wales Institute of Architects), and Mrs.
Jones, J. Herbert (Hon. Secretary, Western Branch, South Wales Institute of Architects).
Jones, W. T.
Kaye, Stewart.
Keen, Arthur.
Kempthorne, C. H.
Keppie, John.
Kerr, Henry F.
Lamont, A. Hay, and Mrs.
Lanchester, H. V., and Mrs.
Lloyd, T. Alwyn, and Mrs.
Lochhead, Alfred G.
Lochhead, James (President, Glasgow Institute of Architects).
Lofthouse, J. A. E.
Lorimer, Alexr.
Lorimer, Sir Robert S., A.R.A., R.S.A.
Lorimer, Lady.
Mackenzie, J. A. H., and Mrs.
Mackie, D. M.
Maclennan, T. F.
Marwick, T. P. (President, The Incorporation of Architects in Scotland).
Maurice, Lt.-Col. Arthur J., C.M.G., D.S.O.
McAlister, Ian (Secretary, R.I.B.A.), and Mrs.
McCallum, Malcolm S.
McGibbon, Alex.
McKay, J. R.
McMillan, J. Ross.
McWilliam, Alexr.
Milburn, T. R., and Mrs.
Milburn, T. R. (guest, Mr. Wm. Thomson, W.S.).
Milburn, William.
Mitchell, Geo. Angus.
Mitchell, Geo. Bennett, M.B.E., D.L.
Mitchell, R. M., and Mrs.
Morris, James A.
Morrison, J. Inch., and Mrs.
Motion, R. H., and Mrs.
Nisbet, J. Bryan.
Oliver, G. Dayle.
Parker, Barry.
Partridge, E. J. (President, Society of Architects).
Paterson, Alex. N., A.R.S.A., and Mrs.
Paterson, Geo. A., and Mrs.
Paterson, James, R.S.A.
Paterson, J. Wilson, and Mrs.
Patterson, Wm.
Paul, A. F. Balfour.
Plume, W. T.
Richards, F. A., and Mrs.
Robb, James.
Ross, Thomas.
Salmon, James, and Mrs.
Salmond, David.
Salmond, Wm., and Mrs.
Sharpe, Thomas W., and Mrs.
Sim, Stewart.
Simpson, George.
Sinclair, G.
Smart, Laurence H.
Smith, J. Llewellin.
Smith, Thomas, and Miss.
Soutar, Chas. G. (President, Dundee Institute of Architects), and Mrs.
Steel, John.
Stewart, D. A.
Stewart, John.
Swan, T. Aikman (President, Edinburgh Architectural Association).
Symon, A. A.
Tapper, Walter.
Tarbolton, H. O.
Taylor, John.
Taylor, L. W.
Teather, H., and Mrs. and Miss.
Thomas, Percy, O.B.E. (President, South Wales Institute of Architects), and Mrs.
Thomas, P. H.
Thomas, W. D.
Thoms, P. H., and Mrs.
Traquair, Professor R.
Tweedie, Charles E.
Walker, W. G. (Secretary, Incorporation of Architects in Scotland).
Ward, J. W.
Warren, Edward.
Waterhouse, Paul (President, R.I.B.A.).
Watson, Geo. M.
Watson, John.
Watson, John F.
Webb, Maurice E., D.S.O., M.C.
Welch, Herbert A.
Whitie, Wm. B.
Williams, J. Teifion J.
Williamson, J. A.
Wilson, John.
Wilson, Mrs. John.
Wittet, John, and Mrs.
Woodward, Wm.
Woore, J. A., and Mrs.
Worthington, Percy S.
Young, C. J. M.
Young, G. P. K.

# Reading the Sphinx

HE great discoveries at the tomb of Tutankhamen and the wide publicity given to them in the Press directed the attention of every one eads a newspaper to Egypt, its nents, and its history. It is appro-, therefore, to hazard some sugges- as to the significance of Egyptian gs and the character of the people uilt them.

character of the builders is em- inevitably in every building. ecture is man's story in stone, and were as skilled in reading buildings are in reading books, we should ore attention to these petrified f history, and, perhaps, less to the written about it. What, then, are racteristics of Egyptian buildings, at sort of people must they have ho built them ?

The towns and the buildings in them, the houses of the rich, well-to-do poor even, had far more variety, were far more expressive of the spirit of their owners than are the great monuments. They seem to have been admirably planned, brilliantly decorated, gracefully adorned—altogether "living" architecture in contrast with the great dead pyramids. But to-day the towns and country-houses are just mounds of earth. We know them only from caskets and coffers made as models of them. The great dead buildings remain to-day; these that were once alive have long ago disappeared.

If we seek to account for the character that civilization assumes in ancient Egypt, we shall find the principal influence in its river, the Nile. It was the main road; it was the only source of fertility; it flowed before the eyes of the peasant all through life, and his supreme pre-occupation all through life was irrigation. Now irrigation can only be carried out by great masses of docile, unwearying men, carefully organized, rigidly controlled. That meant a centralized, bureaucratic Government. The great valley is shut in by hills and deserts; it is scarcely open to the sea at the end through its huge delta; it is full of identical flat fields, intersected by myriads of criss-cross watercourses. The landscape did not inspire imagination, adventure, invention. That meant a population that was fitting food for a bureaucracy.

There is a suggestion of the significance of Egyptian architecture.—T. S. Attlee, M.A., A.R.I.B.A., in the "Western Daily Press."

# Enquiries Answered

*The Editors cordially invite enquiries from readers who require information on architectural, constructional, or legal matters. Answers to enquiries are in all cases the work of experts ; and while every care is taken to make the replies thoroughly reliable, the Editors cannot hold themselves responsible for any inaccuracies that may inadvertently occur. Correspondents whose difficulties involve possible legal proceedings are strongly urged to consult their solicitors before taking action on any advice that may be given. Examination questions cannot be answered. It must be understood that, as a rule, both question and answer will be published in these columns. The name and address of the querist must always be given, not necessarily for publication. Correspondents are requested to be as brief as possible, and to write on one side of the paper only.*

### *Fees for Abandoned Work.*

Architect writes : "Will you give me a short statement of the law regarding architects' remuneration for abandoned work with references to the leading cases thereon. I know, of course, that if the architect has given a notice that he will charge Institute scale and sent his scale of charges, the percentages therein set forth will be recoverable, but as it is seldom possible to take this very strong line there must be innumerable cases in which fees are disputed (often, I fear, successfully), through uncertainty as to what the result of an action would be ?"

—We assume that the architect was unquestionably employed to design and describe works which were subsequently, through no fault of the architect, abandoned. He is entitled to reasonable remuneration for his services, but not necessarily according to Ryde's or any other definite scale. Read carefully section 27, page 95, Vol. I of "The Law of Building, Engineering, and Shipbuilding Contracts," fourth edition, and page 96 and (less important) pages 93 and 94.

S.

### *Detection of Damp on Concrete Floors.*

Subscribers write : "In laying our flooring we are often called upon to decide whether a concrete floor is thoroughly dry or not. In many cases concrete floors appear, from outward appearances, to be quite dry, but they frequently show subsequently that the dampness has by no means evaporated. Are there any definite symptoms to be seen in a concrete floor whereby it can be accurately ascertained that all moisture has definitely evaporated ? Our chief enemy is the concrete floor which shows a white powdery surface to all intents and purposes thoroughly bone dry, but which after all proves, particularly on a wet day, that much moisture is still present."

—This is a difficult case to answer, as the concrete may vary considerably in texture and waterproofness, so that while normally dry there may be dampness rising into it from the soil during wet weather. Time, again, is unreliable as a period for drying; so much depends upon the temperature, air currents, composition of concrete, etc. Possibly a linen cloth treated with one of the following mixtures could be used as a test : (1) cobalt chloride one part, gelatine ten parts water 100 parts, pink shows moisture, violet shows humidity, blue shows very dry; (2) cobalt chloride one part, nickel oxide seventy-five parts, gelatine twenty parts, water 200 parts; green when dry, colour disappears with moisture. If the cloth be laid on a damp surface, and, say, covered by a dry varnished board to make contact, the colour would temporarily change according to the moisture present. The nature of the cementing material that loosens in the damp is not stated, but silicate of soda might be tried as a cementing material.

HENRY ADAMS.

### *Turkish Bath.*

"Turk" writes : "I wish to design a small Turkish bath to accommodate not more than six bathers at a time, and desire the following information : 1. Size of lavatorium; no plunge bath required. 2. Size of tepidarium. 3. Size of calidarium. 4. Size of laconicum. 5. Best material to use for the internal faces of walls and floors in the above rooms, with a view to periodically washing down, and to avoid a bather getting burnt on contact with them. 6. The best system of heating by convected heat. 7. The best system of heating by radiant heat. 8. Could the rooms be satisfactorily heated by steam pipes ? if so, how should the pipes be protected ? 9. System of ventilation. 10. The best system and arrangement for a Russian bath and how same is ventilated."

—1. Lavatorium.—This is, strictly speaking, the washing-room adjoining the shampooing-room, but in small bathing establishments provision for ablutions and shampooing is made in one compartment. This might be fitted with two couches and washing-basins and sprays and two conveniently-placed shower baths might take the place of the usual plunge. Minimum size 9 ft. by 9 ft.

2. Tepidarium.—Temp. 140 deg. This room will contain the greatest number of bathers at one time. To accommodate six the minimum size should be 15 ft. by 12 ft.

3. Calidarium.—Temp. 180 deg. This room should accommodate three bathers at one time. Minimum size 15 ft. by 6 ft.

4. Laconicum.—Temp. 250 deg. This small room very highly heated would be conveniently arranged near the heating chamber, and might accommodate one bather. The ceiling would be best constructed of glazed bricks in the form of a low, flat vault.

5. The best material for the internal faces of the walls would be glazed bricks or tiles with a lining of felt as a non-conductor of heat. Where great economy is essential plaster may be used. For floors unglazed tile paving laid in cement on concrete would be suitable. Glazed tiles become too hot for naked feet and also too slippery.

6. The hot-air system of heating comprises a furnace and flues or shafts, which supply cold or draw off the heated air, and a stoking chamber. Firebrick is the best radiating surface, and for the furnace a type of "convoluted" stove has been found satisfactory.

7. For heating by means of radiant heat the apparatus is constructed of fireclay bricks, quarries, and cement, and contains a long flue of firebrick whi
coils backwards and forwards until t
required amount of radiating surface
obtained. The heat obtained by stov
of this kind is more exhilarating a
satisfactory for the purpose than the co
vected heat referred to above.

8. Steam heating is not desirable
this purpose owing to the possibility
the bursting of a pipe in the heati
coil which would have very serious co
sequences; also the nature of the he
derived from steam pipes is inferior
that obtained from the large radiati
surfaces of firebrick.

9. Ventilation of the heated rooms m
be obtained by means of powerful
propellers placed at the end of a syst
of horizontal flues under the floo
Ventilators should be placed at the fl
level of the hot rooms fitted with lo
wide gratings through which the vitiat
air is drawn.

10. For the Russian or vapour ba
one well-lighted and ventilated apa
ment, steam-heated to a temperat
of 100 deg. or 110 deg., fitted with th
or four tiers of wood trellis seats
stagings placed round the walls would
suitable. The walls should be built
two thicknesses and faced with gla
bricks and the light should be admit
through double windows. The stea
heating pipes, placed behind the tre
seating, are perforated for the discha
of steam into the vapour chamber.

K. C

### *Soldier Course in Brickwork.*

A. L. writes : "1. Is it safe to build
one course of soldier or vertically pla
bricks in the outer skin of an 11
cavity wall at the base, say, damp-pr
course level, of a house, dimensions 30
by 20 ft., two story, 8 ft. 6 in.
8 ft. high ? 2. Are there any makers
pantiles (clay) in Lancashire or the n
counties ? 3. Is Bridgwater the o
place where the Italian type tile
manufactured ?"

—1. There can be no objection to bu
ing in a "soldier course" of bricks in
4½ in. external portion of an 11 in. cav
wall if the proper number of wall
are used, say, not fewer than two to
square yard, but a sound two-story bu
ing should have a 9 in. inner wall on
ground floor, if not throughout.
4½ in. external wall should be looked u
merely as an overcoat to protect
building from the weather, the inte
wall being of such thickness as the bu
ing may require for its stability. 2.
writer does not know of any Lancas
firm manufacturing clay pantiles.
Bridgwater, Somerset, is the chief
for the manufacture of Italian type t
but there may be other makers, such
T. Lawrence and Sons, Bracknell, Be

HENRY ADAM

# Parliamentary Notes

' OUR SPECIAL REPRESENTATIVE.]

### *The Housing Bill.*

nding Committee A of the House mmons, on further consideration of lousing Bill, agreed to a proviso, l by the Minister of Health, requir- local authority, before granting ınce for building, alteration or rsion, to satisfy themselves that the s, flats or tenements will be in all ts fit for human habitation, and ıperficial area not less than the um permissible under clause 1. A lause, moved by Mr. T. Thomson, ng a local authority to hire com- ily any house unoccupied for three s, was rejected by eighteen votes een.

committee stage has been com-

### *Decontrol of Houses.*

Rent and Mortgage Interest ctions Bill, which extends the date ontrol until the summer of 1925, en read a second time by 287 votes

### *Building Materials.*

l E. Percy, Parliamentary Secre- the Ministry of Health, informed Thomson that the committee and nmittee on building materials had x meetings. It had been princi- ngaged on the general survey of with particular regard to increases ain light castings. There was no ce as yet that the committee re- further powers.

### *Housing Progress.*

E. Percy informed Mr. D. G. ille that, according to returns d from 1,067 local authorities, ıouses of a rateable value up to 090 houses between £26 and £52, between £52 and £78 (up to £35, 1 £35 and £70, and £70 and £105 vely, in the case of the Metro- Police District) had been erected vate enterprise during the six ending March 1 last. In addition, ouses containing five rooms or less, ontaining six to eight rooms, and ntaining nine to twelve rooms course of erection on that date. nister of Health had no reason ose that the supply of building ls would not be equal to the

### *The South Queensferry Housing Scheme.*

Mr. Thomas Henderson asked the Under Secretary to the Scottish Board of Health whether he was aware that, in connection with the latest instalment of the South Queensferry housing scheme, the architect to the scheme was insisting on the use of Dougall's Winchburgh bricks, costing substantially more than the price at which perfectly suitable bricks made locally could be purchased, which action tended to encourage the brickmakers to maintain high prices, to discourage competition among brickmakers, and to hamper contractors in producing lower building costs; and what steps he proposed to take in the matter.

Captain Elliot said he was informed that the architect stated that he did not insist on the use of Dougall's Winchburgh bricks, but only that the bricks should conform to the specification which required "hard-burned" bricks. The local bricks referred to were presumably made by the British Brick Company, Ltd., at Philipstoun. Those bricks, which were made by a process new to Scotland, could not be described as "hard-burned," but the Scottish Board of Health were aware that they had been used on other housing schemes and, so far, no complaints regarding them had reached the Board. In the circumstances of the present case, he did not feel warranted in interfering with the discretion of the architect, who would appear to be entitled to insist on compliance with the terms of the specification. The Board were, however, taking steps with a view to ensuring that in future cases the terms of specifications might not be such as to exclude the use of any type of suitable brick, whatever might be the process of manufacture.

# Comparative Wages, 1914—1924

The accompanying chart shows the variations in the building trade wages for London from 1914 to 1924. It has been produced by Messrs. E. A. Roome & Co., Ltd., of Crown Works, Urswick Road, Hackney, E.9, building contractors, and forwarded with a circular to architects, clients, and others interested in building. In the circular it is stated that the chart reveals two items of importance :—

1. That although the current fall is a small one, yet the wages level now shown compares very favourably with the pre-war level; and

2. That the wages are stabilized to January 1924.

It is pointed out "that nothing is to be gained from the building owners' point of view in holding back building work in anticipation of further lessened costs. Especially is this so when consideration is given to the fact that it is quite logical to assume the ultimate level of costs will probably stabilize well above pre-war costs. If, therefore, these conclusions are accepted as a reasonable assumption, there should follow a release of much of the building work that has been held up."

# Our Small Frontispiece

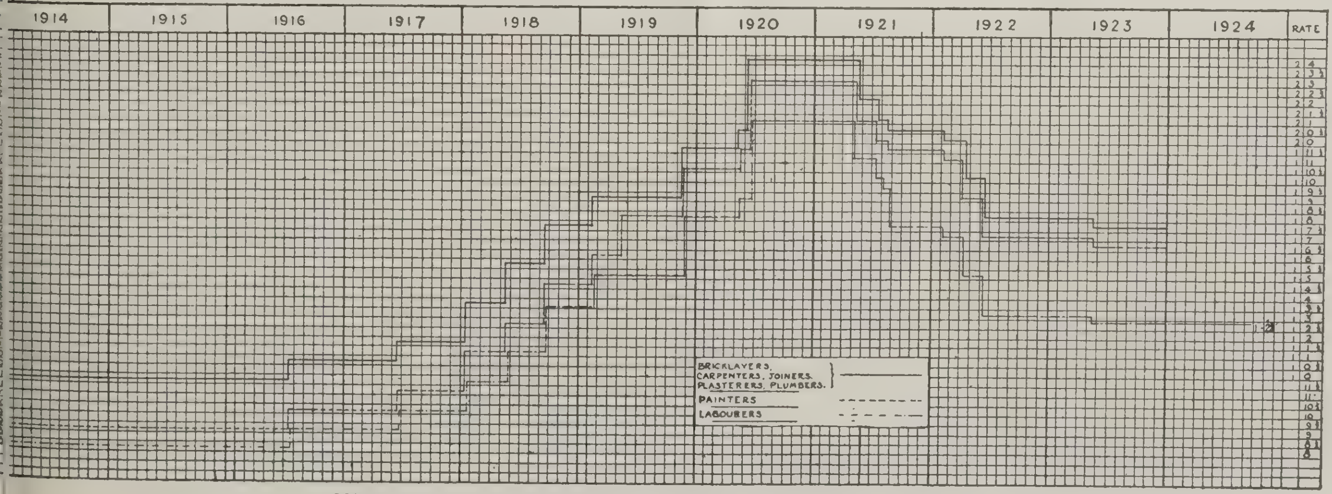
The wrought-iron and bronze lamp, on the Victoria Gate, Hyde Park, illustrated on page 1025, was made by Mr. J. Starkie Gardner.

# Lyons' Corner House

In the new Lyons' Corner House in Coventry Street, illustrated last week, 500 yards of Terrazzo Paving was supplied for Messrs. J. Lyons & Co., Ltd., by Diespeker & Co., Ltd.

# Sir Aston Webb Honoured at Cambridge

The annual conferment of honorary doctor's degrees was a marked feature of May Week at Cambridge. The Vice-Chancellor, Dr. E. C. Pearce, Master of Corpus Christi College, presided. Among the eight recipients of honours was Sir Aston Webb. Presenting Sir Aston Webb, President of the Royal Academy, the Public Orator said that the Roman poet had said, "God was the first architect," and among men there were hardly any who could more securely hope for the eternity of their works, as they learned every day from Egypt and Assyria. Among the monuments of their generation posterity would assuredly find the name of Sir Aston Webb. Son of a distinguished painter, he took to the pencil and planned palaces and museums; not merely planned them, but what his mind conceived he saw rendered in stone. Before the doors of the King stood the marble cenotaph of Queen Victoria, the work of this man's art. The palace of the King himself knew his hand of genius, and in Cambridge his work was to be found with its marks of clearness and simplicity.



VARIATIONS IN BUILDING TRADE WAGES, 1914—1924.

# The Week's News

### *Road Widening at Finchley.*

Finchley propose to spend £20,000 on widening East End Road.

### *Paddington Public Baths.*

To make way for Paddington's £90,000 public baths Porchester Hall has been pulled down.

### *New Fire Station for Nuneaton.*

The Nuneaton Corporation propose to erect a new fire station at an estimated cost of £2,500.

### *Tenement Buildings for Kensington.*

Kensington Borough Council propose to spend £24,000 on new tenement buildings.

### *Stafford's Housing Proposals.*

The Housing Committee recommend that a scheme be submitted to the Minister of Health for the erection of 148 houses on the Lammascote estate.

### *Nottingham Electricity Extension.*

Nottingham Electricity Committee are asking for a further £50,000 for general extension of mains, transformers, and switchgear.

### *New Housing Estate near Acton.*

A lay-out plan for the Greenford Hall estate has been approved by the Greenford Council. The estate has a capacity for 200 houses.

### *Housing at Blyth.*

The Ministry of Health has granted permission to the Blyth Corporation to build fifty houses under the Government's new scheme.

### *Church Builder's Estate.*

Mr. W. Middlehurst, of St. Helens, Lancashire, a builder of churches, who took an active part in the erection of fourteen local churches, left £7,486.

### *New Electricity Station for Lancashire.*

To improve the supply of electricity in the mid-Lancashire district a new capital station is to be erected near Padiham.

### *Mr. A. W. Sinclair's Estate.*

Mr. Andrew Worke Sinclair, of Ivydale, Stepney Road, Scarborough, retired builder, for some years president of the National Federation of Building Trade Employers, left £41,122.

### *Road Reconstruction at Dundee.*

An expenditure of over £40,000 is contemplated by the scheme of road reconstruction to which the Works Committee of Dundee Town Council have agreed.

### *Manchester's New Town-planning Surveyor.*

Mr. Reginald Bruce, A.R.I.B.A., a member of the Town-planning Institute, has been appointed surveyor to the Manchester Corporation and District Joint Town-planning Advisory Committee.

### *Wath-on-Dearne Waterworks.*

Wath-on-Dearne Urban Council have decided to proceed at once with the consideration of proposals for duplicating their waterworks plant. Provisional sanction having been obtained for the erection of sixty-two houses, work on these will be commenced subject to receipt of the Government's £6 subsidy.

### *Widening of Gresham Street.*

The City Corporation has asked the London County Council to contribute one-half of the cost, estimated at £20,000, of the widening of Gresham Street, at the corner of Wood Street.

### *London's Houses.*

The total expenditure of the London County Council this year on housing is estimated at £5,344,705. This figure shows a decrease of nearly £3,000,000 as compared with the previous year's estimate.

### *Church for Mansfield.*

At Mansfield the foundation-stone has been laid of a new Roman Catholic church. The total cost of the church will be £17,500, of which a considerable sum is in hand. The architect is Mr. P. O. W. Edeson (Hartlepool).

### *Gainsborough Housing Sites.*

The Gainsborough Urban District Council have adopted the recommendation of the Special Housing Committee to dispose of forty-nine plots of land, part of the site secured under the Government housing scheme, in order that private enterprise may have an opportunity to build.

### *Bridge Improvements at Wolverhampton.*

Wolverhampton Corporation are proposing to widen the canal bridge at the borough boundary on the Stafford Road to 50 ft., at an estimated cost of £4,358; and also to widen the canal bridge on Cannock Road to 38 ft. 6 in., at an estimated cost of £3,265.

### *Guild Housing Wages.*

The directors of Guild Housing, Limited, the first of the new Guild contractors, have decided that the reductions ordered in the wages of the building trades operatives under the recent arbitration award shall not apply to any of the workers in the service of the Guild.

### *Golders Green-Edgware Railway.*

A start has been made with the laying down of the sleepers and rails of the new Underground extension line from Golders Green to Hendon (Central). About 315 ft. of track have been laid down, and a daily advance of 500 ft. is anticipated from now onwards.

### *Change of Address.*

Mr. Henry E. Farmer, F.R.I.B.A., Housing Commissioner, 1918-1921 (of Hickton, Farmer & Farmer, architects and quantity surveyors), has moved to 57 Colmore Row, Birmingham. Telephone, Central 7274.

### *Plan to Electrify U.S. Industries.*

A plan for electrifying every industry of any size in the United States at a cost of £1,000,000,000 was reported to the Convention in New York of the Electric Light Association by General Guy E. Tripp, chairman of the Board of Directors of the Westinghouse Electric and Manufacturing Company, on behalf of the designer, Mr. Frank G. Baum, a San Francisco hydro-electric engineer.

### *The late Mr. John Howitt.*

Mr. John Howitt, principal in the
of J. Howitt and Son, architects, di
Nottingham on June 9, at the ag
seventy. Mr. Howitt, who was w
known in professional circles, had t
a very prominent part in the work o
Masonic craft, being Past Provi
Grand Warden of Nottinghamshire.

### *The King at Becontree.*

The King and Queen recently visite
London County Council housing esta
Becontree in Essex. The visit is a
of Royal interest in one of the la
housing schemes that has been u
taken. Of the projected 24,000 h
and tenements only three thousand
been built on this portion of the est
the Ilford section.

### *Housing at Guildford.*

The initial step in launching a
housing scheme which will utilize al
available land at Guildford Park be
ing to the Corporation was taken b
Council when tenders were invite
twenty parlour cottages and ninety
parlour houses. A recommendatio
the Housing Committee to erect flats
defeated.

### *Lectures on Architecture at Oxfor*

The General Board of the Faculti
the University of Oxford have autho
the course of lectures on "Mediæva
chitecture, with special referenc
England and France," arranged b
Committee for the Fine Arts, to b
livered next winter. Mr. W. G. Ne
M.C., M.A. (Oxon), A.R.I.B.A., has
appointed lecturer on the recomm
tion of the R.I.B.A.

### *Leeds Architect's Marriage.*

At St. Oswald's, Ravenstonedale,
morland, the marriage took pla
Mr. R. Gribbon, partner in the fi
Messrs. Chorley and Gribbon, archi
Leeds, to Miss May Weston, only
viving daughter of the late Rev.
Metcalfe, M.A., for seventeen years
of Ravenstonedale, and Mrs.
Metcalfe, of Sunnyside, Ravenston

### *Jewels of the Renaissance.*

To Miss Joan Evans, B.Litt.(O
belongs the distinction of being the
woman to lecture before the Royal
tution. Her subject was "The Jew
the Renaissance." Miss Evans
daughter of the late Sir John Evans
archæologist, who died in 1908, and
the council of St. Hugh's College, O
besides being a member of the
Institution.

### *Y.M.C.A. War Memorial.*

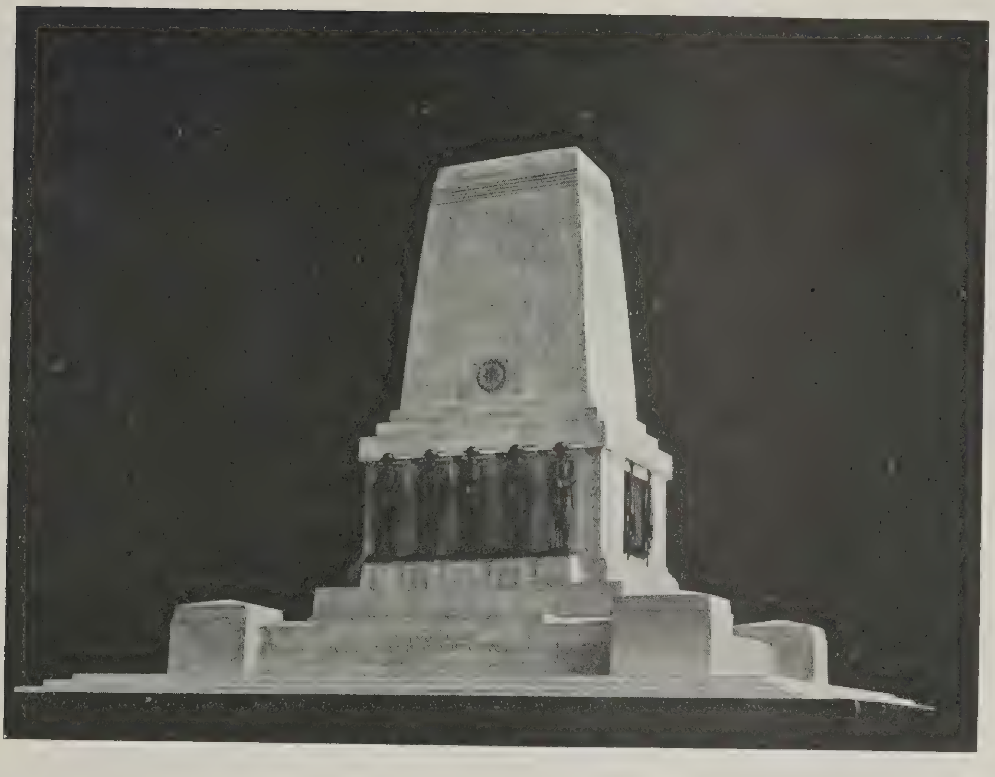
The memorial of the work of the
Men's Christian Association in the
the Chateau de la Falaise, near Bou
—has been opened. The hostel
Bethune, Cambrai, and Peronne
been re-erected as picturesque ch
and there are further chalets named
other Y.M.C.A. huts at Amiens,
Armentières, and Albert. The buil
are enclosed within eight acres of gr
and gardens.

nesday, June 27, 1923.

LVII. No. 1486.

# THE ARCHITECTS' JOURNAL & Architectural Engineer

*With which is incorporated "The Builders' Journal."*



SKETCH MODEL OF THE GUARDS' MEMORIAL, ST. JAMES'S PARK.

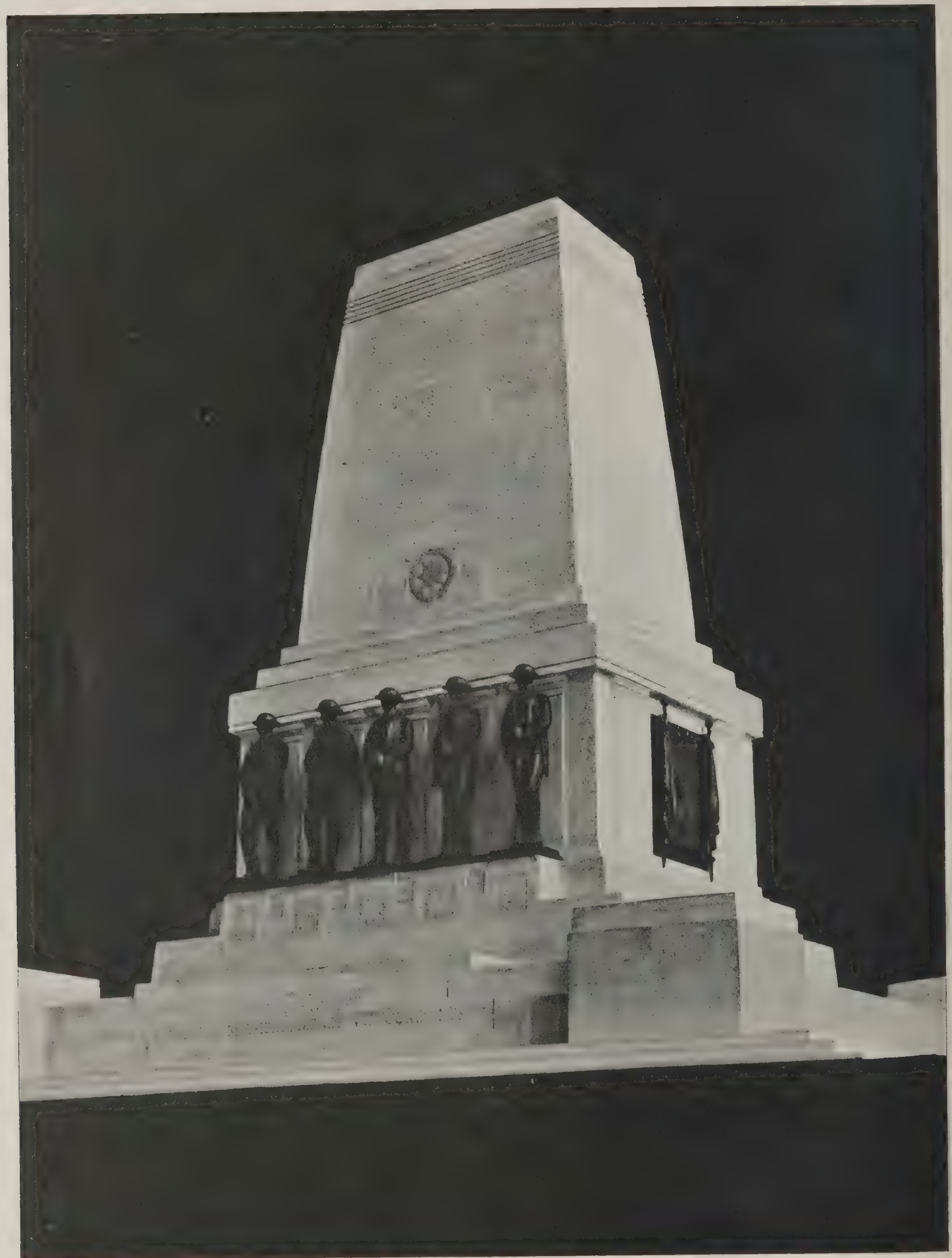
Gilbert Ledward, Sculptor, in collaboration with H. Chalton Bradshaw, A.R.I.B.A., Architect.

*(See also frontispiece.)*

27-29 Tothill Street, Westminster, S.W.1.

# War Memorials. 34.—Sketch Model of the Guards' Memorial, St. James's Park, London

Gilbert Ledward, Sculptor, in collaboration with H. Chalton Bradshaw, A.R.I.B.A., Architect



The Guards' Memorial is to be erected on the west side of the Horse Guards' Parade. The total height of the monument, which is to be executed in Portland stone and bronze, will be 37 ft. and the width across the plinth 44 ft. The upper part of the Memorial will carry the inscription commemorating the Division's dead. A bas-relief at the back shows a field gun in action, in remembrance of the Guards' Divisional Artillery, and on either side are panels giving the Order of Battle—that is to say, the list of all units in the Division—while the five regiments of Guards will be personified at the base by figures of typical Guardsmen, each above the badge of his regiment.

THE
ARCHITECTS' JOURNAL
*27-29 Tothill Street, Westminster, S.W.1.*

nesday, June 27, 1923

Volume LVII. No. 1486

# The Control of Design

VIEWED from a certain aspect it may be said that in so far as architecture reflects the ideas and aspirations of an age it is good architecture; it is, in fact, not divorced from life. But what if se ideas and aspirations in themselves be bad? What uctions as to our ideals and aspirations would a long- nt wanderer, newly returned, make from the vision our streets to-day? Surely he would see in them a ining after self-expression amounting almost to aggres- ; a neighbourly disregard; and, perhaps, a love of ton ostentation. He would read that life was caco- nous rather than harmonious. Yet examining more ly after the first impression, he would find here and e signs of forbearance and of restraint, like a gentle t thrusting up in a bed of richer, ranker, and ill-assorted vths. Such deductions would be a fairly just summary he life which contemporary architecture reflects. Our ern now is to foster the growth of this small plant and spirit of which it is the outward and visible sign.

the past, for the most part, a beautiful town has been outcome of an autocrat or an autocratic rule. A single arch, an emperor, or a powerful prince dictates the that his town shall take—in this way co-ordination is ured. With the growth of democracy, however, there es about a change of values, resulting, at first, in a ntment of control in whatsoever form, but developing at last, little by little, into a realization that civic ity can only thrive where control and co-ordination t.

r some years now the idea of a Ministry of Fine Arts a Commission of Fine Arts has been discussed in limited es, France being inevitably cited as a democratic nation h, by the aid of such control, possesses a capital which beauty is the envy of the world. A few weeks ago, ever, this matter entered definitely upon a new phase n Sir Aston Webb made an announcement at the Royal demy banquet that the Government were actually con- ing the establishment of a permanent Commission of Arts. This body, it is true, is, according to the present osals, to have no executive power, but to be purely sory; nevertheless, its very existence is a tacit acknow- ment of the desirability of some disinterested assembly esentative of a civic consciousness.

gly buildings, aggressive posters, ill-placed statues and uments, badly-designed lamp standards, and such-like t apparatus, will all come within the scope of such a mission which, in fact, will preserve the amenities for sense of vision, as police and local regulations preserve in other respects. To erect an ugly building is to lt the public. A man may not make a grimace at his hbour with impunity, yet he may erect a building, the t of which may be infinitely more devastating, more ersive to the harmony of life than many a small per- l insult which would land the perpetrator in the police ts.

e objections that will be raised to the establishment ch a commission will roughly fall into three groups. e will be those who object on principle to any Govern- t interference; there will be those who consider that building control will be detrimental to trade; and there will be those who think that art will not flourish if subjected to any kind of control. There are fallacies in all these arguments. In the first place, in certain respects government is synonymous with interference. Every statute interferes with the desires of certain individuals. A law against theft interferes with thieves, and constitutes its necessity though not its justification. To the next objectors we would point out that a beautiful city is the first incentive to trade in its wider aspect, for its beauty attracts and promotes foreign intercourse. And the beauty of a city lies partly in unity and in a subordination of the part to the whole.

And as with the town so with the street; a beautiful street is an attraction, and so a stimulus to trade, but a beautiful street is one in which the parts are subordinate to the whole rather than a miscellaneous collection of unconnected and ill-assorted, though maybe individually pleasing, buildings. Finally, there are the objections of those who think that any sort of control must lead to a loss in artistic merit. To such we would point out that art flourishes partly by reason of its limitations, be these limitations of form or of material. The sonnet form in poetry, the sonata form in music have been devised because men felt the need of some such limitation. Architecture is already beset by the physical limitations of materials, the further restriction imposed by environment should enhance rather than diminish the value of a building. And as with architecture so, too, with those other art forms which contribute to the amenities of public life—statues and their pedestals, public monuments, and so on to the lesser appurtenances of pillar-box and sand-bin, they will gain inasmuch as they contribute to a complete civic conception.

Actually, it may be pointed out, we have had a recent example of some sort of Government control over architecture, and ignoring, for the nonce, the much-debated economic aspect, a consideration of which will be no part of the proposed commission's function, it must surely be conceded that the Government's control over housing from 1919 to 1921 has been to the ultimate good of architecture. The control, it is true, was only most indirectly an æsthetic one; nevertheless, a most superficial inspection of the houses which were built under a limited Government control with those which were subjected to no such restrictions will show that control is not of necessity a detrimental influence.

The present resuscitation of town-planning activities is tending towards a realization that urban beauty can only be achieved through control. Orderliness is one of the first essentials for the town beautiful, and orderliness implies control. It has to be realized that architecture differs from other arts inasmuch as it is a public not a personal affair. The denser and more complex a community the greater is the necessity for the careful observances of good manners, reticence, and neighbourly consideration. With architecture the necessity for such observances is equally emphatic, and it can only be achieved where there is some recognized controlling body. The composition of that body is a detail, an important one we admit, that must receive later, albeit careful, consideration. It is first essential to acknowledge and to realize the necessity for such a body, and architects, we think, should be the first to do so. The fact that the announcement that the matter is now receiving serious attention was made by an architect is in itself auspicious.

Every thinking architect must chafe at the ugliness of our streets, and as he traverses them see, with an inward vision, order arising out of chaos. This ideal order where all is harmonious can be achieved only where control is exerted and where each is willing to subordinate to the whole. Too long have we suffered from the creed of uncontrolled individualism to which our towns testify. We require of buildings as of our neighbours that they should conform to an accepted standard of good manners and relinquish their craving after self-assertion. For this reason do we welcome the prospects of a commission that shall exert a beneficial control over our streets.

## Sir John Burnet, Royal Gold Medallist

Sir John Burnet, of whose work we give a large number of illustrations in this issue, together with an appreciation by Mr. Goodhart-Rendel, is a worthy recipient of the Royal Gold Medal. Few architects living can compare with him either in quantity or quality of output, and fewer still may be said to have had so pervasive an influence upon the work of their own time. Yet, unlike so many of his compeers, and despite the temptation to repetition that is the principal danger of a large practice, Sir John has never allowed his work to degenerate into the merely formal or perfunctory; he is too great an artist for that. Mannerisms he certainly has, and they are encountered in buildings of widely differing character; but never do the mannerisms overwhelm the design; rather do they set off and reinforce the individuality of each varying conception. Sir John had experimented widely in forms of beauty as the direct outcome of practical purpose. Never has he set out with preconceived, hard-set theories of design; rather has he allowed function to express itself as naturally and readily as it will in the terms of architecture. It is only when we realize this extraordinary elasticity, adaptability, almost universality of mind that we can understand the diversity of character displayed in his executed works; that we can understand the relationship between, for example, the Drumsheugh Baths and the Kodak Building, the British Museum Extension and Adelaide House. A complete list of Sir John's works is given elsewhere in this issue. Here we have but to add a few biographical notes. Sir John James Burnet, A.R.A., R.S.A., LL.D. (Glasgow), F.R.S.(Ed.), F.S.A.(Scot.), F.R.I.B.A. (to give the complete tally of his distinctions), was born in 1857, and is thus sixty-six years of age. Trained in the Ecole des Beaux Arts, 1874-7, he has travelled widely, notably in Italy and America. He is Corresponding Member of the Institute of France, of the Société Central des Architectes Français, and of the American Institute of Architects. He holds the Bronze Medal of the "Salon," Paris, for the British Museum Extension, and the Gold Medal of the "Salon," 1922. He is also principal architect for the Imperial War Graves Commission for Palestine and Gallipoli. The distinction of the Royal Gold Medal sets the final seal upon a career of extraordinary brilliance, potency, and success.

## Insurance against Defaulting Clients

In this issue a contributor, Mr. Leonard Lait, draws attention to the hard case of the architect who finds himself the victim of a defaulting client. Mr. Lait seems to doubt the practicability of an ordinary insurance to cover this contingency, and suggests that the only satisfactory solution of the difficulty is the formation of an organization properly equipped to deal with cases as they arise, membership of the body being open to all architects by payment of a small annual fee. The first purpose of such a society would be to afford legal aid to members in trouble, but as surplus money accumulated it could be formed into an insurance fund, "which would, in time, enable the society to afford insurance against losses from insolvency and, possibly, against successful resistance by the building owner to th architect's claim on grounds other than that of negligence That there is room for such an organization cannot l doubted, and that it would be strongly supported by arch tects is equally certain. The suggestion is one that mig well be investigated by the R.I.B.A.

## Builders and Architectural Education

Great firms of builders have always taken a keen intere in architecture apart from the practical building metho that go to create it; that they also take an interest architectural education is shown by the endowmen already given by builders to the Universities of Lond and Manchester. That this interest is waxing is to l inferred from the announcement that Messrs. Hollar and Hannen and Cubitts, of London, have offered found in the Liverpool School of Architecture two annu prizes, one of £15 and one of £10, for the best sets of workir drawings made in the school each year. This offer has bee accepted. In their letter to the university offering the prizes to the school they state: "We are greatly interest in the very excellent work the School of Architecture h been doing, and more especially in the great developme it has made in the preparation of fully-dimensioned workir drawings, which are of such assistance to the builder These save much useless expenditure on the part of tl building owners, and we think the matter so importa that we should like to present the above prizes." Messr Holland and Hannen and Cubitts in offering the money the university have suggested that they would like to ha copies of the prize drawings sent them each year and have the right to exhibit them. These conditions, togeth with the foundation of the prizes, are evidence of intelligent interest in the work of the schools which is ve gratifying to architects and all who are interested in arch tectural education.

## Guild Housing, Limited

We are very glad to see that the Guild has been reco structed, and is prepared, under its new name, to ventu into the arena once more. We watched the first experime with a good deal of sympathy, and we were very sorry wh it was brought to an abrupt termination. The Guild ideals are of the highest—good terms for their operative including payment in good and bad weather alike, go materials and sound craftsmanship, and last, but not leas a stipulation that a properly qualified architect shall l employed for all works which they are to carry out. Gui Housing, Limited, has just published an attractive bo of type plans prepared by architects for houses rangi from £498 to £950, the sum named in all cases including tl architect's fee. But, if he prefers to do so, the buildir owner can pay the architect direct, and here we cannot better than to quote the Guild's words: "We are dete mined that every house we build shall be carried out co-operation with a fully qualified architect, and we a prepared to introduce our prospective customers to arcl tects on whose skill and judgment they may rely. Tl architect's fees may be paid direct or through us, as ma be preferred. Alternatively, we are quite willing to wo to plans prepared by architects chosen directly by o customers. In either event the customer remains pe fectly free to obtain tenders from any builder and to pla his order wherever he desires."

## London Traffic

The traffic chaos of the London streets cannot be allow to continue. The suggestion has been made in the Pre that a Committee of Control should be set up. Very goo But no Committee of Control can solve the problem l merely issuing instructions for the regulation of traffic. T plain fact is that the existing streets are inadequate. Wh is required is a Committee of Town Planning to show ho an out-of-date muddle of roadway communications can adapted to modern requirements.

*MONTHLY CAUSERIE*

# Joking Apart

## A Word to Town Planners

THE recent publication of yet another book on town planning will lead some of us to hope that we shall some day see a town that has been planned. We are, it is true, rejoiced by the sight garden villages, so called; but so far as I am aware the y towns in the Empire that have been duly planned and mitted with aforethought are Letchworth and Khar-m. Of Letchworth, speaking for myself, I can only say t among its various merits and conveniences—including convenience of its "Drunkards' Train," which is frail nanity's retort on local prohibition—I have never, as a tor, been able to perceive any more meritorious plan n might be attributed to an active spider; and as the eral scheme of Khartoum was initiated by Lord chener and is "governed by military considerations," so t all other amenities of communal life are subordinated facilities for shooting down the populace with the least enditure of bullets, the plan of the town, although enious, strikes me as exotic and profane.

he fact is that town planning has thus far mainly ex-ssed itself, not in buildings, but in words. To call ention to the fact is not, however, to discredit this uacity. For a hundred years and more our towns have eloped at the instigation of shrewd, hard-headed iness men, who have known little incentive other than -interest, and acknowledged few responsibilities beyond se defined by law. If this deplorable tradition is to be ken down it is necessary that both governments and ividuals alike should be made familiar with the idea t the building of towns carries the obligation to plan in thought for the well-being of the people. The philan-opic impulse which has initiated and supported the sing and town-planning movements, and the enthusiasm hose who have devised practical expedients with which lothe the theories of idealists, is not merely a matter for ise but for thankfulness. It is not too much to say that terity, which is to benefit by our awakened consciences, give a conspicuous place in English history to the ning of the twentieth century as marking the beginning an epoch that saw the principles of humanity first dis-aging themselves from the suffocating stranglehold of nmercialism.

own planning covers vast fields, comprehending, as it s, all that can be learned from the applied sciences, from iology, political economics and art—all of which learning o be combined and welded in that ideal of perfection ich is the essence of beauty. It will have been noticed intelligent observers that most of the commanding cers in the campaign hold the rank and title of professors. w, if we want to understand exactly what a professor is cannot do better than apply to a professor for the in-nation. It happens that a professor who occupies a ir of Political Economy, and holds the highest degrees Moral Philosophy, and whose qualifications for speaking h authority are, therefore, particularly tough and un-ding, has unbosomed himself on the matter. A pro-or, he says, is a man stored with learning who has been jected to the severest tests of examination and duly ified to be completely full and incapable of receiving any ideas. On the ground, therefore, that town planning look for no new ideas under professorial guidance, I ture to present some from a quite different source.

he main accepted governing principles of the art of n planning are not only wrong but utterly fatuous. se principles comprise symmetry, geometrical setting , comprehensive unity, convergence of thoroughfares n important buildings, and so forth; but in obedience these principles the town plan has become, first and foremost, a thing to be esteemed for the attractiveness of the pattern the town would exhibit to a bird flying overhead. The delectation of passengers in its streets, and not of passengers in the air above it, is, however, the aim of the planner of towns: what, then, is the effect upon the town dweller of the symmetry, geometrical ingenuity and convergent thoroughfares provided for him with such stress of thought and invention? The answer is: a sense of being borne down by the unutterable, weary monotony of his surroundings.

As three principles of town planning have been cited, so may three causes for the dreariness resulting from them be expounded. The gratification we receive from the neat orderliness, balance of parts, and emphasis of proportion which attends on symmetry can only be felt when symmetry manifests itself as a whole. If I view a piazza and then, after walking three-quarters of a mile, come upon another piazza exactly similar, I get no impression of symmetry, or order, or balance, but merely one of redundancy and boredom. If I continue on my way under the general impression that I am going forward, and come upon another piazza like the last, and then even to a fourth or a fifth and sixth, my boredom becomes coloured with confusion of mind; I am like a man in a trap. If I still advance and find by noticing the position of the sun that instead of going forward I am retracing my steps, and am then finally brought to my senses by the shock of finding myself back at the point from which I started—why then I shall feel baulked and exasperated, and shall have experienced the delights offered to the stranger by a plan which would be accepted as "ideal" and worthy of distinction by the town-planning fraternity—as witness, for instance, Scamozzi's ideal plan or Mr. Sulman's proposals for Canberra. In nearly all town plans you will find such features as twin avenues each with eight-and-forty pairs of lime trees, the poor bemused planner conceiving he is obtaining a grand effect of balance and symmetry although his two avenues may be a mile apart.

Attendant on this source of dejection and dreariness is that deadlier monotony due to living in a geometrical pattern from which it is impossible to escape. A plan has been instanced above which the town planner, with stoic disregard for its destructive influence on the souls and imaginations of the unhappy people who may one day inhabit it, quite lightly and cheerfully calls a "radially planned city." Milan is an actual example of such a plan rendered in a loose, vague, uncertain form. It exhibits no hoof-mark of the town planner; the line of its radial thoroughfares was not determined by a mahogany T-square, but by the ox wagon. Yet Milan, though thus softened by its casual mediæval origin, lacks by force of its geometrical plan nearly all the mystery, character, and legendary and traditional glamour which make an ancient historical city a delight to experience and a joy to remember. The place soon fixes itself in the visitor's mind in the image of a huge sprawling starfish. All roads outward lead to the fortifications; all roads inward lead to the Piazza; all roads right and left lead the traveller back into his own tracks. In a week the place has exhausted itself: the visitor feels as though he were in a cage. Lastly, as though his other devices failed to effect the uttermost, the town planner takes special pride in arranging so that the largest possible number of roads shall all offer exactly the same prospect. This he calls "convergence of thoroughfares." Must it really be that only when these mistakes have been perpetuated in actual cities the town planner will learn to avoid them?

KARSISH.

# The Work of Sir John Burnet, Royal Gol Medallist

### By H. S. GOODHART-RENDEL

ROBERT ADAM was a Scotsman, and was the greatest and most prosperous British architect of his day. Sir John Burnet is a Scotsman, and is, I think, the greatest British architect of the present time. I do not expect that he is the most prosperous; greatness and prosperity go together less often than they did. Between Adam's day and ours there has been a period during which the two things at times became almost incompatible. Days when a Tite was preferred before a Cockerell, a Sir Gilbert Scott before a William Burges.

If Sir John Burnet had obtained, as Robert Adam did, a share of opportunities proportionate to the supremacy of his genius, it is possible that his genius, like Robert Adam's, would have been overworked. There will come a time when it will seem as stupid that such and such a public building was not confided to Sir John as it seems now that the architects of our early Victorian town halls were allowed so to waste good stone during the lifetime of Sir Charles Barry. I suspect, however, that the cleverly organized mass-production of the Adam firm would be impossible with the subtler and more thoughtful art of their present-day compatriot, and that Sir John has done in quantity as much as one man can of that which is superlatively good.

Not that Sir John has not designed a large number of important buildings; I am merely complaining that there is too large a number of important buildings which he has not designed. It seems such a pity that there are so many modern shops not at all like Forsyth's, so many modern hospitals not at all like the Carlisle Infirmary, so many modern kirks not at all like the Barony kirk. Continually one finds the architectural profession agonizing over the penultimate or the ante-penultimate word in some kind of building, when Sir John has said the last word twenty years before. There is no need to imitate the qualities of his design, which are idiosyncratic, but there is, on the other hand, no excuse for doing things which he has made out of date once and for all.

Take, for example, the problem of the big shop on several floors. The first of these in London was, I believe, the Army and Navy Stores, which is merely a perfunctory adaptation of a Gothic distillery designed by Messrs. Mayhew and Calder. Shortly after this came the Junior Army and Navy, housed in an old building of Decimus Burton's now known as Carlton Chambers. The Civil Service Stores were the first to build their own premises, the architecture of which (designed by the late Mr. Verity) is elegant enough, but fully as inexpressive of the shop idea as were, perforce, the older adaptations. Next came a host of buildings, all alike in the illogical preservation of a domestic character in the stories above the shop front. Messrs. Jenner's shop in Edinburgh (Messrs. Rhind, architects), is an average example of this kind. It was Sir John who first perceived that the façade of a block of superposed sale-rooms ought to be homogeneous in design; that shop over shop should not look like house over shop. Messrs. Forsyth's building, and the big stores in George Street, inaugurated in Edinburgh the proper type of this department of commercial architecture. Less naif than the Wertheim shop in Berlin, less provoking than the classic Magasins du Printemps, less bathotically monumental than the Selfridge building (which Sir John is now completing, in bondage to the first design), these two admirable structures body forth the whole spirit of modern advertising trade. Here is an attractive architecture, at once capricious and learnedly allusive, playing round the stern lines of the structure like a luxurious counterpoint of Bach.

And yet, after this had been done, we were to have large furniture firm standing Hampton Court on stilts i the middle of Oxford Street.

It is the same thing with warehouses, only here ther is less excuse for the modern designer who misapprehend his programme. In the nineteenth century warehouse were designed well enough until Edward Walters, with th snobbishness of his epoch, thought that they would loo better if they were made to imitate Italian palaces. Th Gothic revival relieved us from the incubus of Walters' exaggerated cornices and produced one perfect little poer of warehouse-building by Burges in Upper Thames Street otherwise it substituted new evils for those which it swep away. To it we owe the turrets in which nestle forgotte crates and hampers, the oriels from which bales of good look coyly down, the richly traceried windows temperin the daylight of galleries blocked to the ceiling with case Stained glass in warehouse windows is not unknown. Jus as it is now the fashion in Central Europe to make an building whatever look like a warehouse, so it was th fashion in Great Britain fifty years ago to make a warehous look like any other building whatever—but never like warehouse.

Sir John Burnet's Kodak warehouse looks so much like warehouse that there are some who resent its presence i Kingsway. It was nothing to do with its architect whethe or not the London County Council should allow a ware house in an important boulevard; he built what was de manded of him, and built it well and beautifully. At th time of its erection the best modern warehouses in Londo were those which were indebted, more or less, for thei style to foreign counterparts of the Middle Ages and th Renaissance, such as the designs of the late Mr. Joh Belcher, the late Sir Ernest George, and Mr. George Somer Clarke. The Kodak warehouse wears no borrowed plume it is entirely original, entirely logical, and entirely satis factory.

If we were to take stock of British progress in variou kinds of architecture during the last hundred years w should probably regard that made in the designing of ho pitals with the greatest complacency. True, the plan Robert Adam's old Glasgow Infirmary, built in 1793, wit its wards lit on both sides, is not so far behind moder notions as might be expected from its date, but this pla was a freak, and cannot be thought of as characterist of an eighteenth-century hospital. Generally speaking, th reign of Victoria coincided with the whole advance fro the insanitary square block to the pavilion type of plan.

But the appearance of the average modern hospital deplorable, ranging from the ungainliness of the chea Union Infirmary to the blood-coloured hideousness of th great building at Birmingham. Fortunately, there a exceptions to this condition of things, and foremost amo these exceptions are all those hospitals designed either b Messrs. Adams and Holden or by Sir John Burnet, whic æsthetically as well as practically are among the be modern works of architecture which Great Britain ha produced.

Sir John has designed buildings of the kind at Glasgo at Carlisle, and at Kilmarnock, and in all of them is appare his wonderful skill in devising exactly the best arrangeme of plan for use, and letting that arrangement shape th architecture of the whole structure.

It is, in fact, in the reconciliation of conflicting requir ments and the simplification of complex problems in desig that Sir John peculiarly excels. The external form of h ildings is as inevitable as the outward form of an animal; ch is its anatomy, such are its habits—then so must it ok, there can be no question about it. And since Sir hn is a master in devising exactly the proper kind of atomy for his architectural creatures, it follows that, atever their functions, they are always healthy and mely. The divers rooms and laboratories which he has nned for Glasgow University all look as though their m and arrangement had been evolved by those who use m.

SIR JOHN JAMES BURNET, A.R.A. ROYAL GOLD MEDALLIST, 1923.

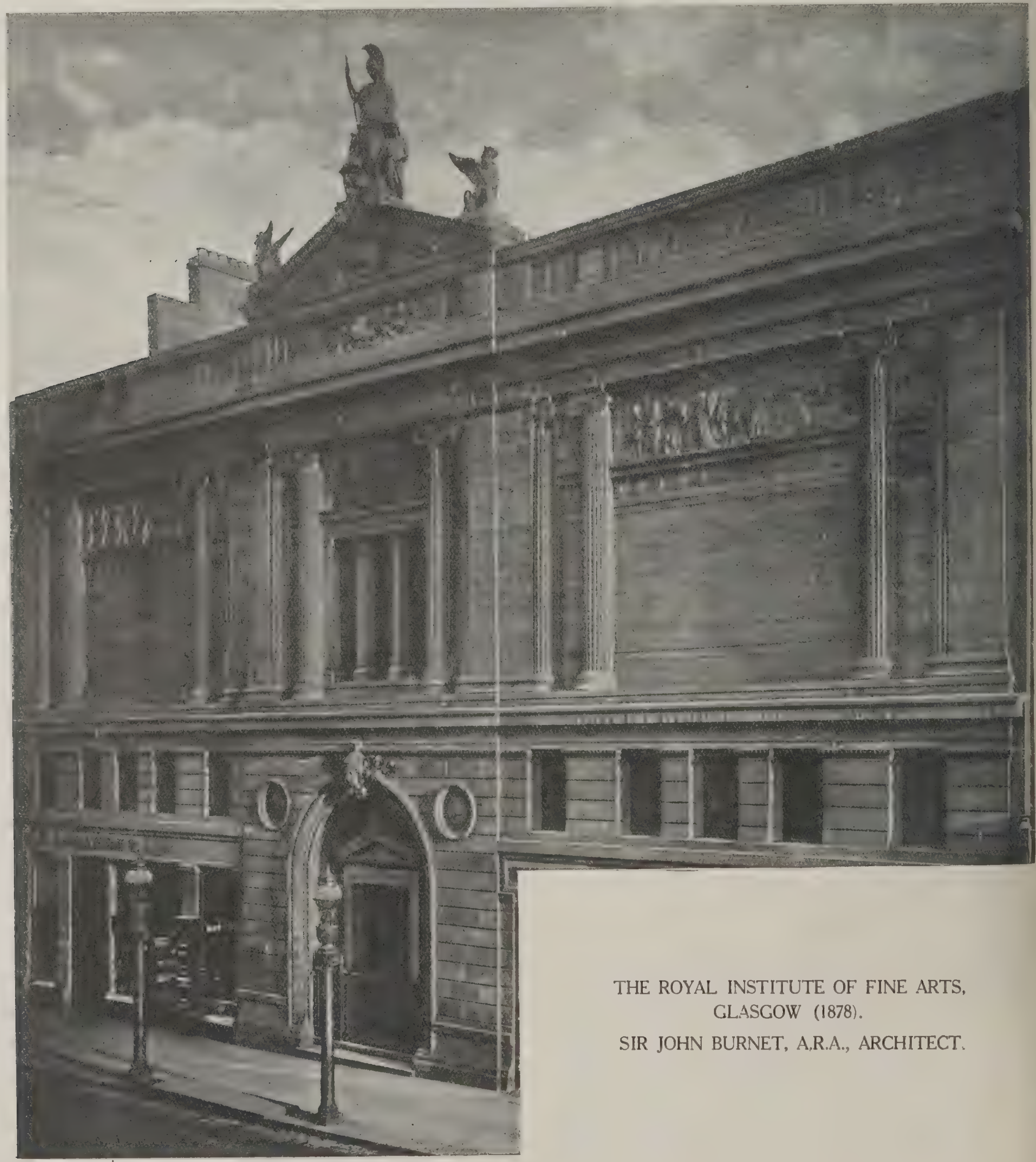
Probably few Englishmen think of Sir John as an archi- t of houses, and I do not know how many he has built. t in this, too, I think he can claim to be a pioneer, since design which he made for Mr. Broom's little house at ipbelltown seems amazingly anticipatory of modern olicity when its date (1898) is considered. I remember esign for a small hotel at Lochranza which was more ventional, and it may be that Sir John, like other men, had to conform to the sentiment of the day in building es for people to live in. I expect that he has had to gn a baronial villa or two, and I do not doubt that a nial villa by Sir John would be more than tolerable. rtainly he has had to design Gothic kirks, which seems n Englishman an illogical sort of thing to have to do. ing aside all considerations of sentiment or religious ook, there is an essential antagonism between the archi- ure of Catholicism and the theory of Protestant wor- which it can hardly be profitable to excite. This, ever, is the business of those who use the building, not of the man who designs it, and Sir John's Barony Kirk at Glasgow and the kirk at Arbroath are both beautiful and convenient buildings of which it would be hypercritical to cavil at the style. In countries in which the ancient religious buildings are in Protestant hands it is natural that a number of sacred associations should have grown round forms which were spiritually alien in origin. In a city like Glasgow where the glorious Cathedral of St. Mungo has long been the centre of the religion to which it is now devoted, it is understandable that Scottish romanticism should tend to discard the Protestant classicism of St. Andrew's, St. Enoch's, St. George's, or St. Paul's, and should rather adapt to its new purposes the forms of an art more ancient and national. The eclectic design, however, of Sir John's Christian Scientist building at Kensington shows that he has many resources of a really fertile and original kind ready for the use of kirk builders when they shall demand them from him.

The greatness of Sir John's achievement in monumental architecture can never be ignored in the city to which he has given the noble back façade of the British Museum. Unable to find any other detail which is open to criticism in this magnificent work, faultfinders have concentrated their efforts upon the central doorway, which, they allege, fails through being neither one thing nor the other—neither an imposing entrance nor a mere doorway of accommodation. To admit that there is some justice in their contentions is not to acquiesce in their severity; and since in such matters it is better that each man should speak for himself, I may say that the doorway does not seem to me to be satisfactory. The great difference in merit, however, between this façade and that of any other recent public building is that here if one wishes to object to anything it must be to the doorway, while elsewhere if one wishes to object to anything it is difficult to know where to begin.

I do not propose here, however, either to describe or to indicate the especial beauties of particular buildings designed by Sir John, but rather to fill the space remaining to me by a few general remarks about his work in the mass. Sir John, as everybody knows, is an architect's son, and got his architectural education in Paris. We are all believers nowadays in the great worth of that best training ground of architects in the world, the Ecole des Beaux Arts. Such an education appears to us the best that an architect can have. When Sir John was a student, however, I imagine that there was no unanimity even among competent persons about the value of early discipline in architectural studies. The champions of imagination unchastened by knowledge or tradition were many. Men gloried in putting a pediment where they felt like putting a pediment, and dreaded lest if they learnt what a pediment meant they would lose the intermittent impulse towards such a featu which was their guide. Knowledge was feared.

Edinburgh and Glasgow were probably at all times durir the last century less completely inundated by romanticis than the other large cities of Great Britain. Edinburg had her Playfair to look back upon ; Glasgow her Hamilto The classic tradition lived late in such men as Rhind ar Bryce in Edinburgh, as Barclay and Clarke and Bell Glasgow. Struggling with it always was the strong for of Gothicism, aided by the patriotic recommendations "baronial." Alexander Thomson in Glasgow had attracte the attention of Europe by his experiments in picturesq restatement of primitive classicism, and with his imitato James Baird, had borrowed some of their lawlessness fro his Gothic enemies. Thomson died, and a new generatic arose, a generation not ignorant of the attempts of Norma Shaw and others to recapture the Wren tradition. Tl small-featured Renaissance, which terra cotta had brougl to London and the Midlands, had its influence also in tl northern cities.

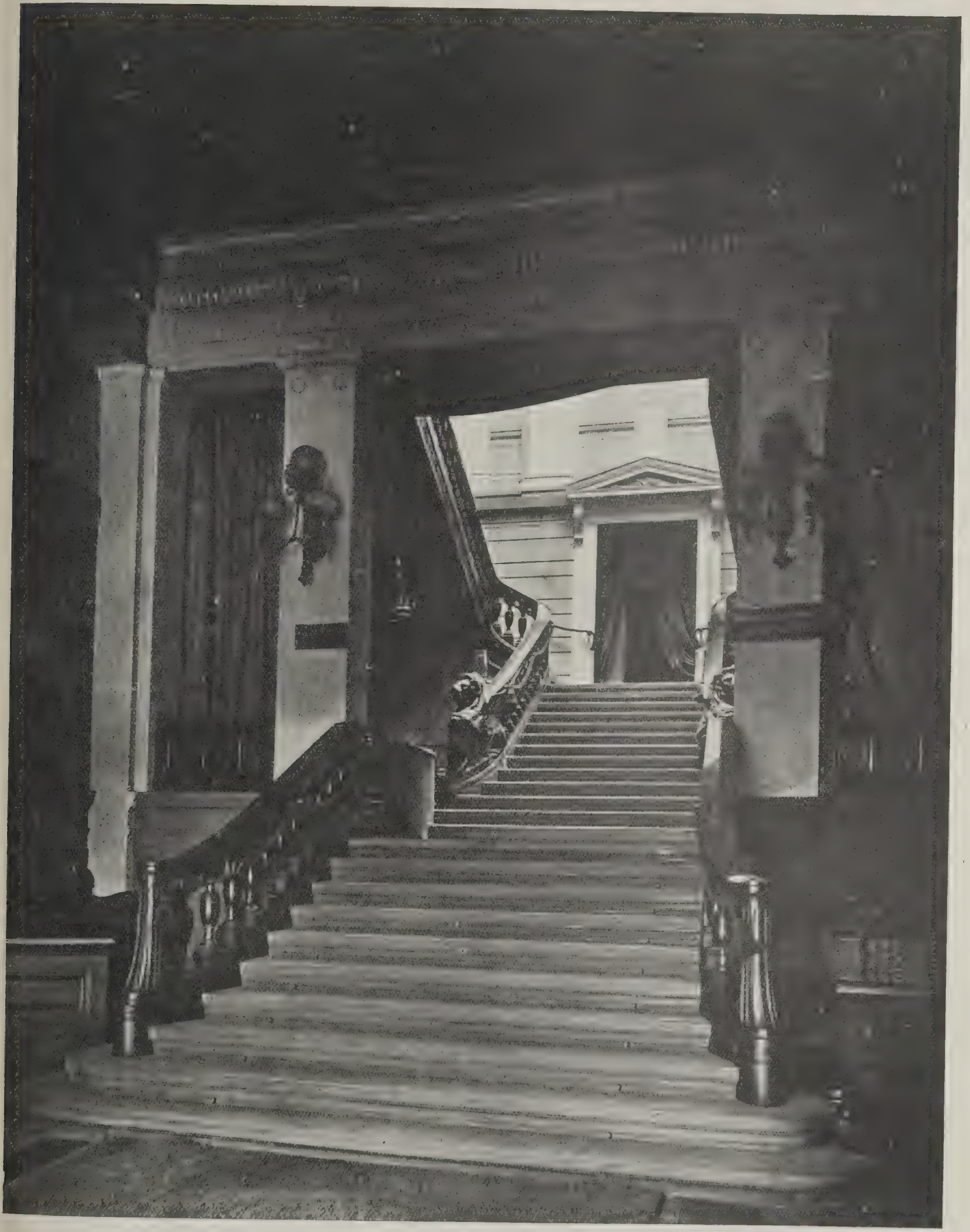
Into this welter came Sir John, armed with a faultle technique, a rich imagination and a strong individualit



THE ROYAL INSTITUTE OF FINE ARTS, GLASGOW (1878).
SIR JOHN BURNET, A.R.A., ARCHITECT.

# The Royal Institute of Fine Arts, Glasgow (1878): The Staircase

Sir John Burnet, A.R.A., Architect



The Royal Institute of Fine Arts, Glasgow, is one of Sir John Burnet's earliest works, and, in the opinion of many, one of his finest. A fine feature of the interior is the dignified and spacious staircase shown above.

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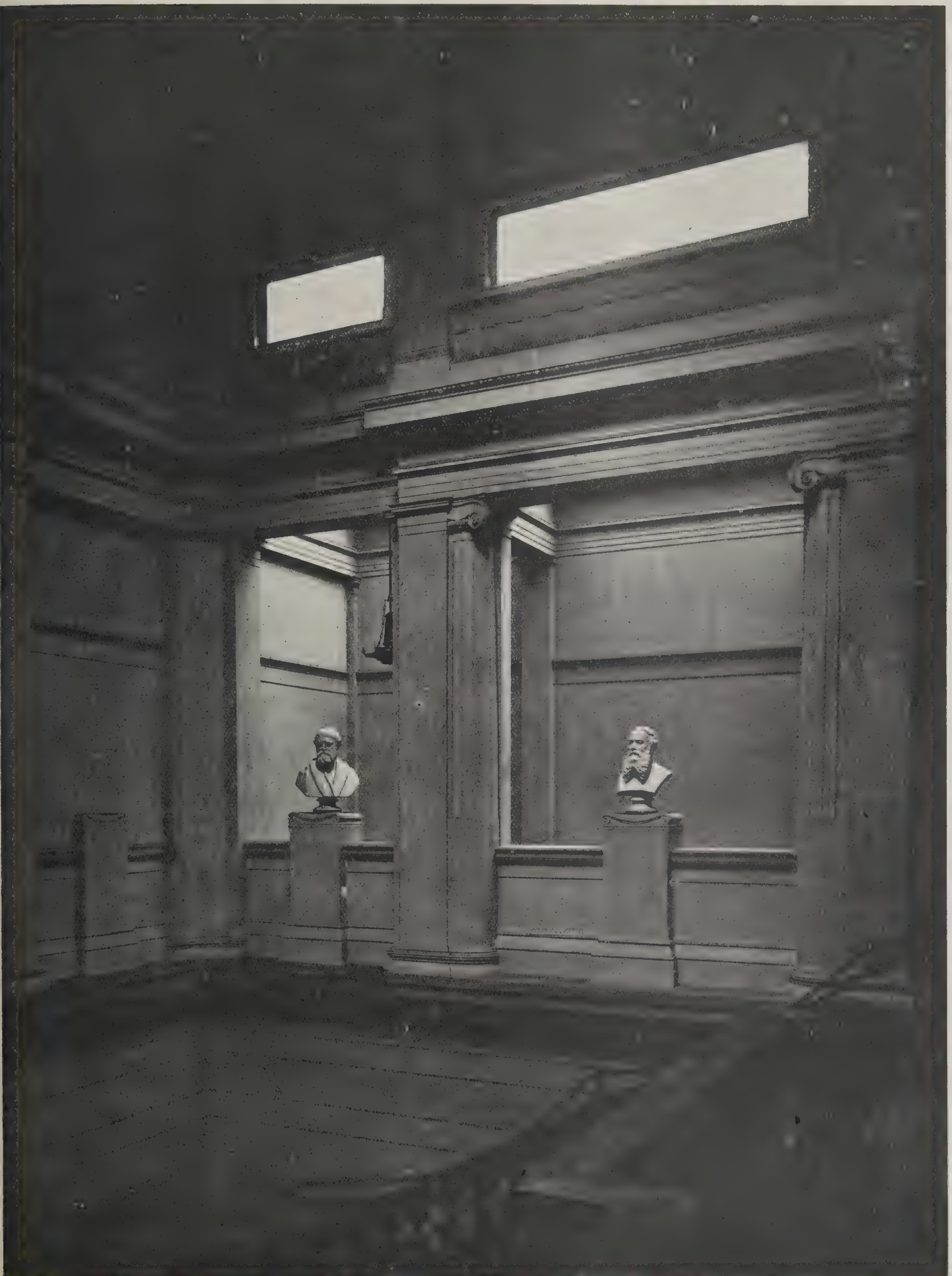
# The Royal Institute of Fine Arts, Glasgow (1878): The Staircase

Sir John Burnet, A.R.A., Architect



The well of the staircase from the first-floor level. A view from the ground floor is given on the preceding plate.

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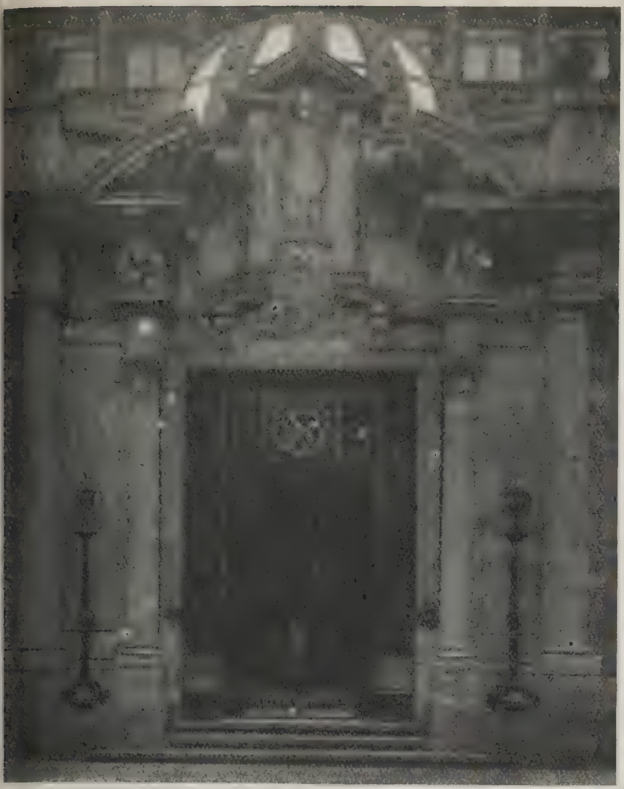
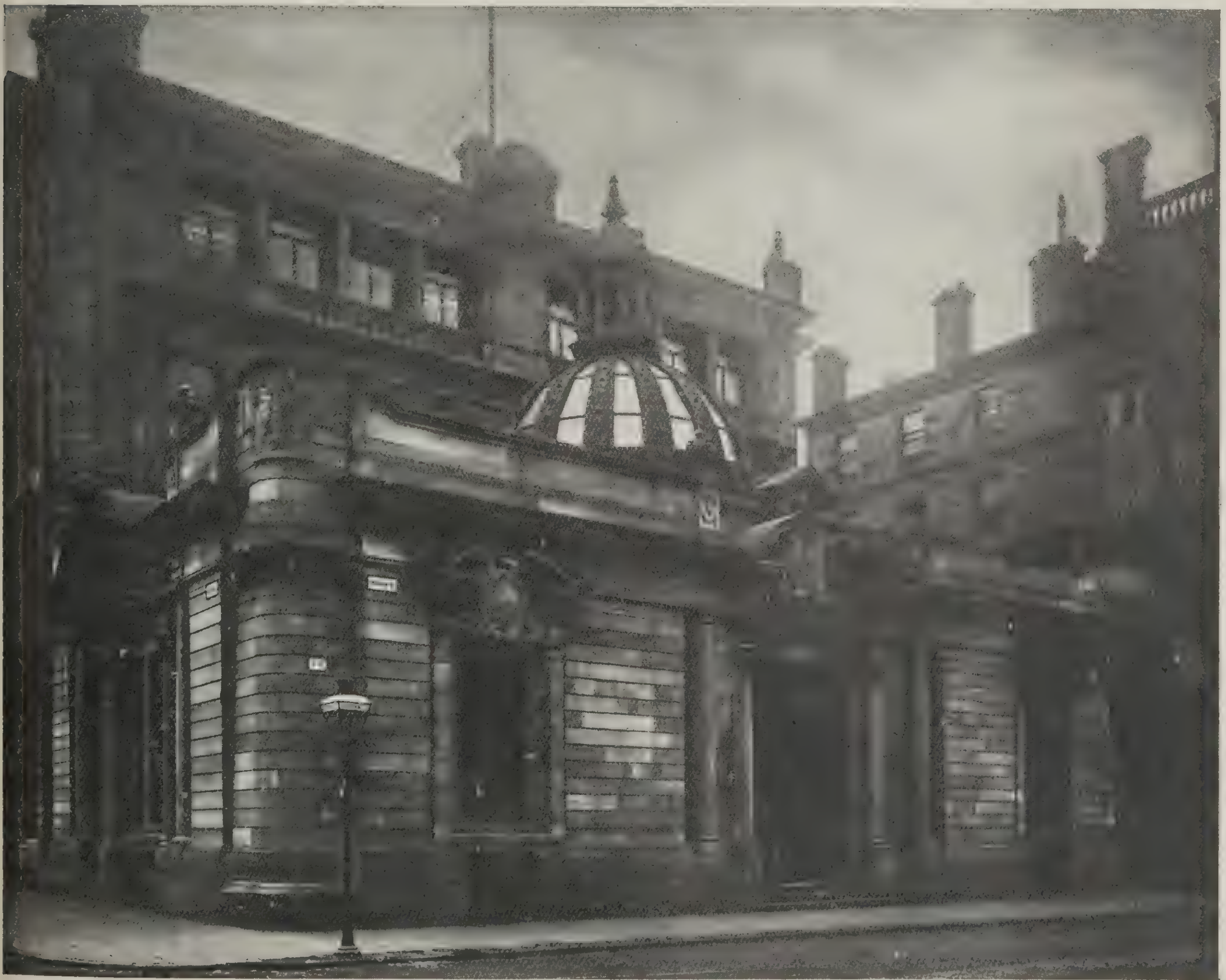


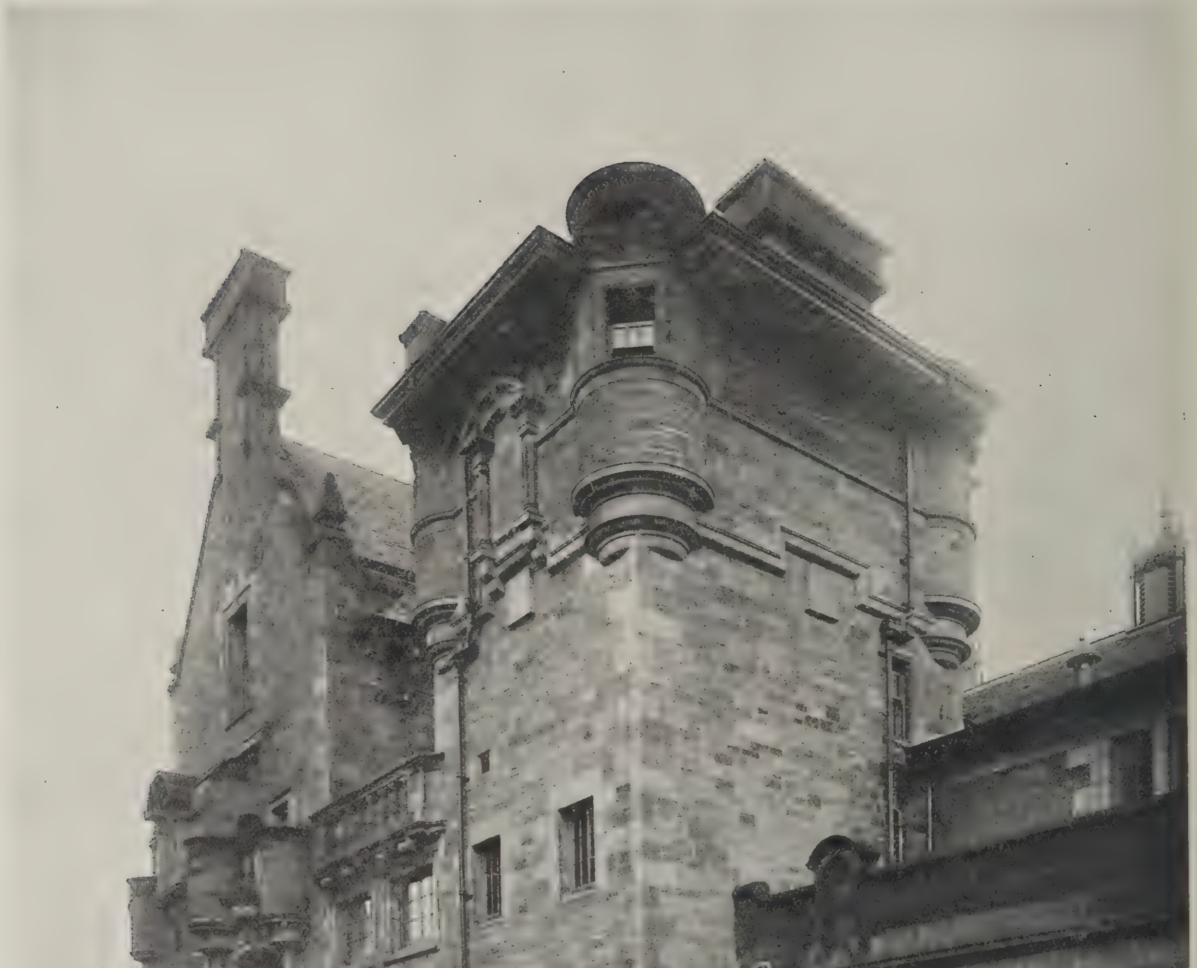
THE SAVINGS BANK OF GLASGOW (1894-1900): DETAIL OF ENTRANCE

French ways became him well, as they become every Scotsman. I wonder if he realizes how positively if undefinably Scottish all his work is, never more so than when it savours faintly of Paris. Let anyone study the tablings and corbellings of a Scottish Renaissance chateau, the amusing quibblings and ingenuities of mouldings infinitely mitred and returned, and then turn to the subtle play which Sir John makes with flat bands and slightly projecting surfaces. Let anyone compare these two and decide whether they are not different expressions of the same impulse in design. The concentration of the richest shadows at the top of a design, which Sir John so often delights to contrive by means of a loggia—is not that also equivalent to the delightful things which in a fortified building can only happen high up out of harm's way? The contempt for artificial symmetry, the matter-of-course acceptance of symmetry when it arises naturally—are not these also characteristics both of the French and of the Scottish mind?

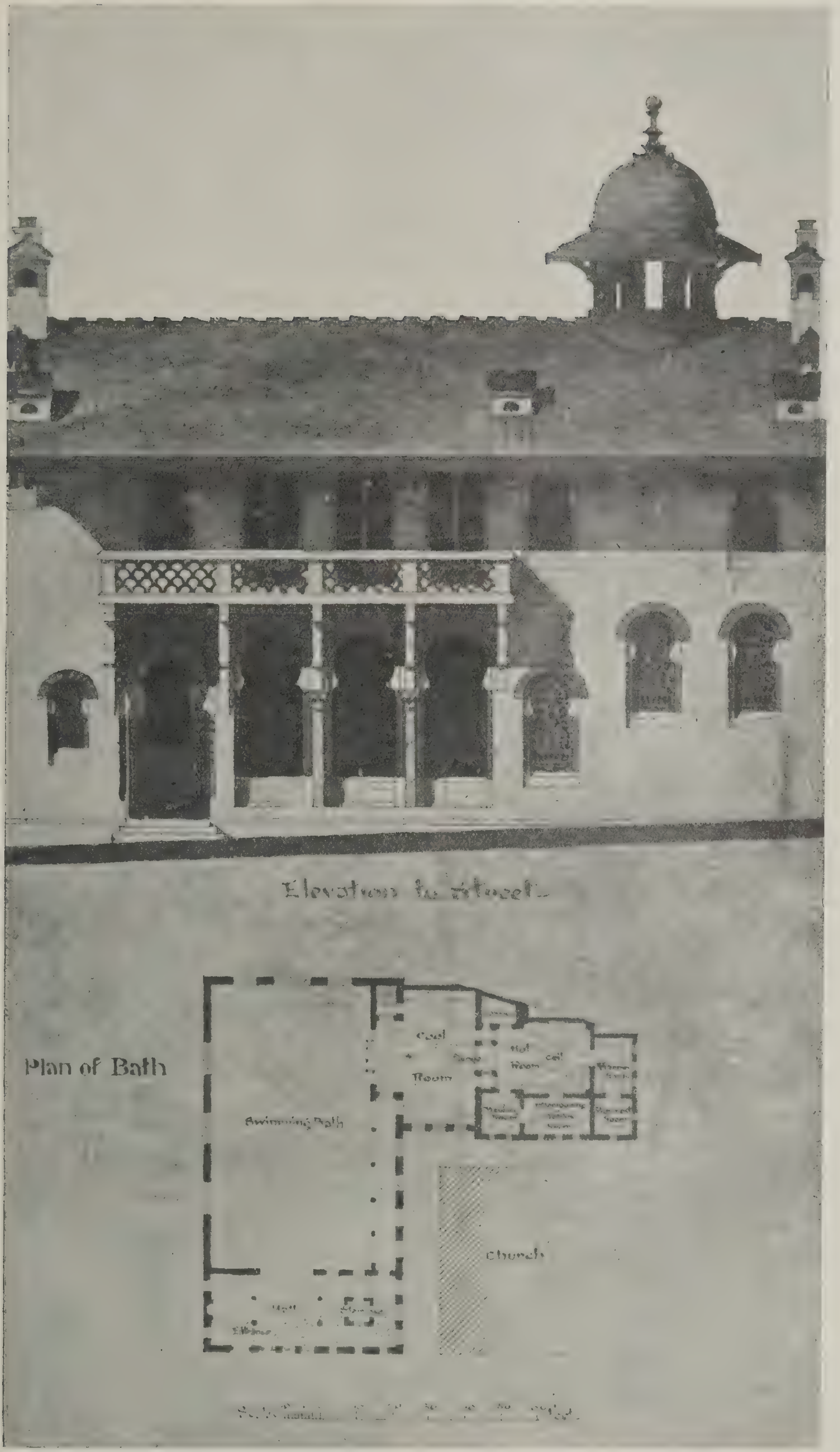
I do not suppose if Sir John were now to design again the façade of the Glasgow Athenæum in Buchanan Street, which he built in 1891, that he would do exactly what he did then. But of its kind I doubt if he or anyone else could make it better. If to modern taste it seem a little restless, it is amazingly clever and picturesque, and to me has always been as delightful and exciting as a good adventure story. This is the kind of romance without a little of which northern architecture cannot thrive; and against which it seems to me that we are now in excessive reaction. In its turn it, I suppose, was a reaction against learned platitudes of the Smirke and Playfair order, platitudes which are sometimes enunciated over again nowadays, I think, unwisely. Sir John's designs are never prim, their



THE SAVINGS BANK OF GLASGOW, INGRAM STREET, GLASGOW (1894-1900).
SIR JOHN BURNET, A.R.A., ARCHITECT



THE PUBLIC BATHS, ALLOA (1895–99): DETAIL OF CISTERN TOWER
SIR JOHN BURNET, A.R.A., ARCHITECT.



DRUMSHEUGH SWIMMING BATHS, EDINBURGH (1900)
SIR JOHN BURNET, A.R.A., ARCHITECT

scholarship never kills joy. Sculpture he loves, sculpture often full of movement, and placed with a skill and artifice which are astonishing. Indeed, his adroit though sparing use of brilliant points of sculptural emphasis in a design is one of his most successful processes. The illustrations to this article will show so many striking examples of sculpture used to "pull together" a design that I need make no attempt at a fuller description of this characteristic. In all Sir John's work there is a quality of directness and essential simplicity which makes detailed description unnecessary and even impertinent; it makes its effect simply and immediately, and needs no exposition.

Following is a list of Sir John Burnet's works :—

### LONDON :

- British Museum Extension, King Edward VII's Galleries.
- General Buildings, Aldwych, for the General Accident, Fire and Life Assurance Corporation, Ltd.
- Kodak Building, Kingsway.
- Institute of Chemistry, Russell Square.
- Selfridge Extension, Oxford Street, W.1.
- Adelaide House, London Bridge.
- Second Church of Christ Scientist, Palace Gardens Terrace.
- Vigo House, Regent Street (now in course of erection).

### RAMSGATE :

- Scheme for the East Cliff Gardens.
- Improvement Scheme for the Sea Front.

### SCOTLAND :

#### *Churches.*

- Barony Parish Church, Glasgow, 1886–9, 1898–1900.
- Arbroath Parish Church, 1894–6.
- Gardner Memorial Church, Brechin, 1896–1900.
- The McLaren Memorial Church and Manse, Stenhousemuir, 1897–1900, 1905–7, etc.
- Parish Church, Lossiemouth, 1899–1903.
- Rutherglen Parish Church, 1900–2.
- Broomhill Congregational Church, Glasgow, 1900–8.
- Wemyss Bay Church, for Lord Inverclyde, 1901–2.

#### *Residences.*

- Loch Ranza Hotel, Arran, 1895.
- Glasgow Workmen's Dwellings, Green Street, Glasgow, 1898–1901.
- House at Kilwinning, for Mr. R. C. King, 1898–1901.
- Marine Hotel, Elie—additions, 1900, 1904–6, 1907–8, 1910–11.
- Charing Cross Mansions, Glasgow, 1901.
- Fairnalie Mansion House, near Selkirk, 1904–6.
- Trochrague House, near Girvan—additions for Mr. George Todd, 1910–13, 1915, 1920–3.
- Duart Castle, Isle of Mull—restoration for Sir Fitzroy D. MacLean, Bart., K.C.B., 1911–16.

#### *Hospitals and Infirmaries.*

- Glasgow Royal Asylum—
  - New Entrance and Gate Lodge, 1898–9.
  - New Church, 1904–6.
  - Additions to South Wing, East House, 1907–9.
  - New Boiler-house, 1908–9.
  - Extension to Laundry Building, 1910–12.
  - West House alterations, 1913–14.
  - Piggeries, 1900–1.
- Glasgow Western Infirmary—
  - Pathological Institute, 1894–6, 1912–14.
  - Dispensary, 1902–5.
  - New South-west Wing, 1909–12.
  - New Clinical Laboratory, 1910–12, 1914.
  - New Dietetic Kitchen, 1911–12.
  - New Admission Block, 1913–16.
  - Laundry Extension, 1913–14.
  - Massage Building, 1920–1.
  - Nurses' Home Extension, Nurses' Lecture Theatre, New Chapel, 1922–3.
- Cumberland Infirmary, Carlisle—
  - Extensions, 1908–12.
  - Out-patients' Department, 1912–13.
- Elder Cottage Hospital, Govan, 1910–12, 1914.
- Royal Hospital for Sick Children, Yorkhill, Glasgow, 1911–16.
- Kilmarnock Infirmary—
  - Extension, 1912–16.
  - New Ward Block, 1st section, 1915–18.
  - New Ward Block, 2nd section, 1920–2.
  - Administrative Block—alterations, 1921–2.
  - No. 1 Block—alterations, 1921–2.

#### *Business Premises.*

- Savings Bank of Glasgow, Head Office, Ingram Street, 1894 1900.
- Clyde Navigation Trust, Glasgow, 1883–6, 1906, 190 1913–14.
- Glasgow Stock Exchange—additions, 1894, 1896–8, etc.
- R. W. Forsyth, Ltd., Glasgow—additions, 1896–8, 190 1902, etc.
- Albany Chambers, Glasgow, 1896–9.
- Atlantic Chambers, Glasgow, 1899–1901, 1906, 1908.
- Bakery, Sauchiehall Street, Glasgow, for Mr. Geo. Skinne 1900–2, 1920.
- Professional and Civil Service Supply Association, Ltd., Georg Street, Edinburgh, 1903–7.
- Union Bank of Scotland, Ltd., Branch Premises, Lerwic Shetland Islands, 1904–6.
- Wm. McGeoch & Co., Ltd., New Warehouse, West Campbe Street, Glasgow, 1905–9.
- R. W. Forsyth, Ltd., New Warehouse, Princes Street and S Andrew Square, Edinburgh, 1906–10, 1923.
- Merchants' House, George Square, Glasgow—additions, 190 11, 1913–14.
- Wallace, Scott & Co., Ltd.—
  - Tailoring Institute, Cathcart, Glasgow, 1913–16.
  - Pergola and Retaining Walls, 1919–20.
  - Lych Gate, 1920–1.
  - Internal Alterations, 1921–2.

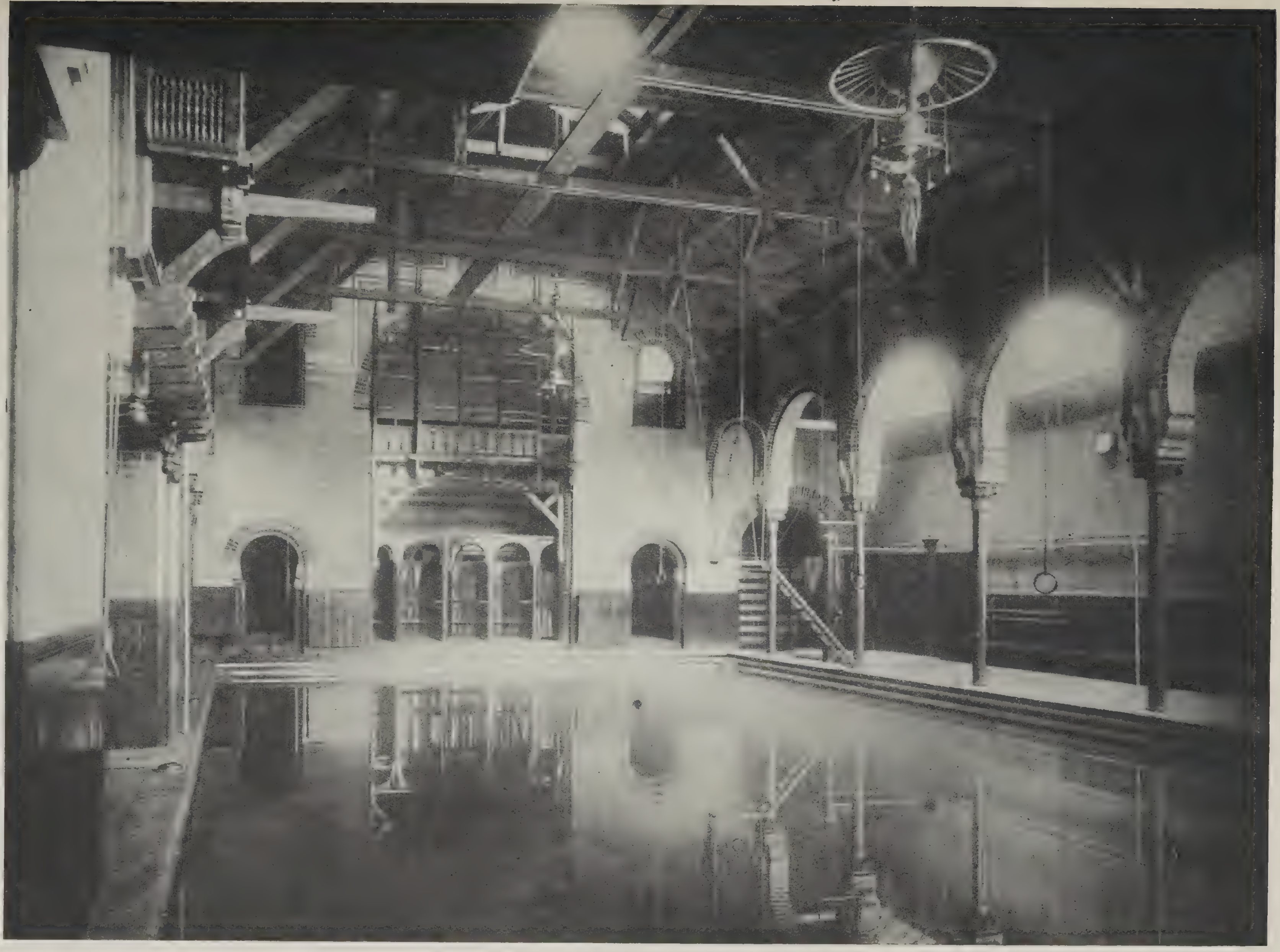
#### *Institutions, Public Buildings.*

- Royal Institute of Fine Arts, Glasgow, 1878.
- Edinburgh International Exhibition, 1886.
- Glasgow Athenæum, 1886, 1890, 1891–3, etc.
- Glasgow Central Railway—
  - Glasgow Cross Station, 1895.
  - Anderson Cross Station, 1895.

(*Continued on page* 1089.)

DRUMSHEUGH BATHS, EDINBURGH: THE DIVING NICHE.

Sir John Burnet, A.R.A., Architect



In the design of the Drumsheugh Swimming Baths Sir John Burnet entirely avoided conventional practice and adopted a quasi-Oriental style, which has a peculiar appropriateness to purpose.

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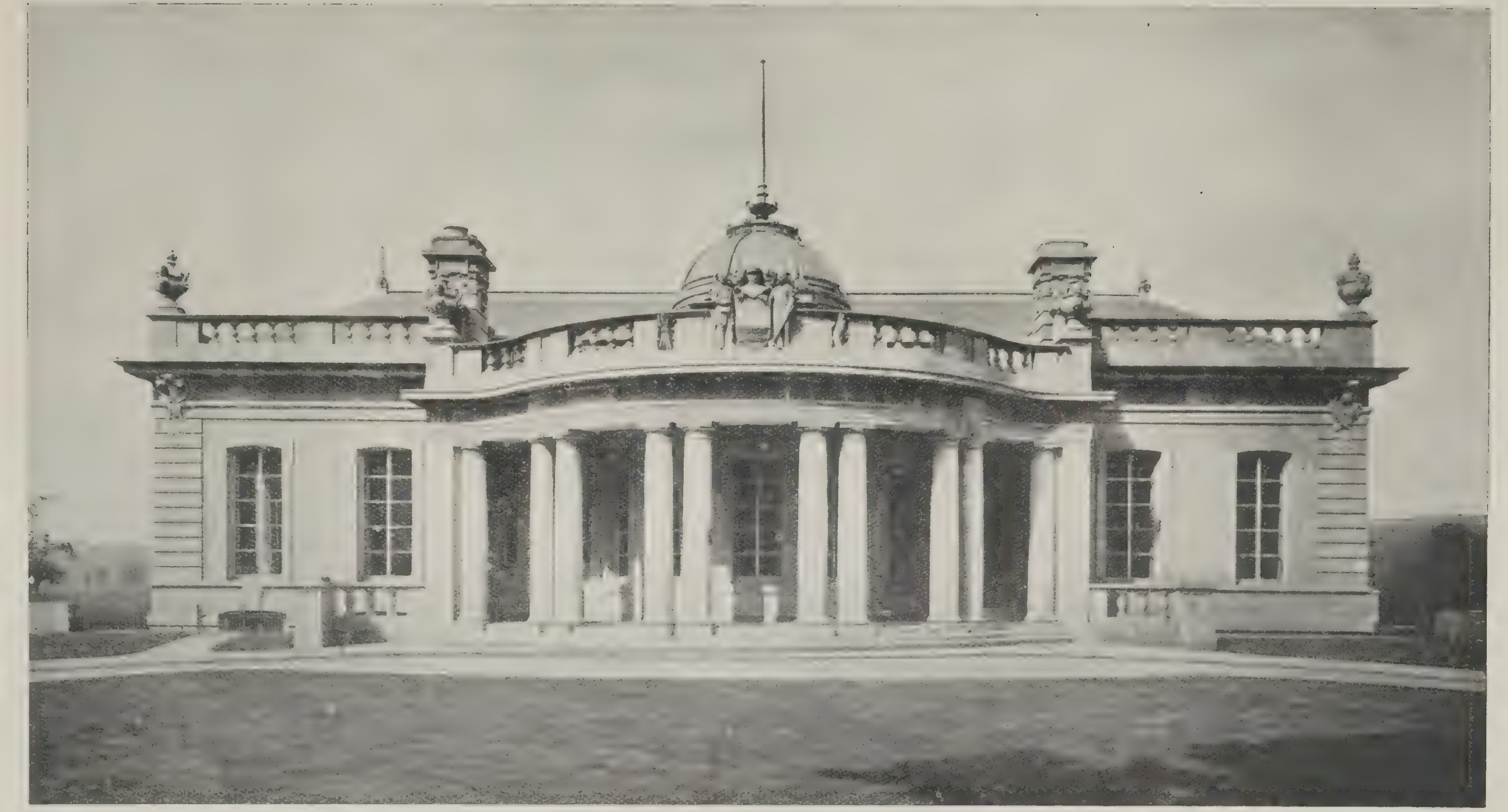
## The Elder Public Library (1903-4)

Sir John Burnet, A.R.A., Architect



The Elder Public Library is one of Sir John's most interesting essays in informal design on a small scale. The influence of Beaux-Arts training is here apparent.

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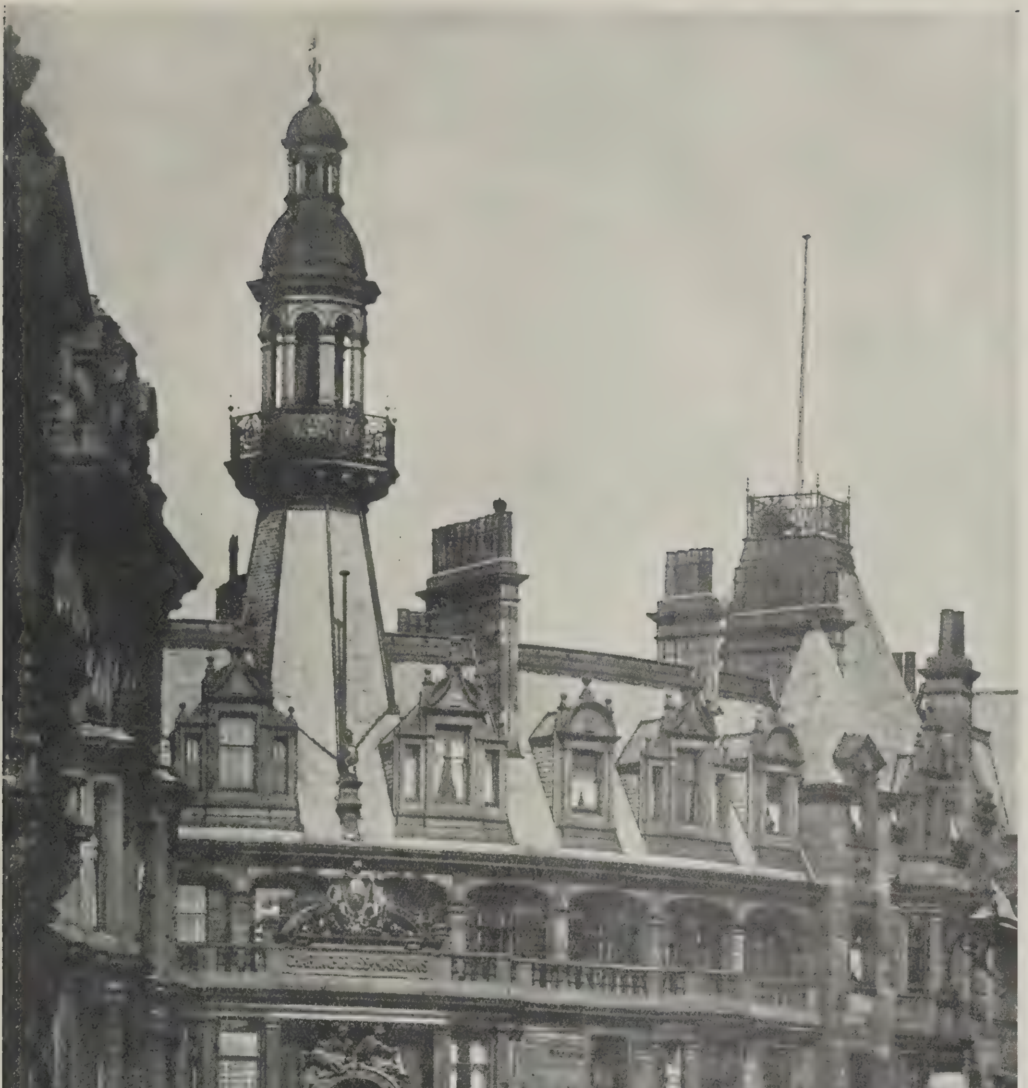
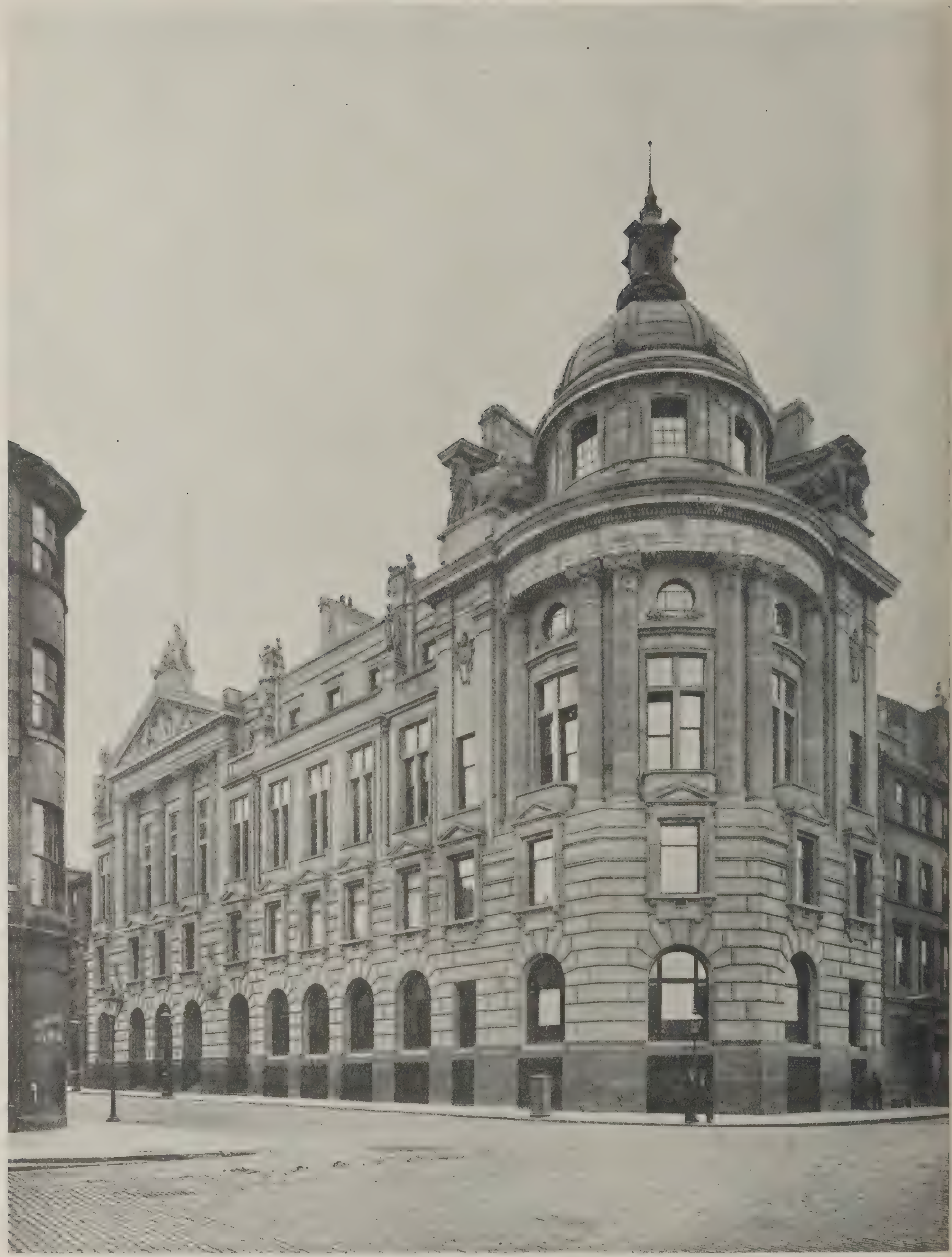
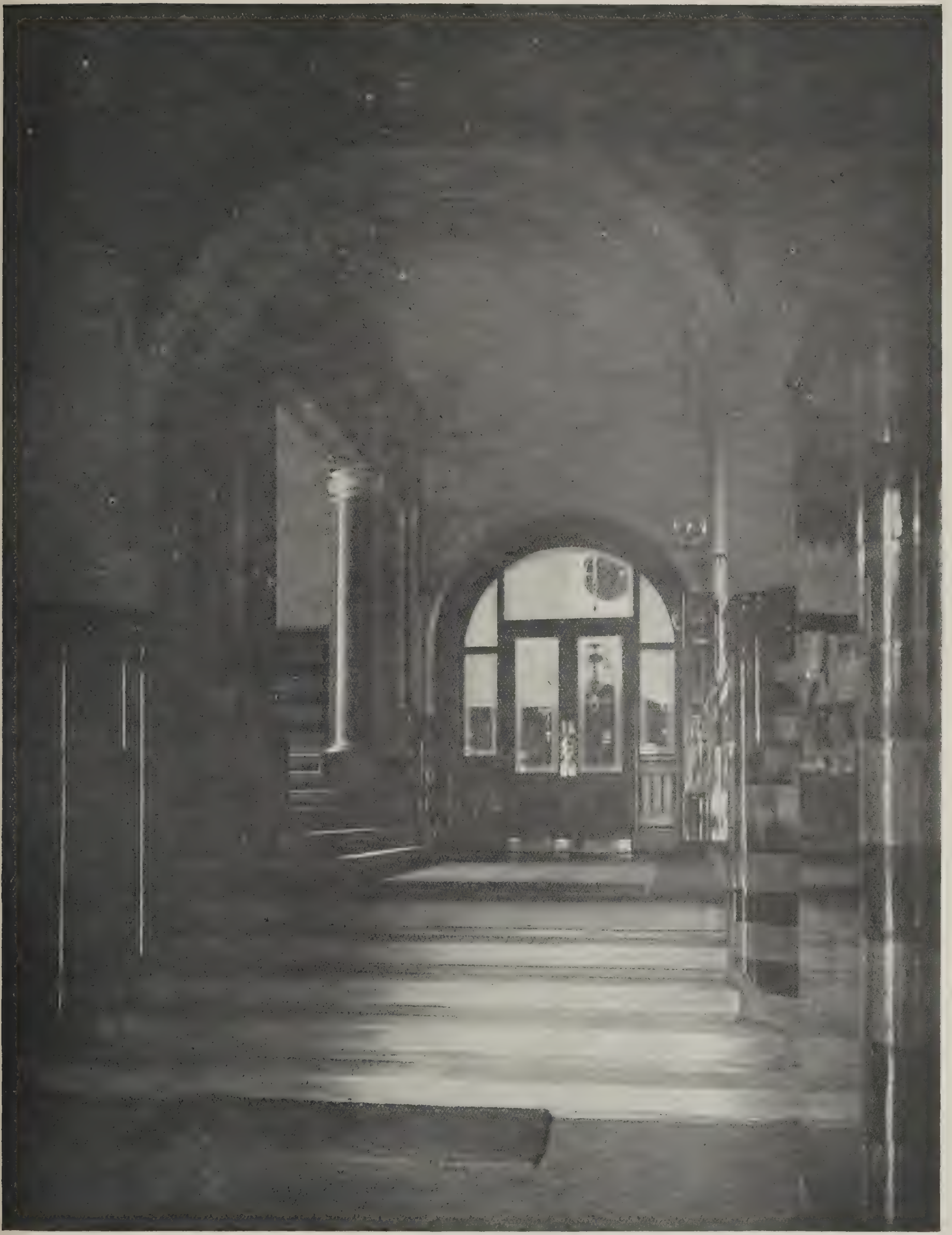


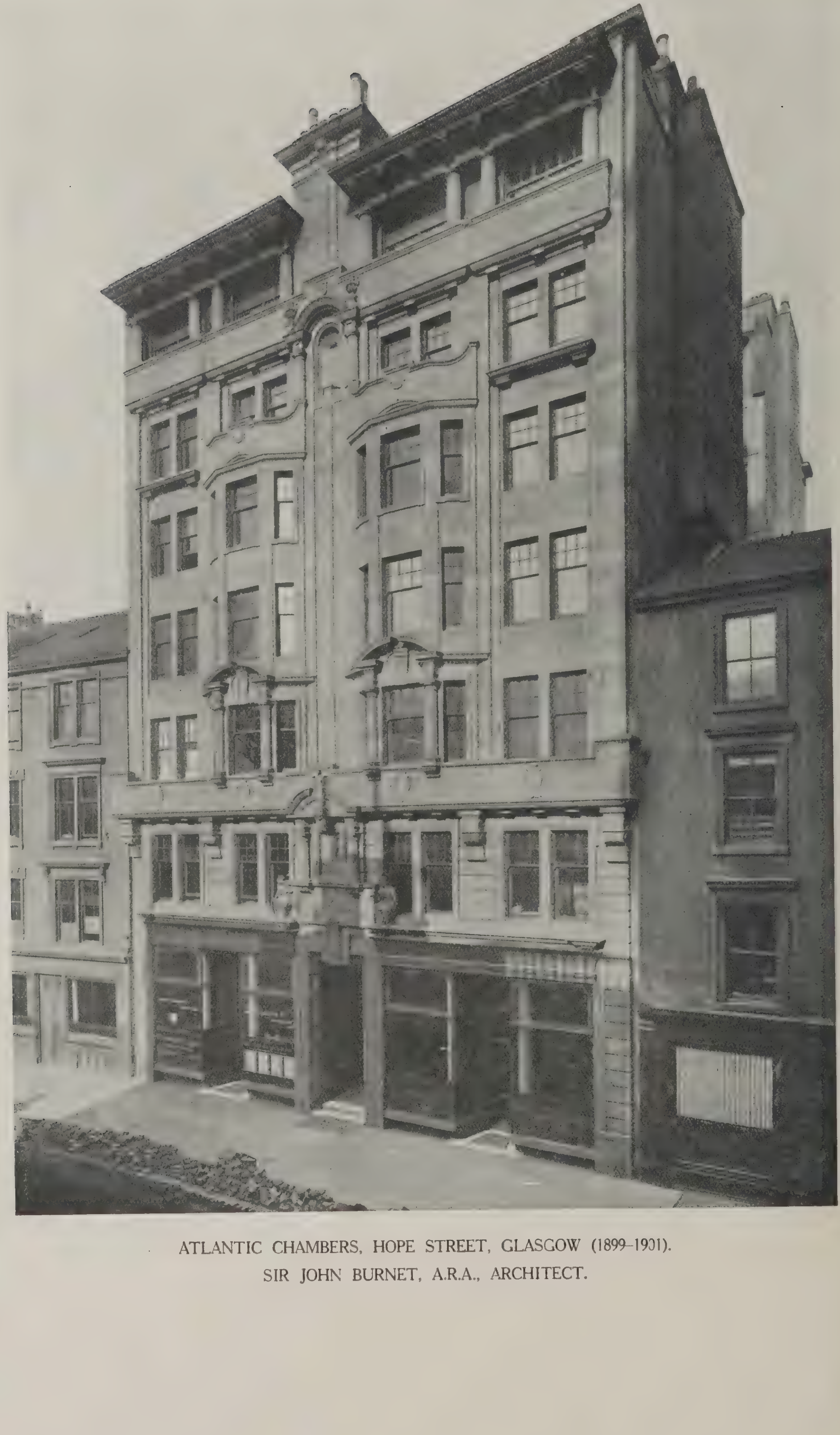
CHARING CROSS MANSIONS, GLASGOW (1901).
SIR JOHN BURNET, A.R.A., ARCHITECT.



THE CLYDE NAVIGATION TRUST BUILDING (1906–9).
SIR JOHN BURNET, A.R.A., ARCHITECT.



THE CLYDE NAVIGATION TRUST BUILDING, GLASGOW (1906–9): THE ENTRANCE HALL.
SIR JOHN BURNET, A.R.A., ARCHITECT.



ATLANTIC CHAMBERS, HOPE STREET, GLASGOW (1899–1901).
SIR JOHN BURNET, A.R.A., ARCHITECT.

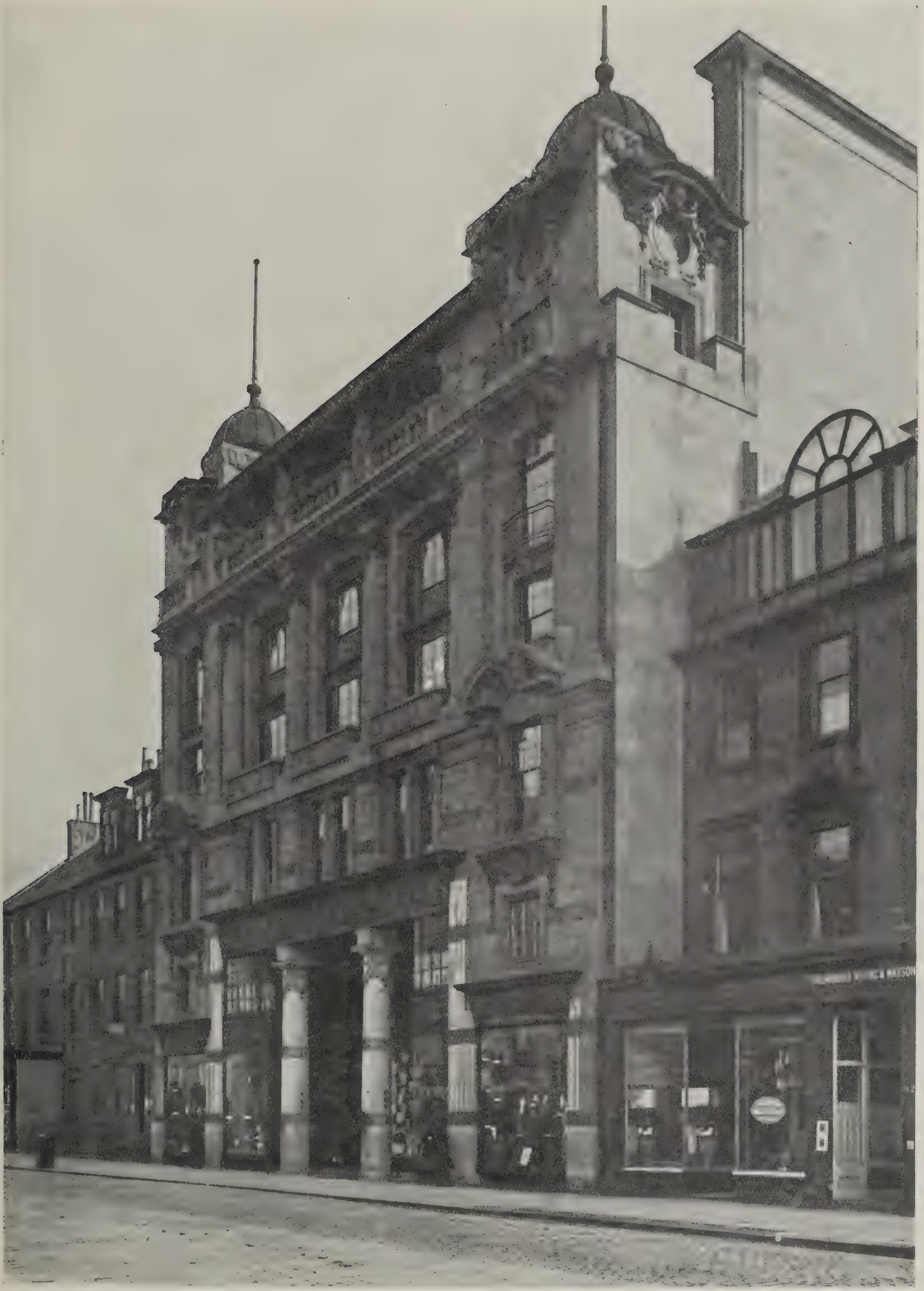
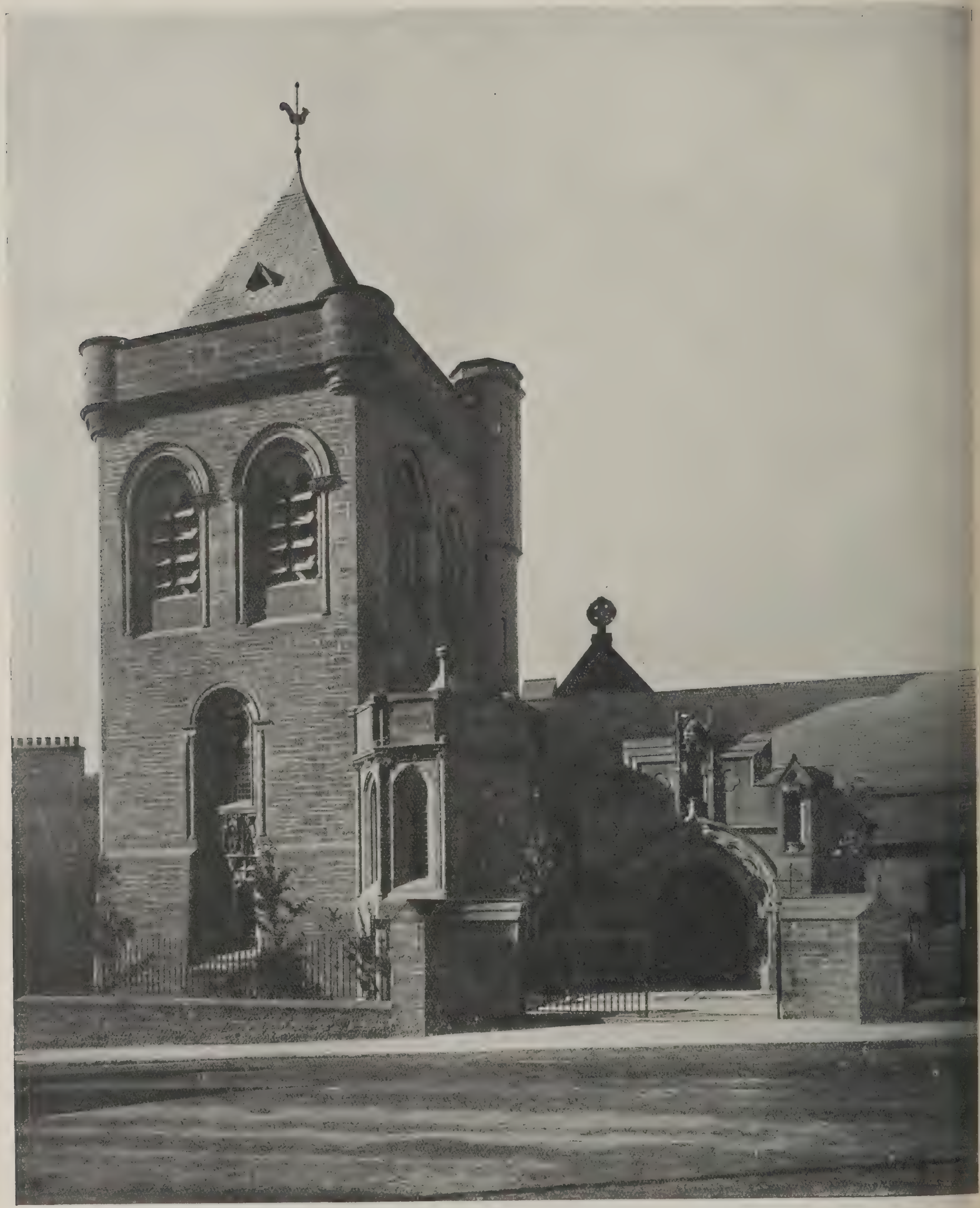


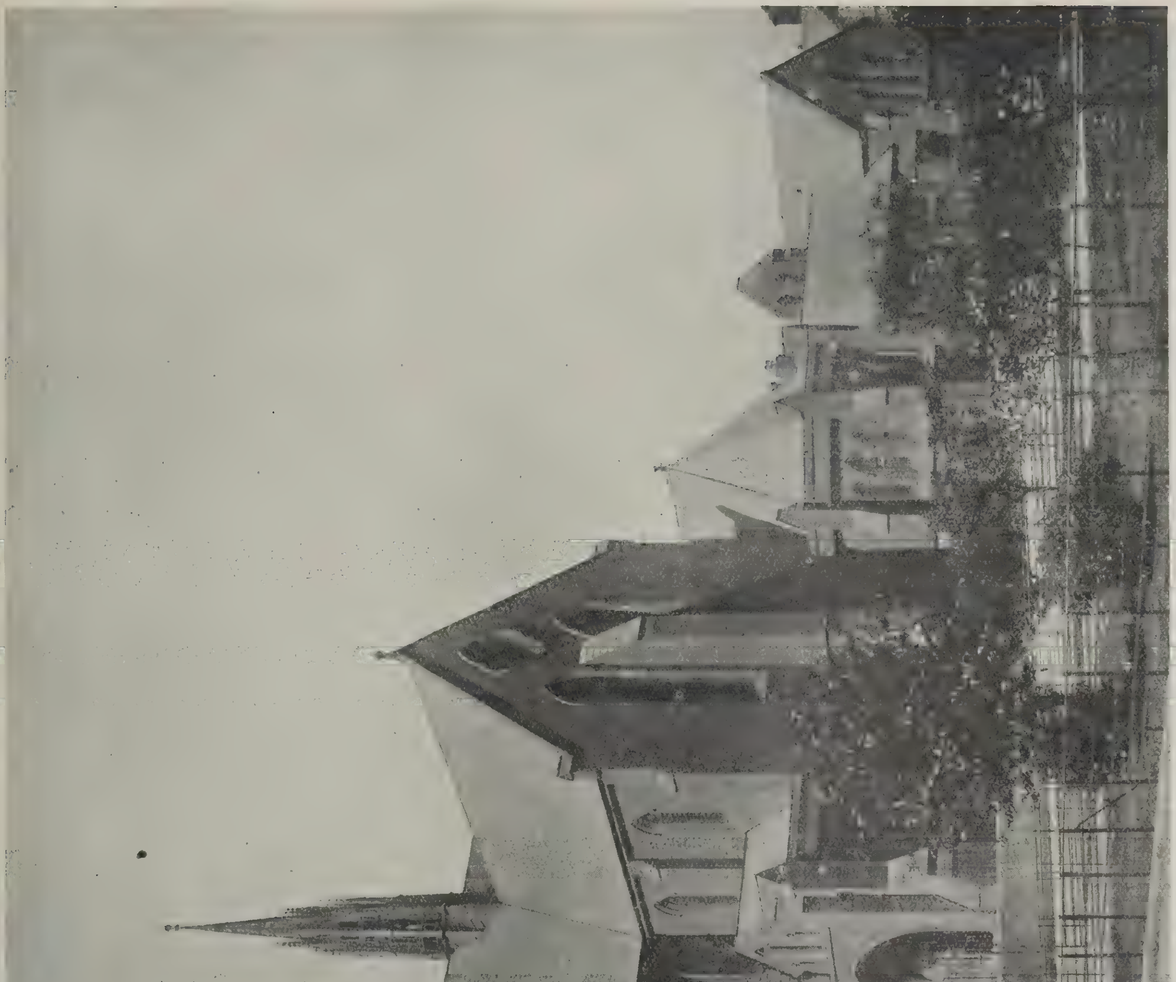
*Photo: Annan, Glasgow.*

PREMISES OF THE PROFESSIONAL AND CIVIL SERVICE SUPPLY ASSOCIATION, LTD., GEORGE STREET, EDINBURGH (1903–7).

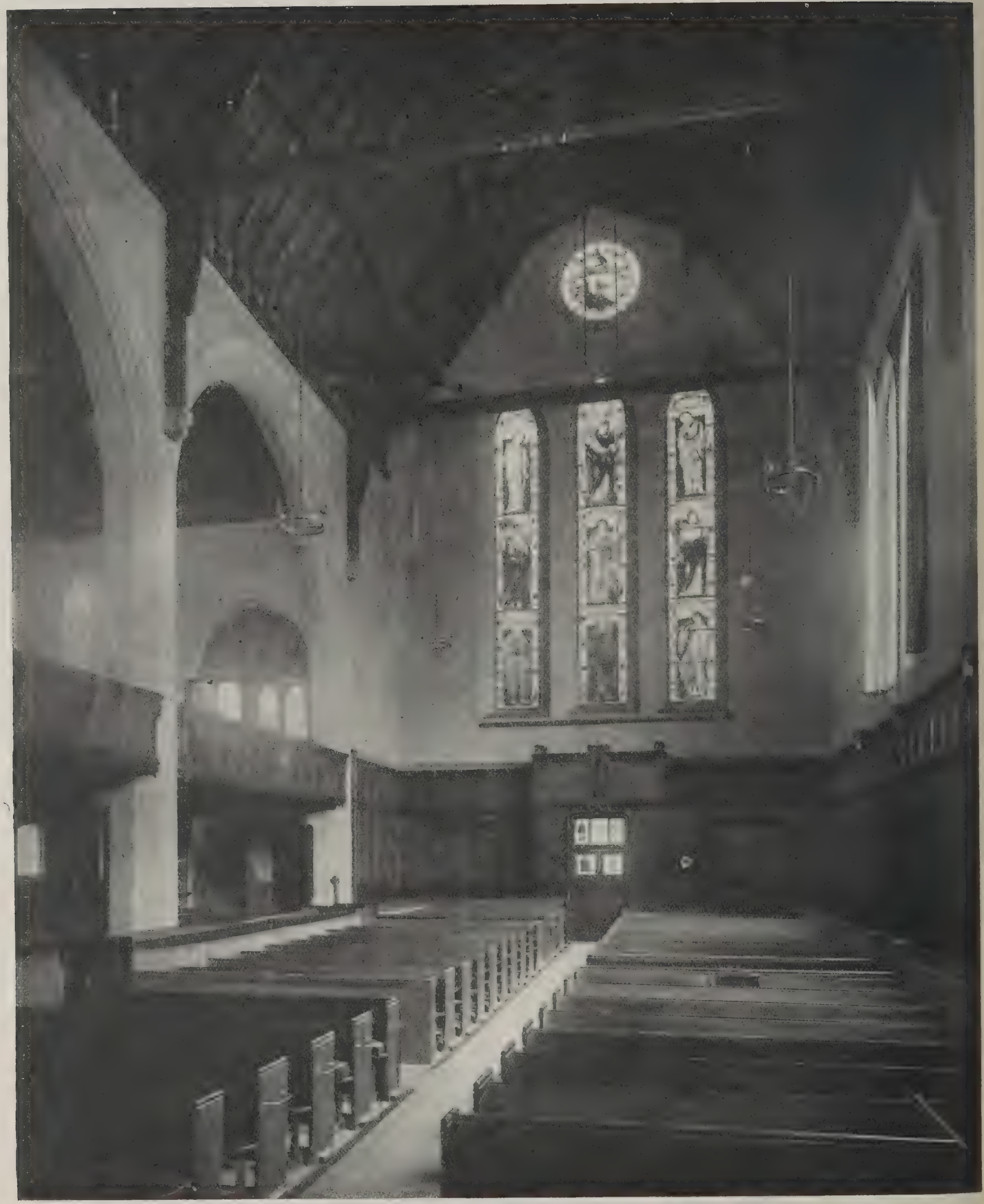
SIR JOHN BURNET, A.R.A., ARCHITECT.



THE GARDNER MEMORIAL CHURCH, BRECHIN, N.B. (1896–1900)
SIR JOHN BURNET, A.R.A., ARCHITECT



BARONY PARISH CHURCH, GLASGOW (1886-9). SIR JOHN BURNET, A.R.A., ARCHITECT.



THE PARISH CHURCH, ARBROATH (1894-6). SIR JOHN BURNET, A.R.A., ARCHITECT

(*Continued from page* 1076.)

otanic Gardens, 1895.
entral Station (low level), 1897–1900.
a Public Baths, 1895–9.
vinside Station, for Lanarkshire and Dumbartonshire Railway, 1896–7.
sgow University—
tudents' Union Club, 1895.
otanical Building, 1899–1902.
ngineering Laboratory, 1899–1902, 1907, 1908.
natomical Laboratory, 1900–3.
urgical Laboratory, 1901–3.
hemistry Building, 1903–6.
tudents' Union Extension, 1908–9.
ymnasium, 1908–11.
dditions to Engineering Building, 1920–2.
ew Natural History Building, 1922–3.
ew Arts Building and Chapel, 1923.
msheugh Baths, Edinburgh, 1900.
ambra Theatre, Glasgow, 1910–12, 1914–15, 1920–2.

*War Memorials.*

SCOTLAND:

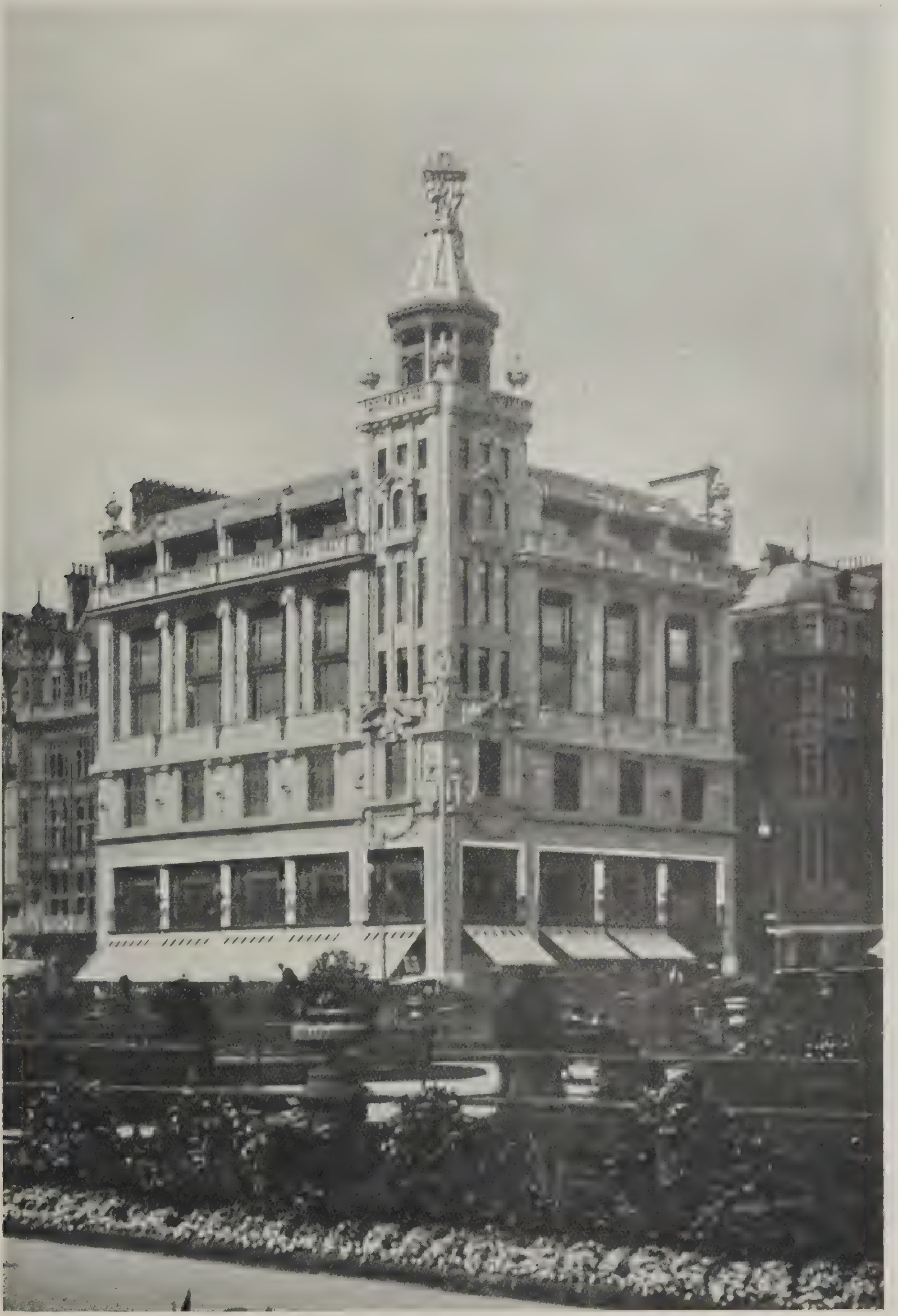
Broomhill Congregational Church, 1921–2.
Clydesdale Bank, Ltd., Head Offices, 1921–2.
Arbroath Parish Church, 1920.
Stenhouse Parish Church, 1920–1.
Wellington U.F. Church, 1920–1.
Dumbarton War Memorial, 1920–1.
New Cumnock War Memorial, 1921–2.
Clyde Trust War Memorial, 1921–2.
Accountants' Hall War Memorial, 1921–2.
Ballater War Memorial, 1922–3.
Skelmorlie and Wemyss Bay War Memorial, 1922–3.
Grangemouth War Memorial, 1922–3.
Glasgow War Memorial, 1922–3.

THE EAST:

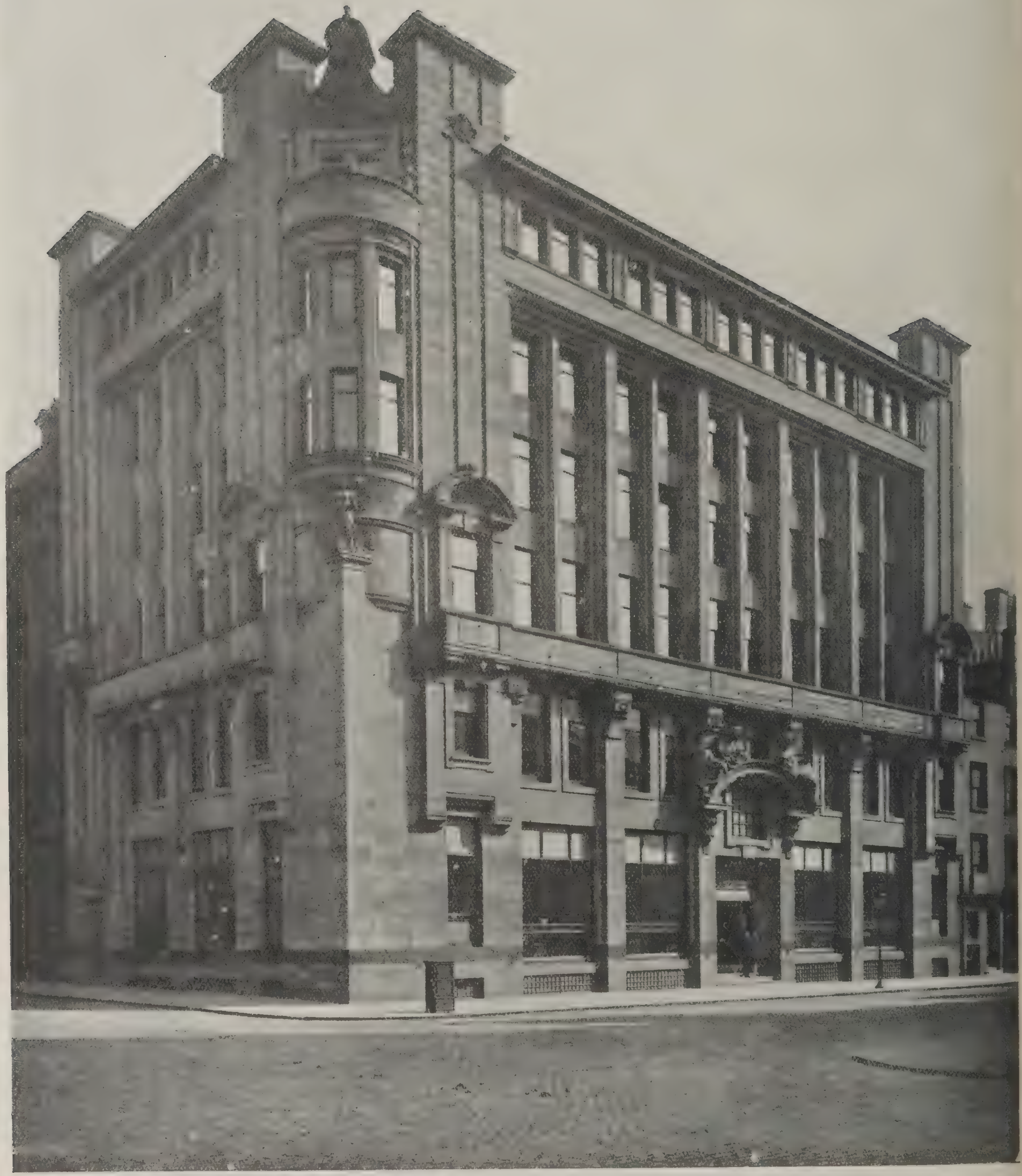
Designs for the War Cemeteries in Palestine and Gallipoli.
Indian War Memorial at Port Thewfik, Gulf of Suez.
Cape Helles Memorial.

LONDON:

Cavalry War Memorial, Stanhope Gate, Hyde Park.



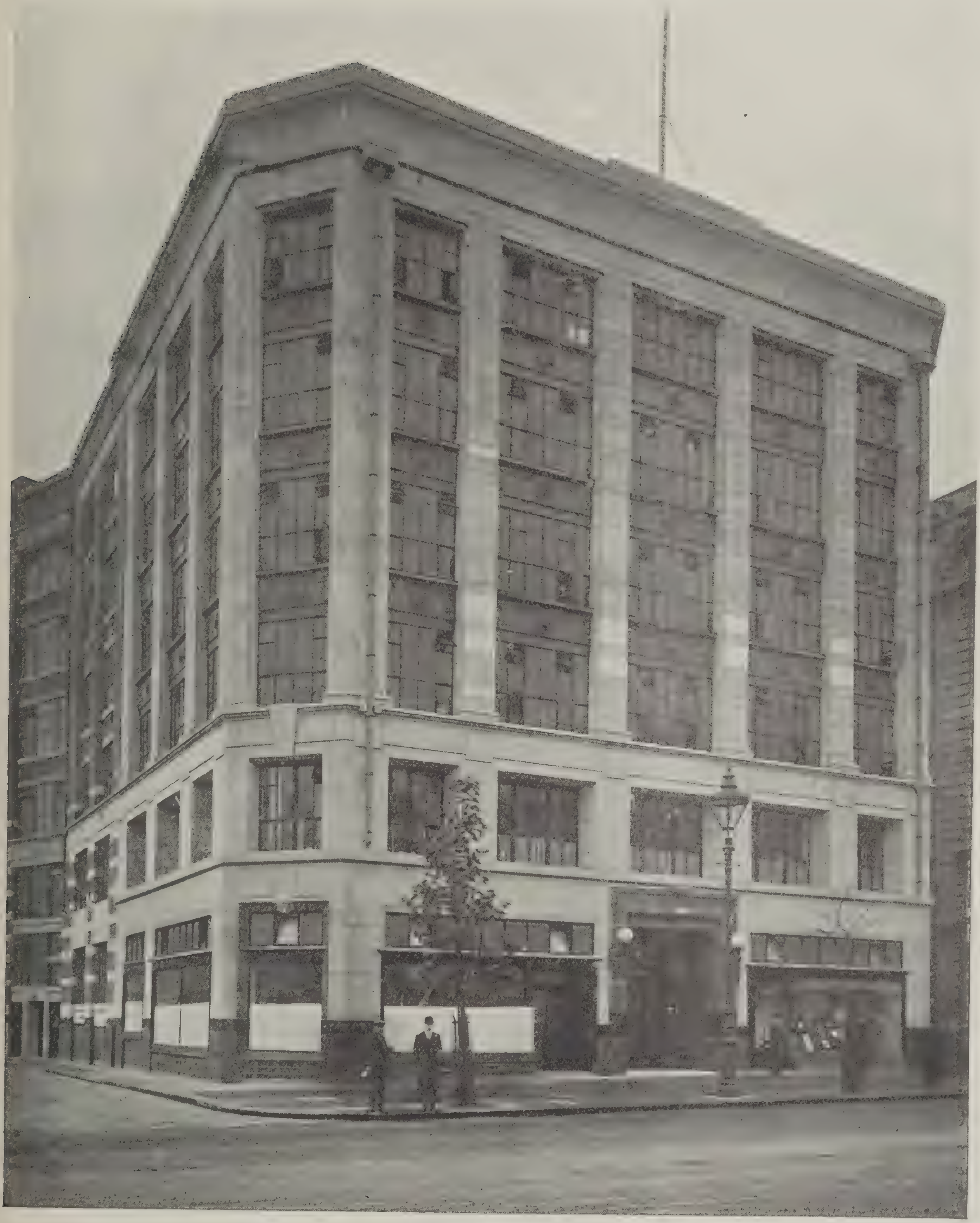
PREMISES OF R. W. FORSYTH, LTD., PRINCES STREET, EDINBURGH (1906-10).
SIR JOHN BURNET, A.R.A., ARCHITECT.



WAREHOUSE AND HEAD OFFICES OF WM. McGEOCH AND CO., LTD., GLASGOW (1905–9).
SIR JOHN BURNET, A.R.A., ARCHITECT

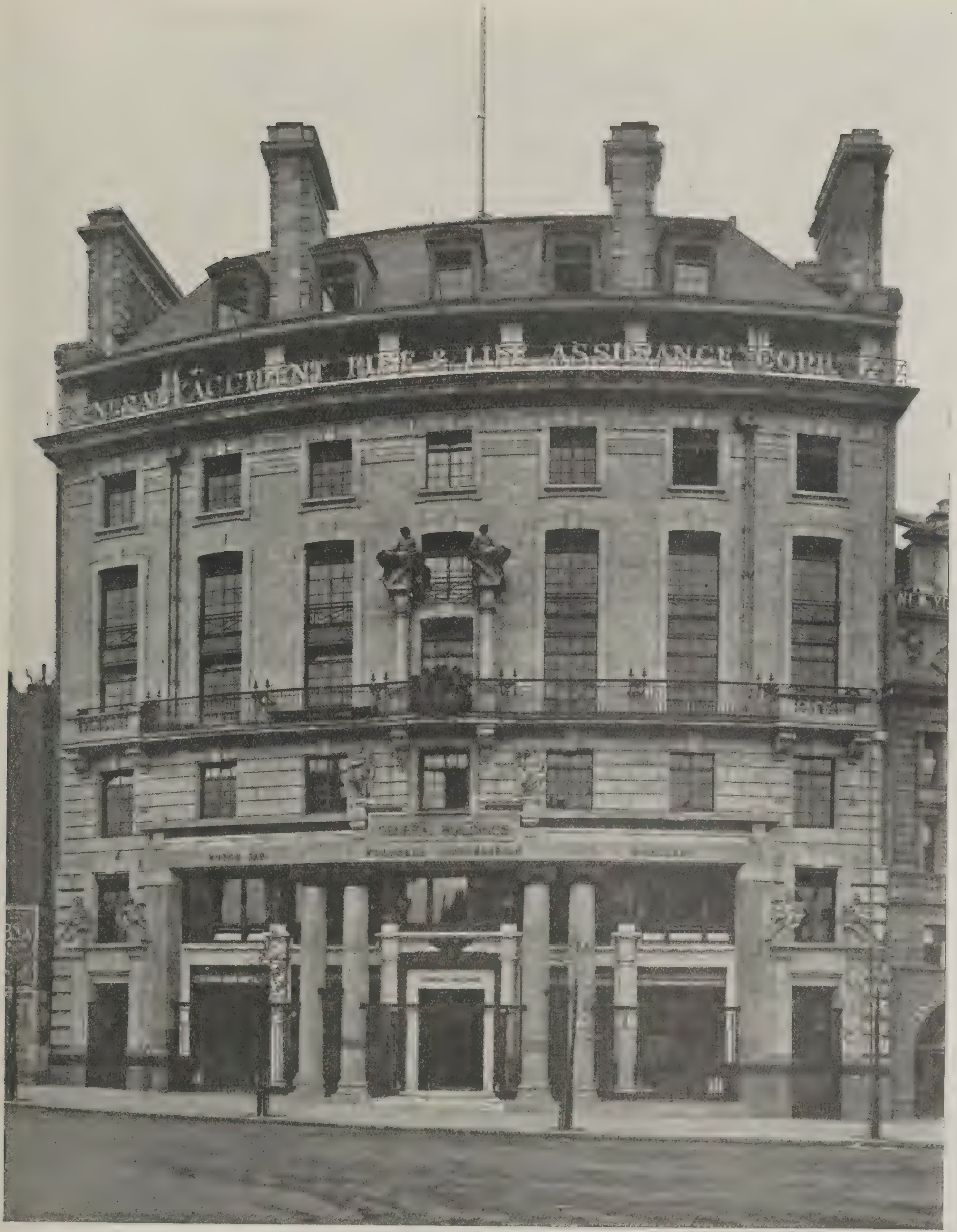
# The Kodak Building, Kingsway, London

Sir John Burnet, A.R.A., Architect

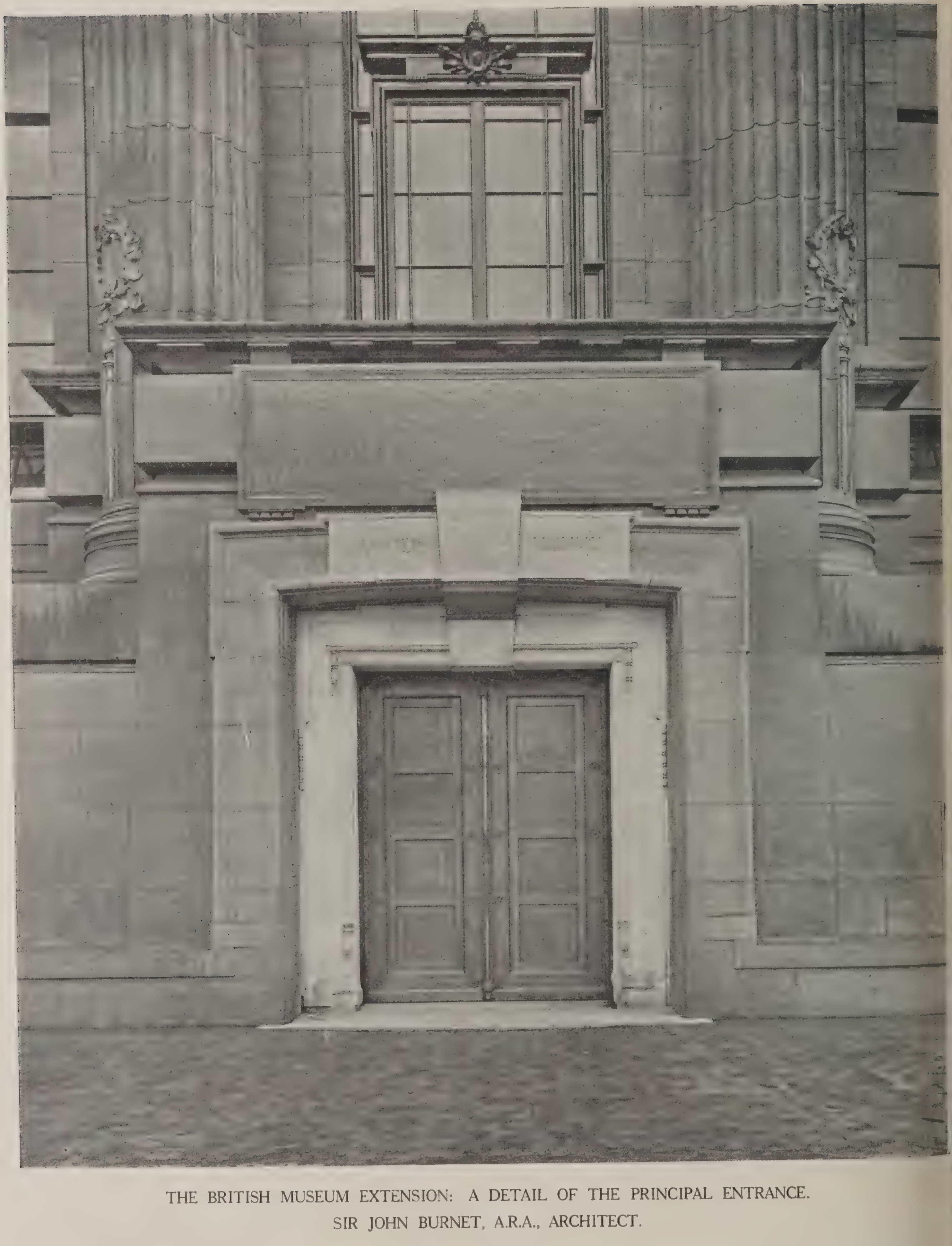


The Kodak Building, erected in 1912, set a new standard for commercial architecture in this country. In the words of Mr. Goodhart-Rendel, it is "entirely original, entirely logical, and entirely satisfactory."

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS



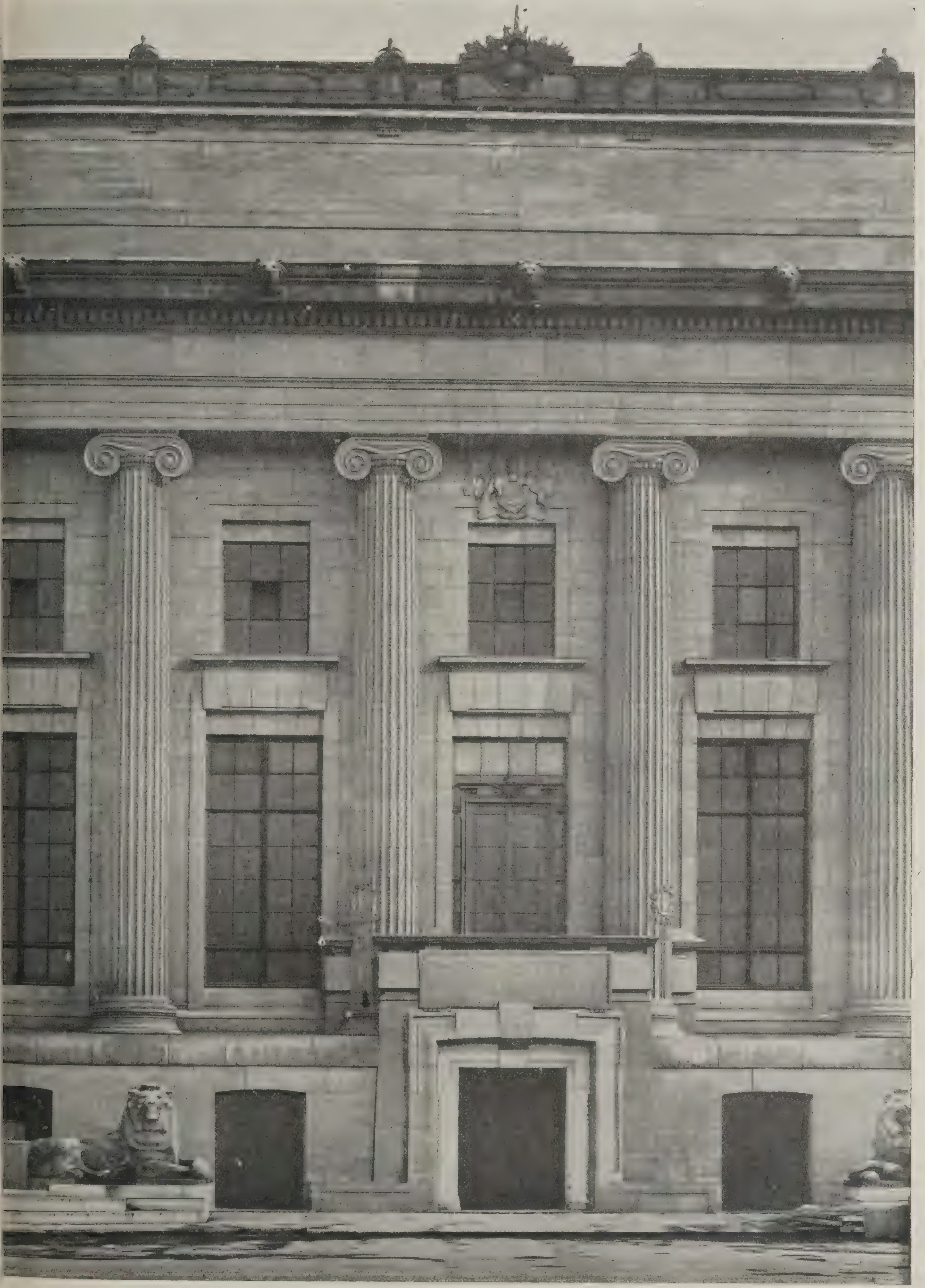
GENERAL BUILDINGS, ALDWYCH, LONDON.
SIR JOHN BURNET, A.R.A. ARCHITECT



THE BRITISH MUSEUM EXTENSION: A DETAIL OF THE PRINCIPAL ENTRANCE.
SIR JOHN BURNET, A.R.A., ARCHITECT.

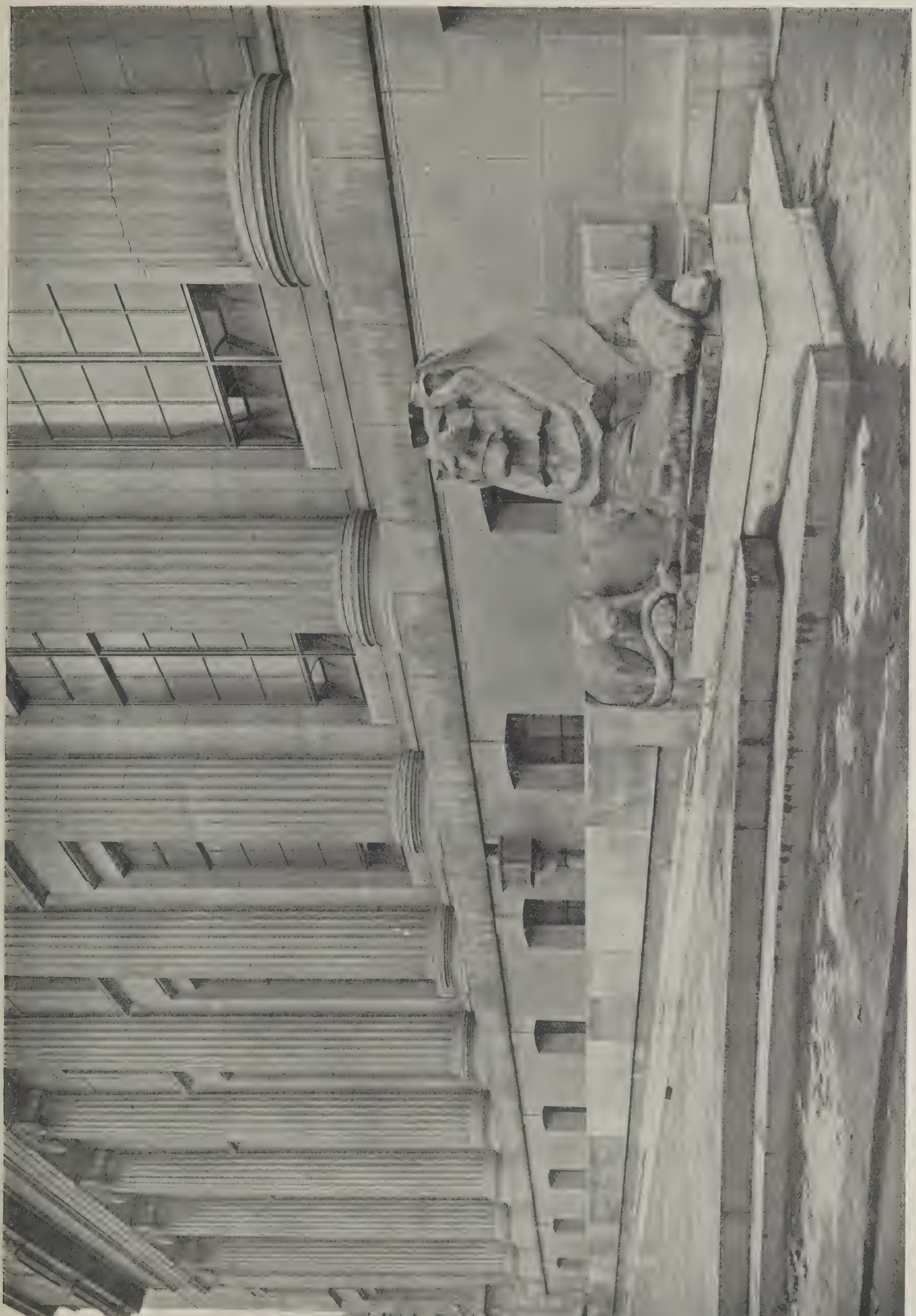
# The British Museum Extension : A Detail of the Colonnade

Sir John Burnet, A.R.A., Architect



The lions on either side of the entrance and the coat-of-arms beneath the architrave are by Sir George Frampton, R.A.

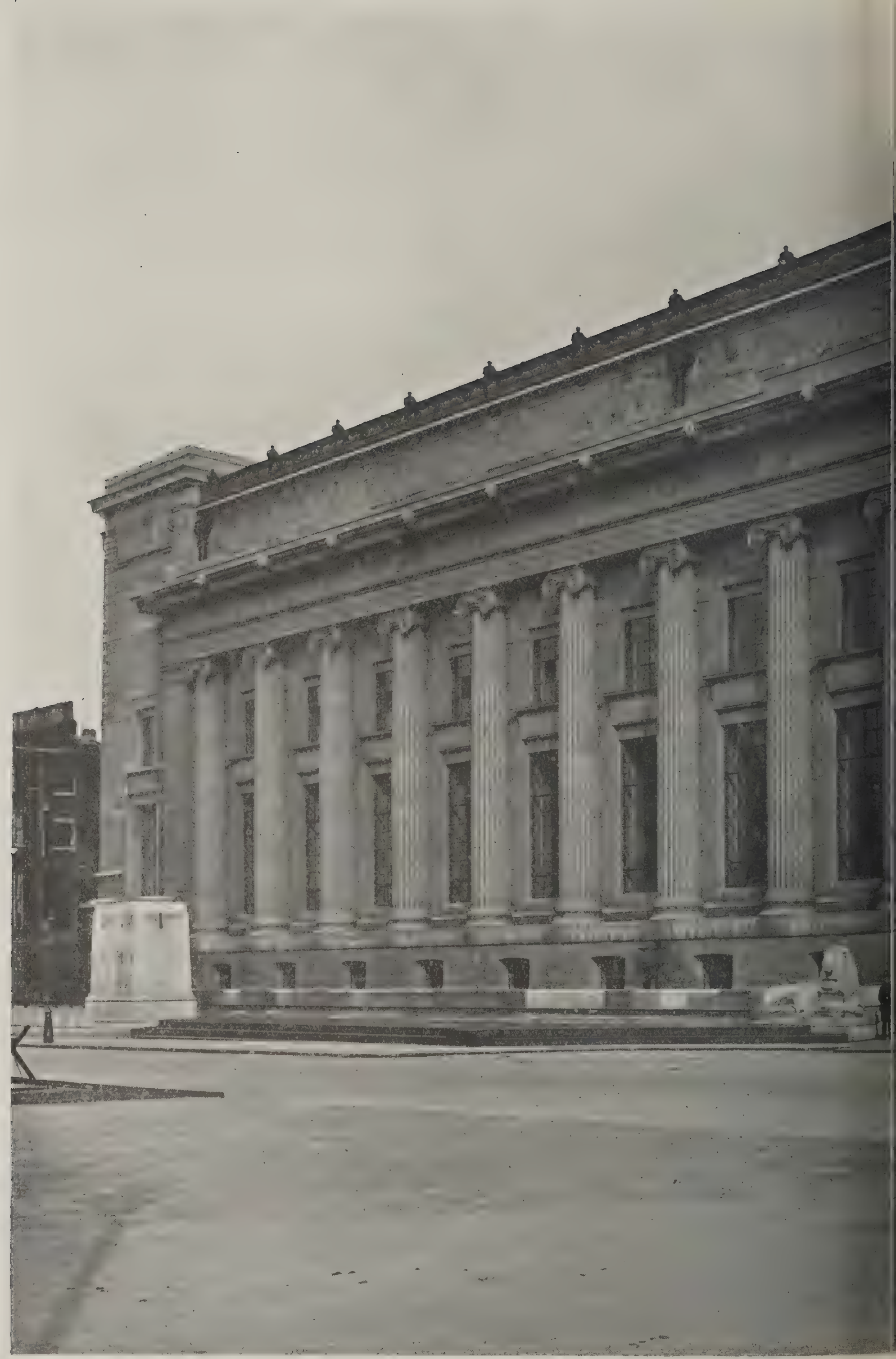
THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS



THE BRITISH MUSEUM EXTENSION: A DETAIL OF THE FAÇADE SIR JOHN BURNET, A.R.A.: ARCHITECT

# The British Museum Extensio

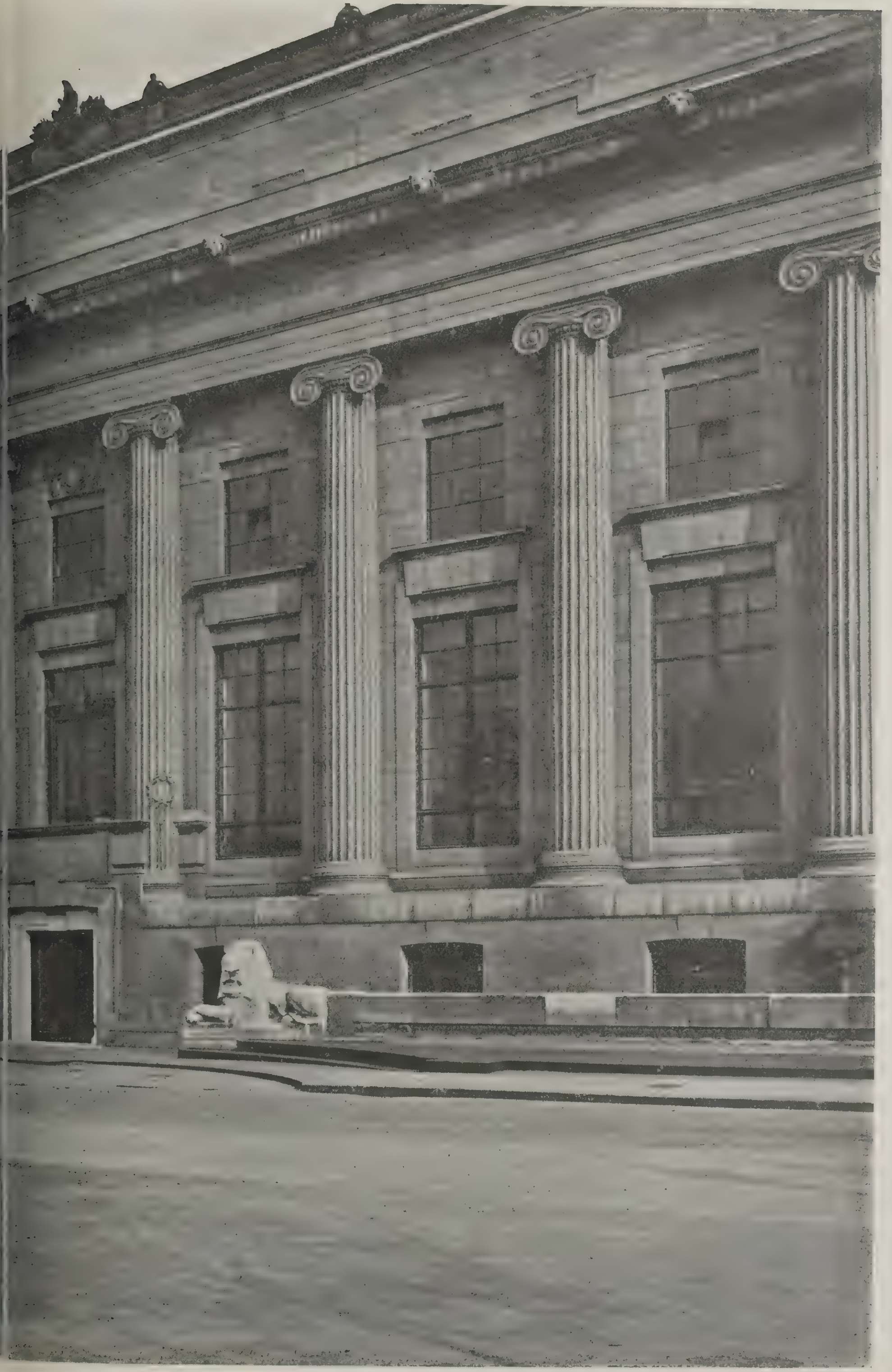
Sir John B



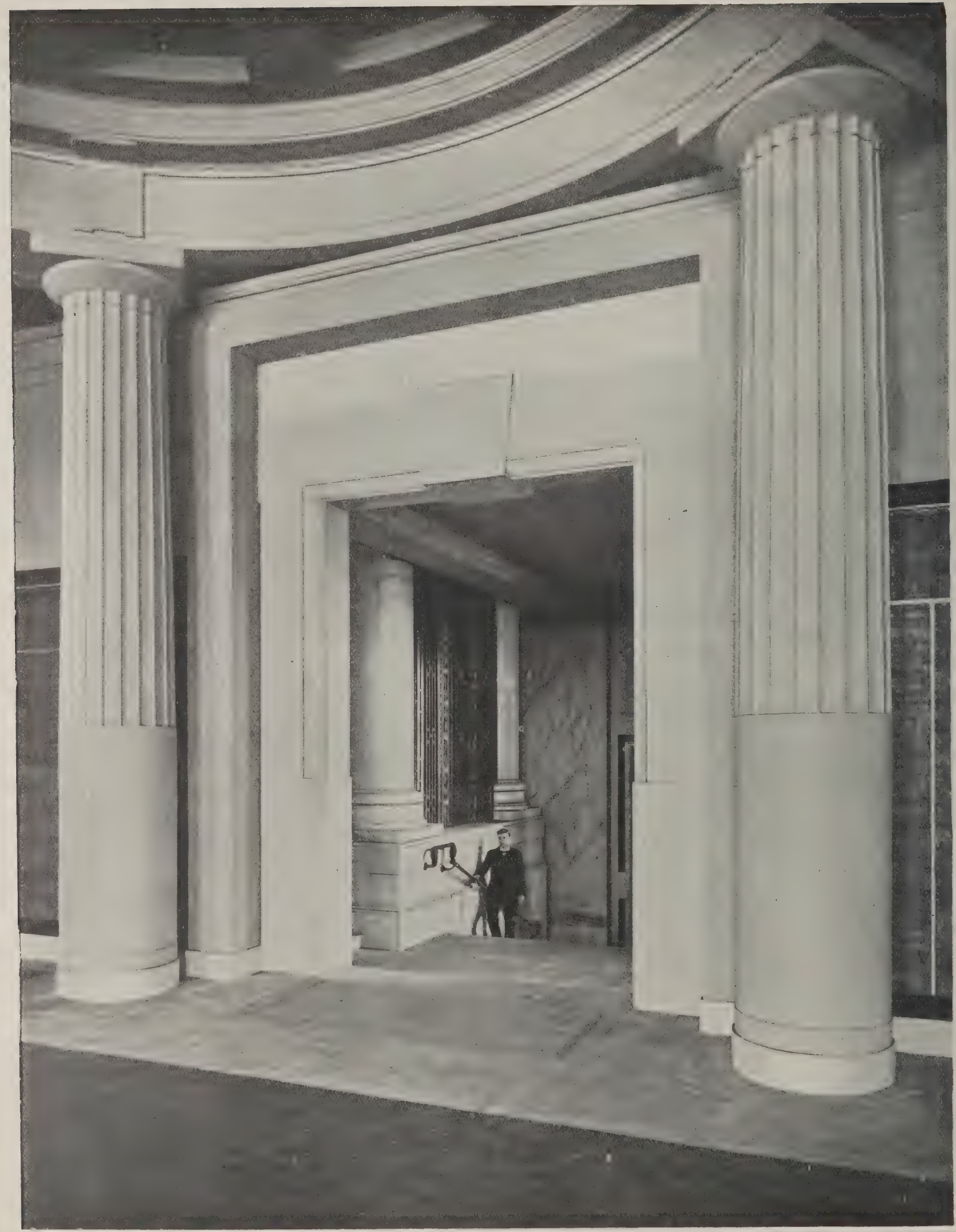
The façade of the new north wing of the British Museum Extension is magnificent in scale
entrance are the w

# North Façade (to Montague Place)

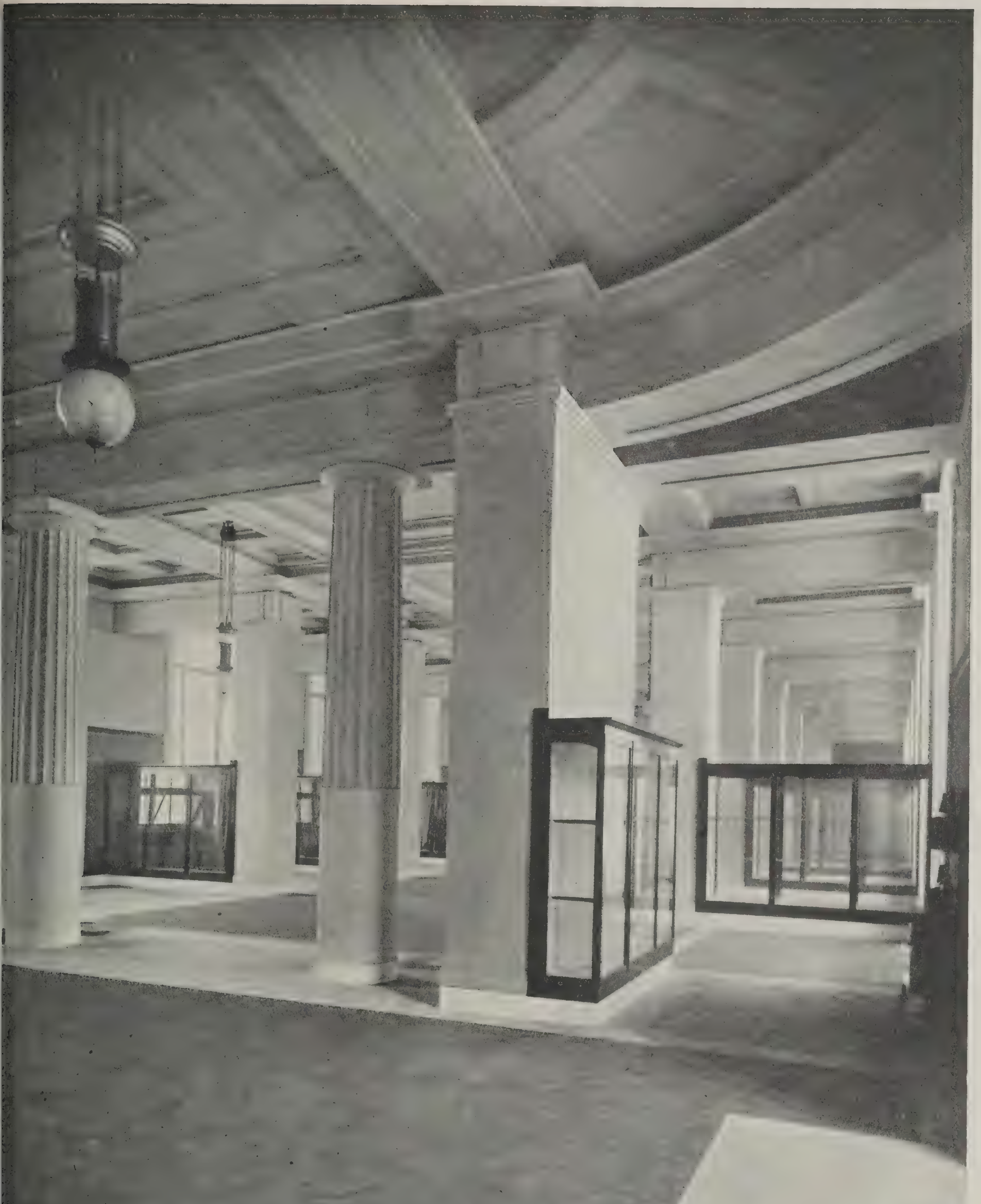
, Architect



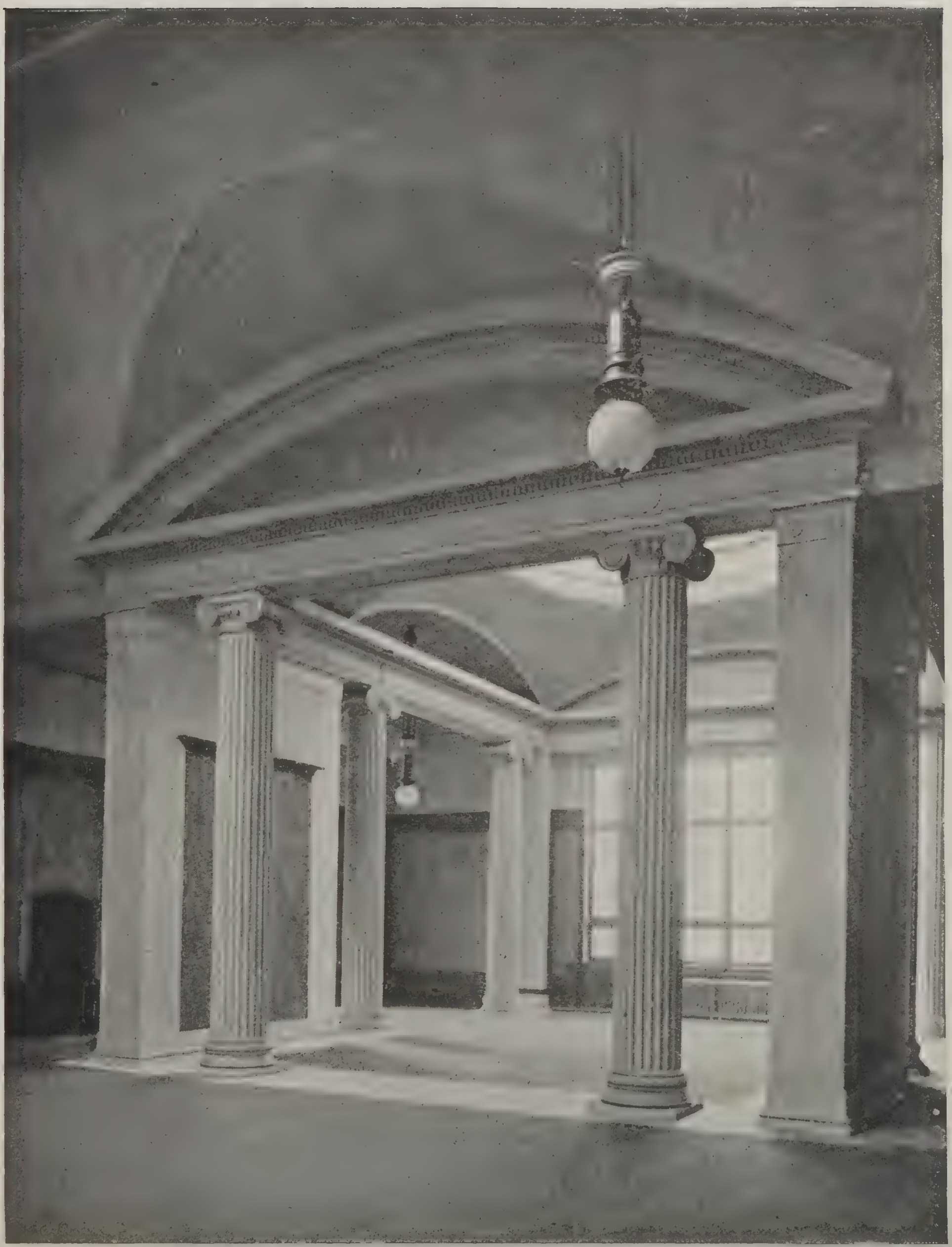
s the high standard set by Smirke in the old building. The lions flanking the principal
Frampton, R.A.



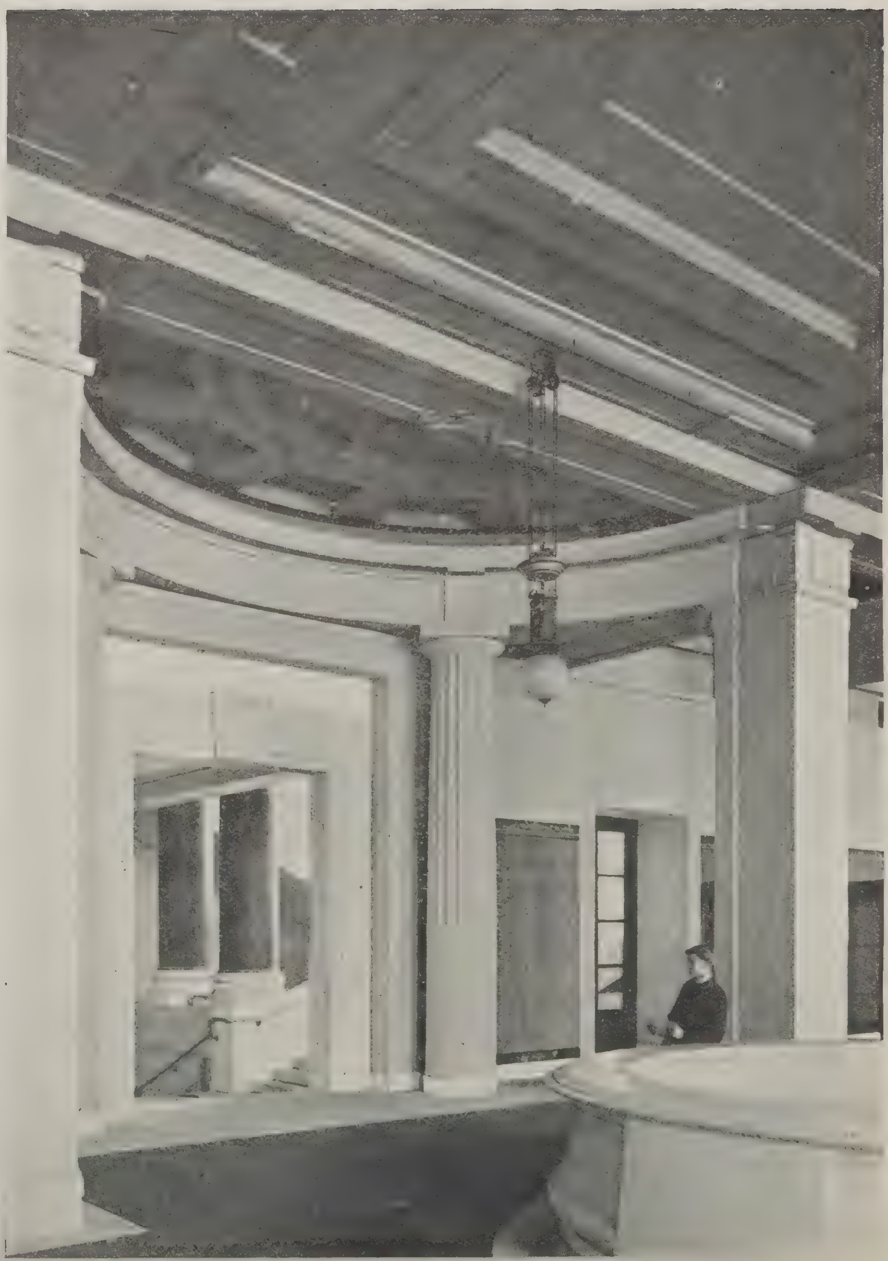
THE BRITISH MUSEUM EXTENSION: THE ENTRANCE TO THE FIRST-FLOOR GALLERY
SIR JOHN BURNET, A.R.A., ARCHITECT.



THE BRITISH MUSEUM EXTENSION: A VIEW LOOKING ACROSS THE MAIN GALLERY.
SIR JOHN BURNET, A.R.A., ARCHITECT.

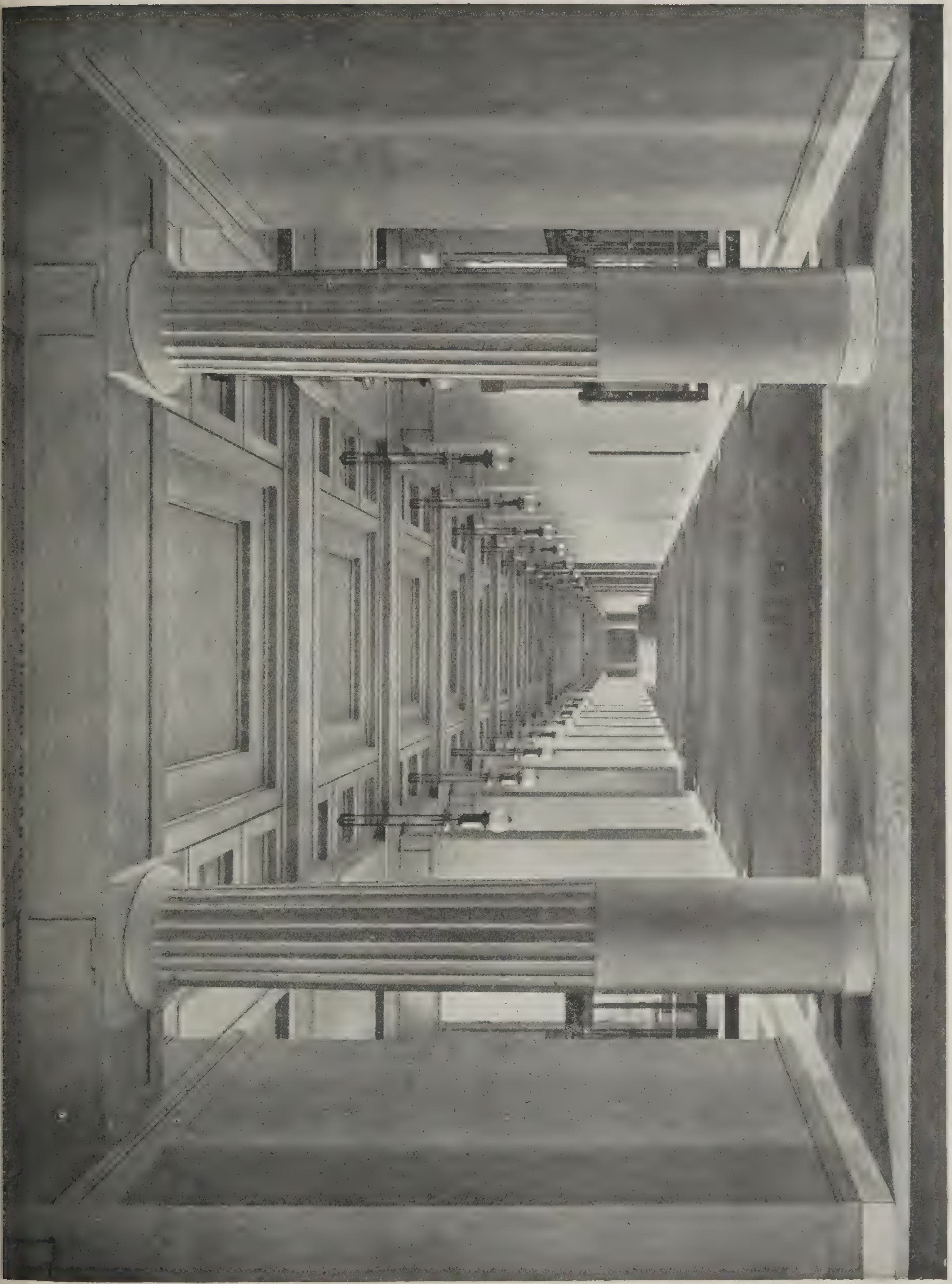


A VIEW IN THE TOP GALLERY.

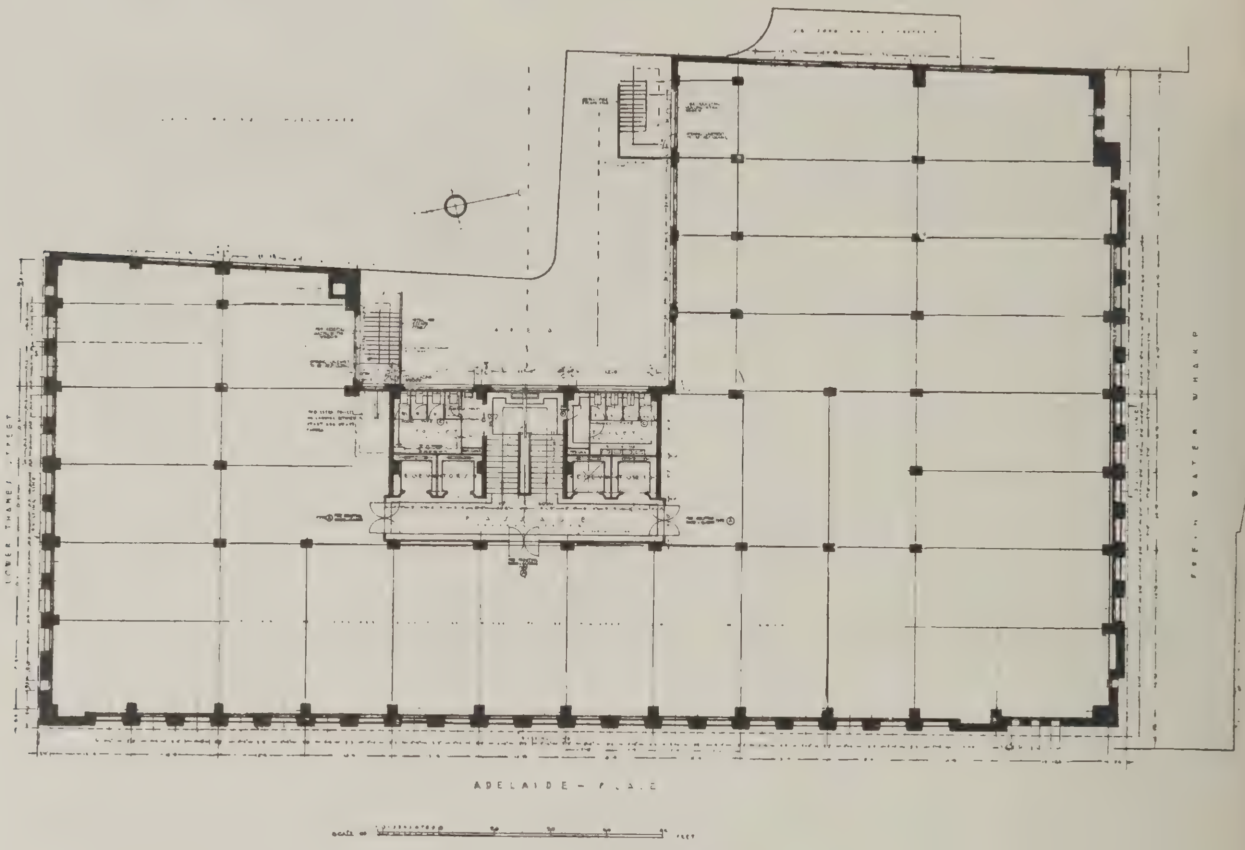


A VIEW IN THE MAIN GALLERY.

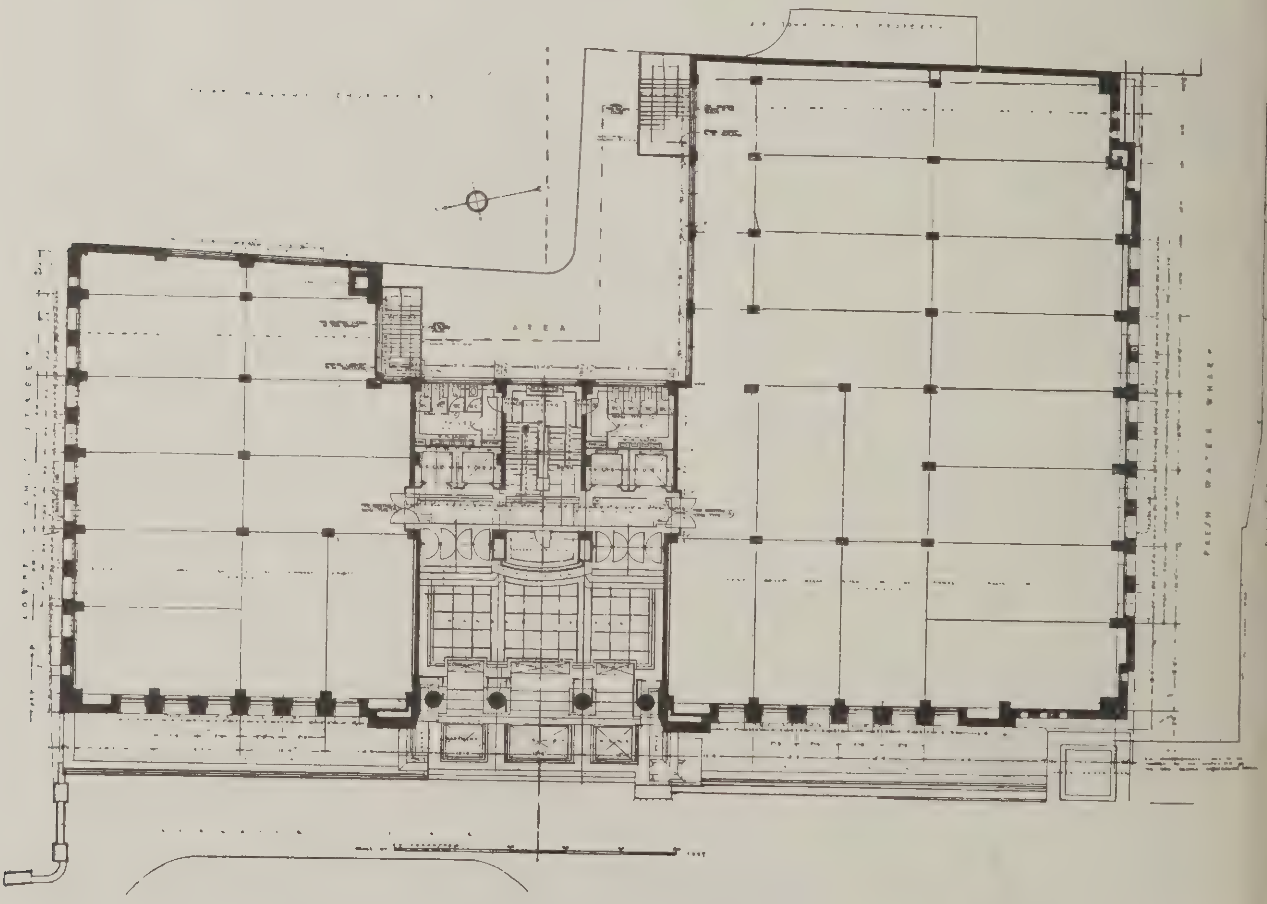
THE BRITISH MUSEUM EXTENSION. SIR JOHN BURNET, A.R.A., ARCHITECT.



THE BRITISH MUSEUM EXTENSION: THE FIRST-FLOOR GALLERY. SIR JOHN BURNET, A.R.A., ARCHITECT

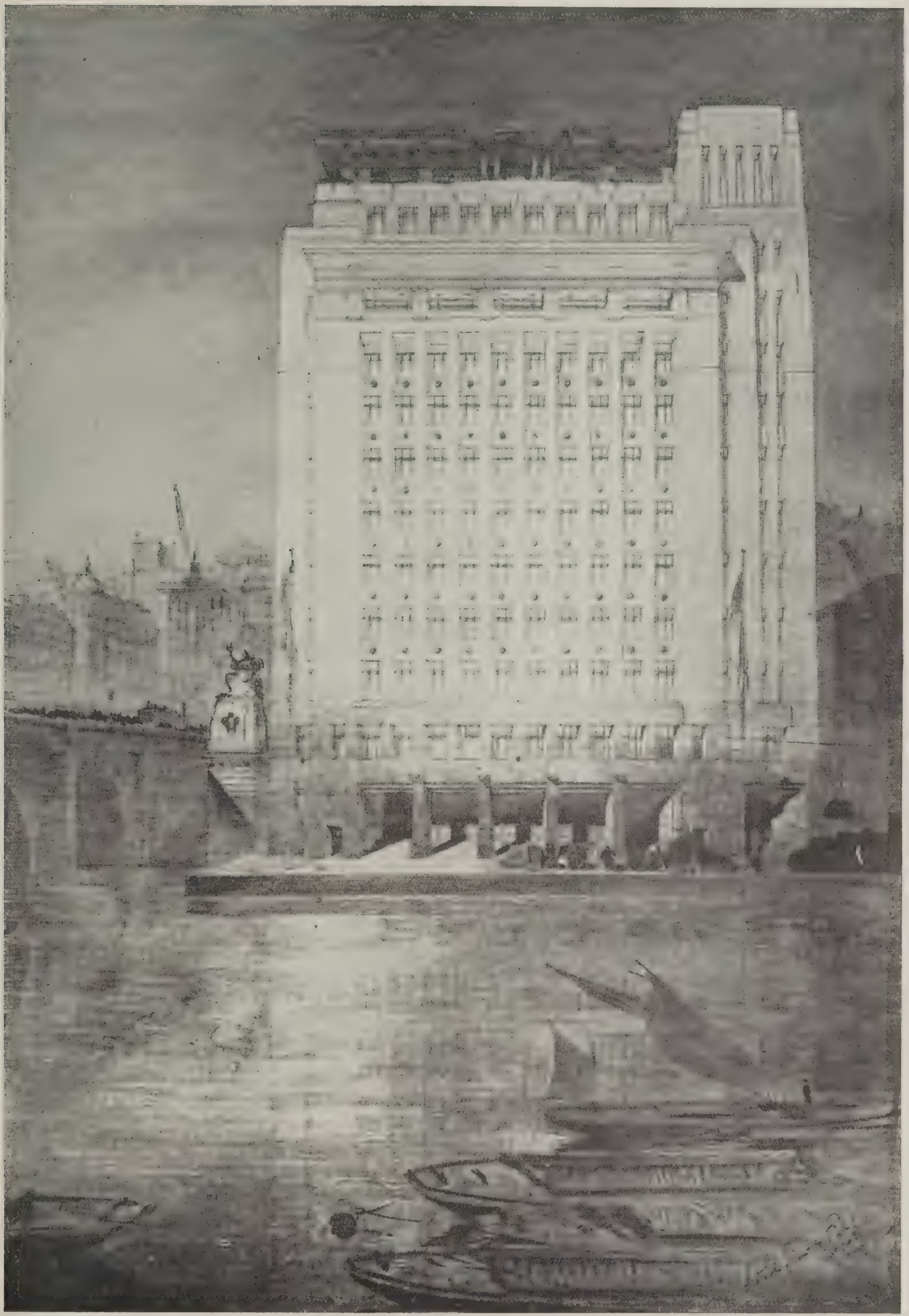


TYPICAL FLOOR PLAN.

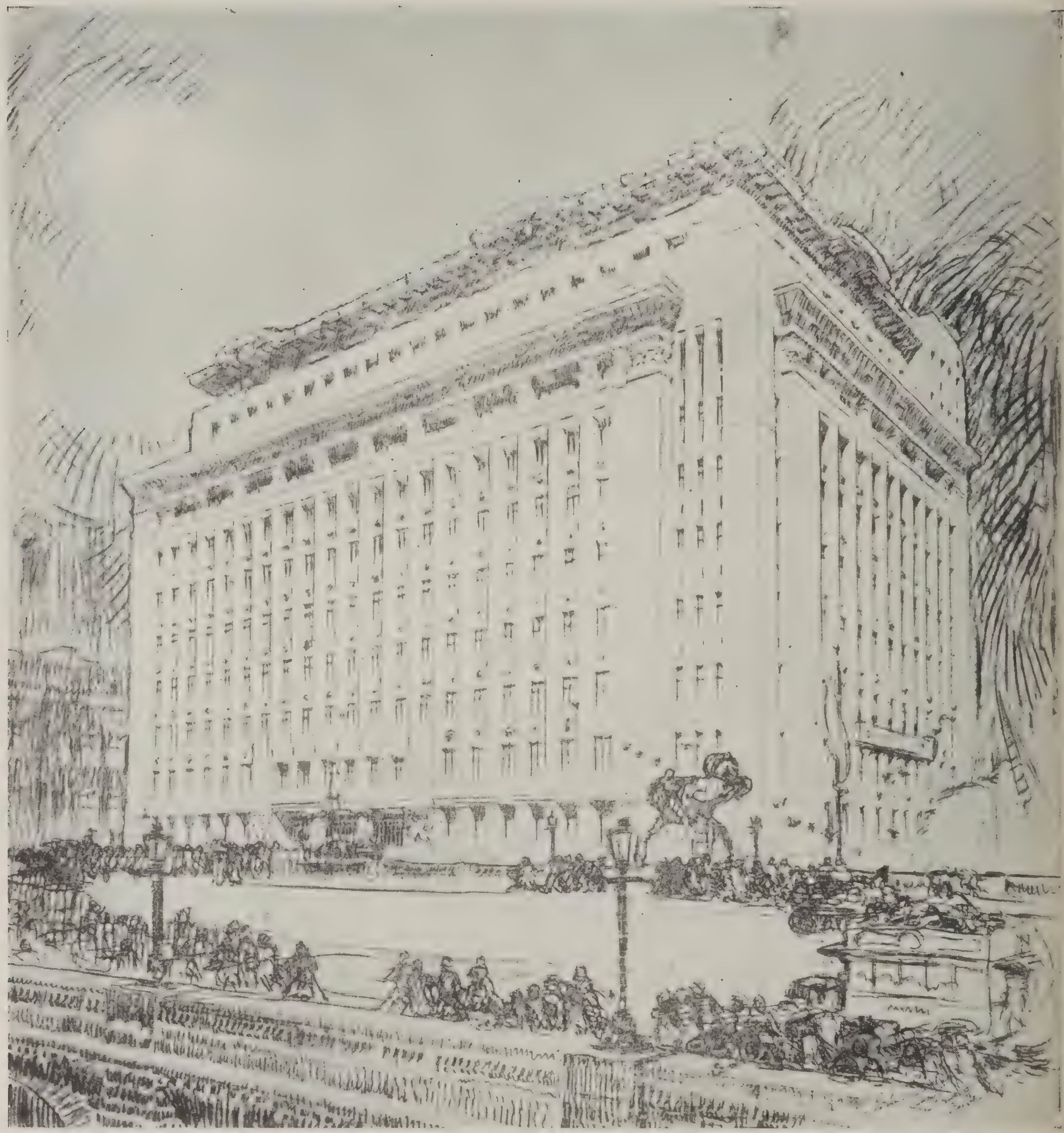


GROUND-FLOOR PLAN

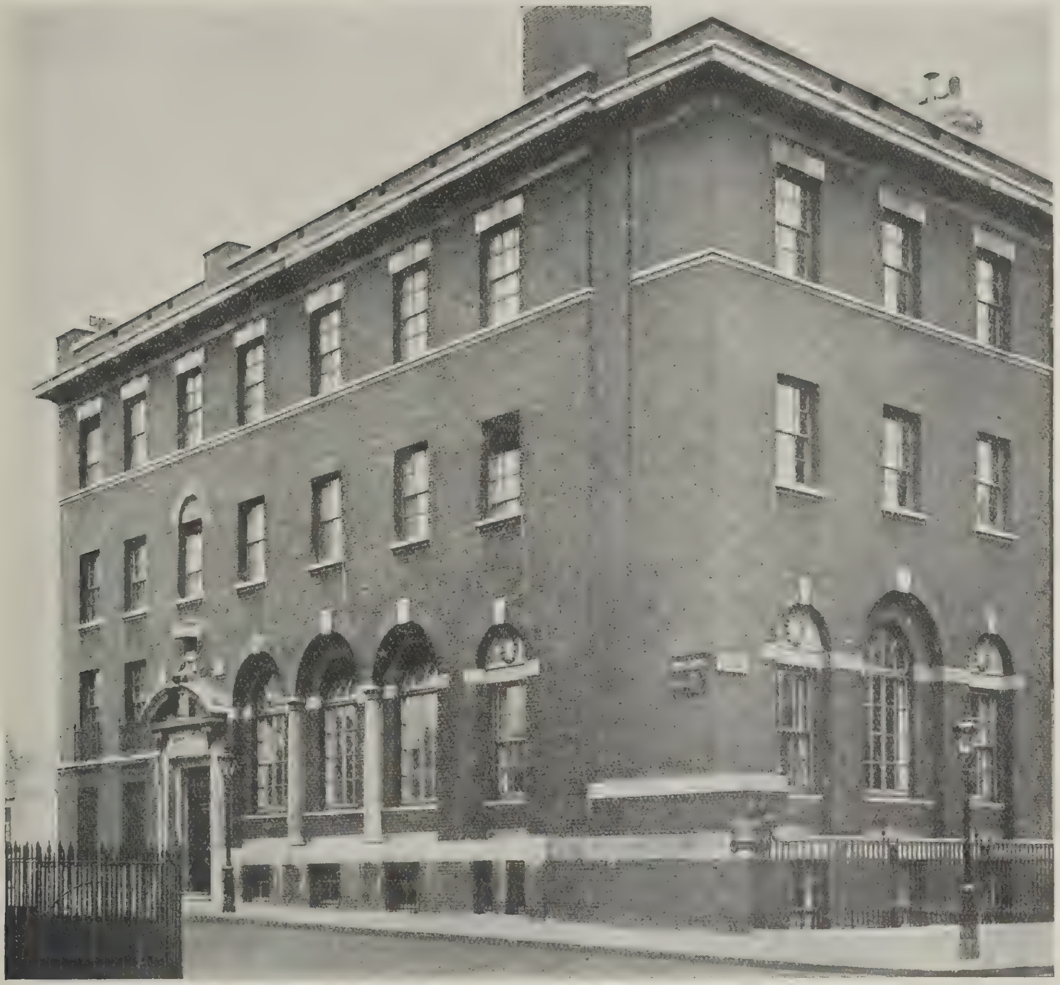
ADELAIDE HOUSE, LONDON BRIDGE. SIR JOHN BURNET AND PARTNERS, ARCHITECTS.

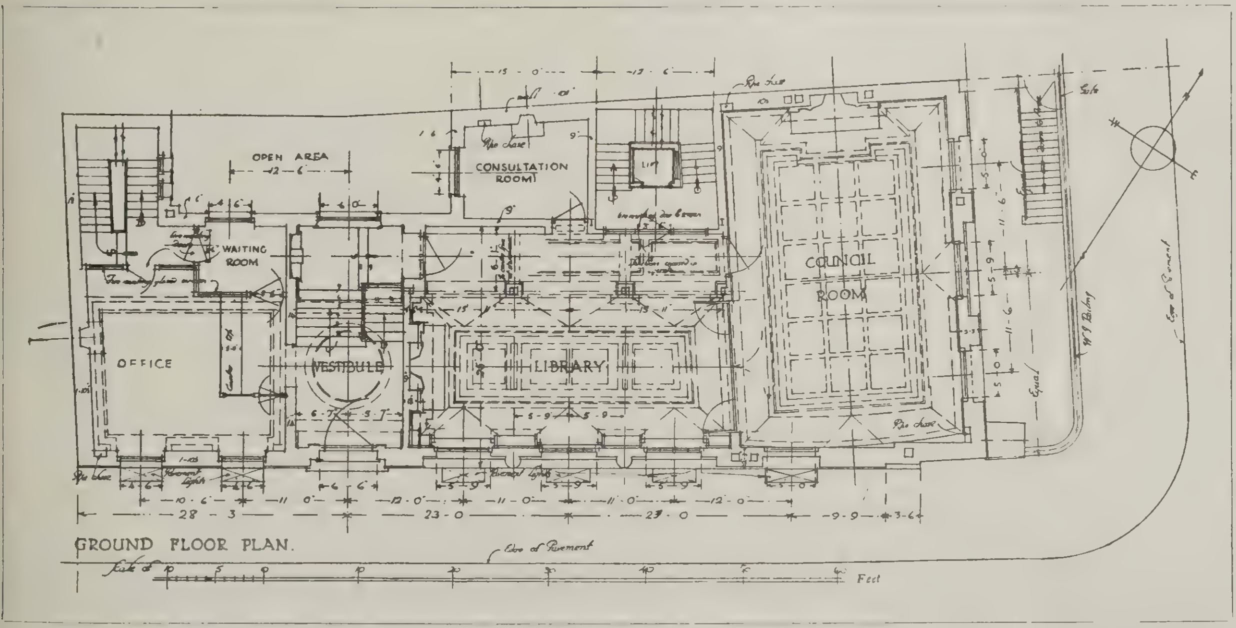


ADELAIDE HOUSE, LONDON BRIDGE: ELEVATION TO RIVER.
SIR JOHN BURNET AND PARTNERS, ARCHITECTS

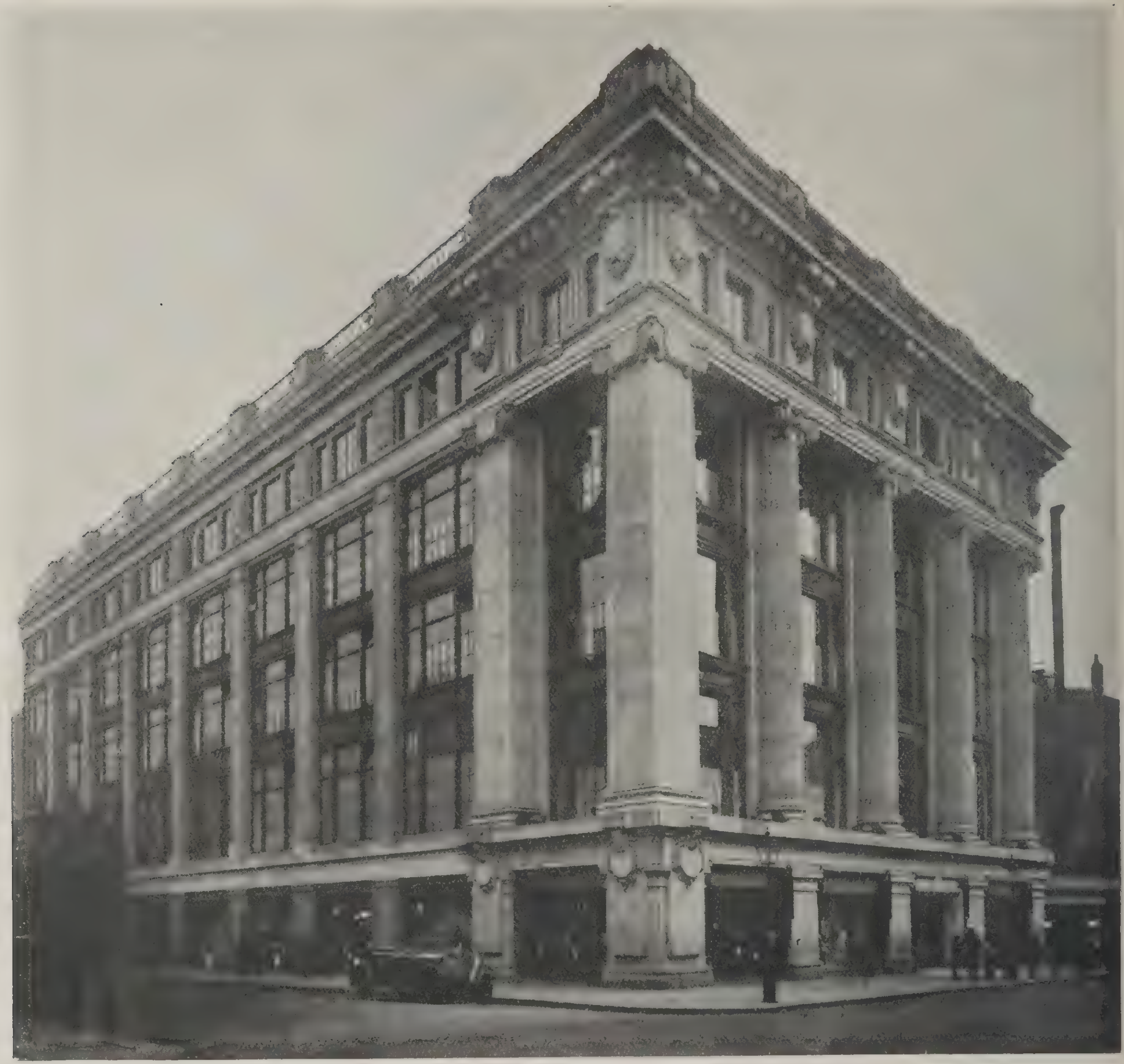


ADELAIDE HOUSE, LONDON BRIDGE. SIR JOHN BURNET AND PARTNERS, ARCHITECTS.

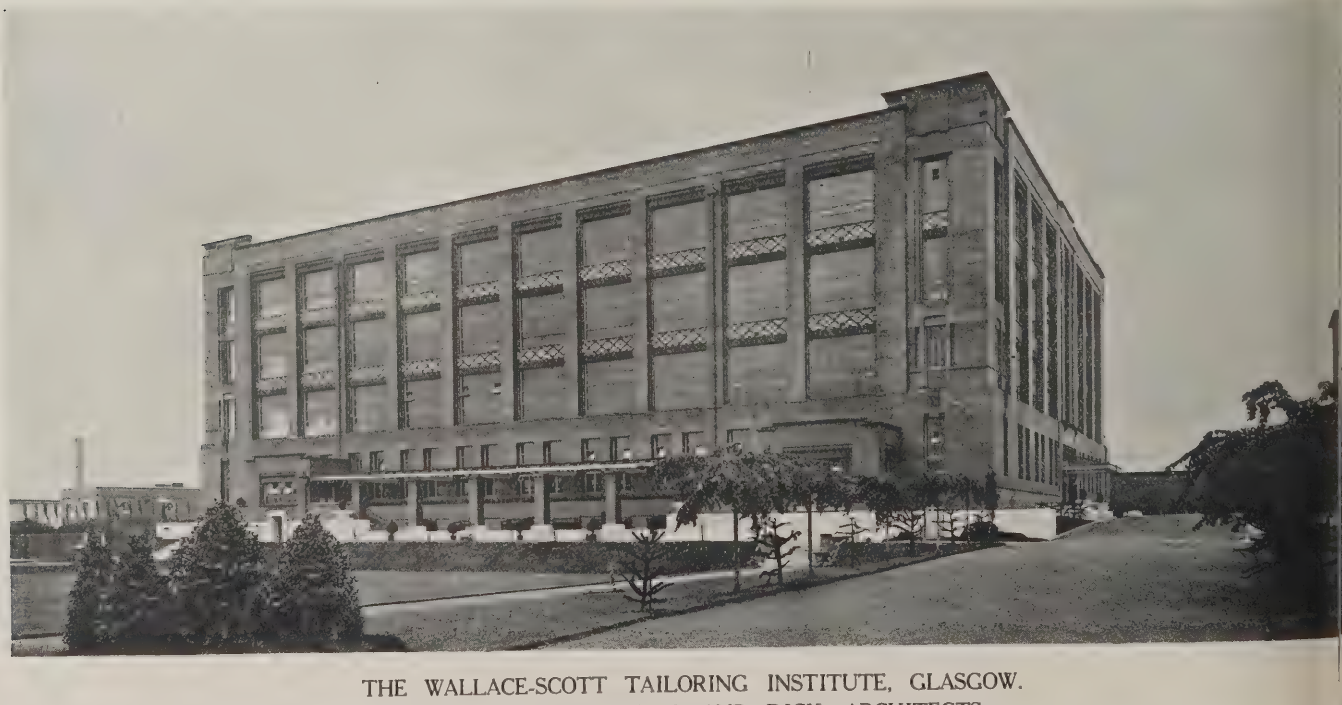




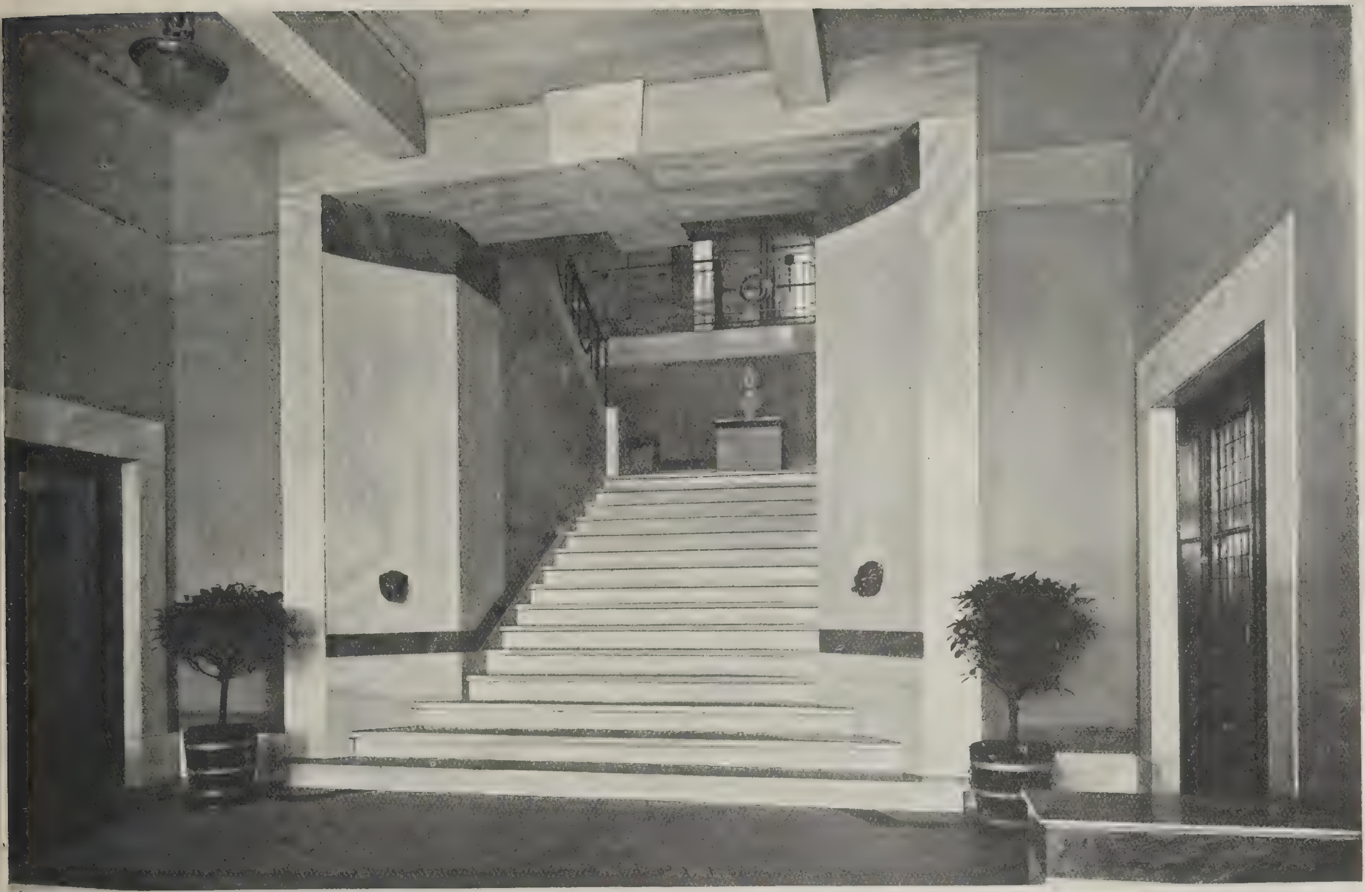
THE INSTITUTE OF CHEMISTRY, RUSSELL SQUARE, LONDON.
SIR JOHN BURNET, A.R.A., ARCHITECT



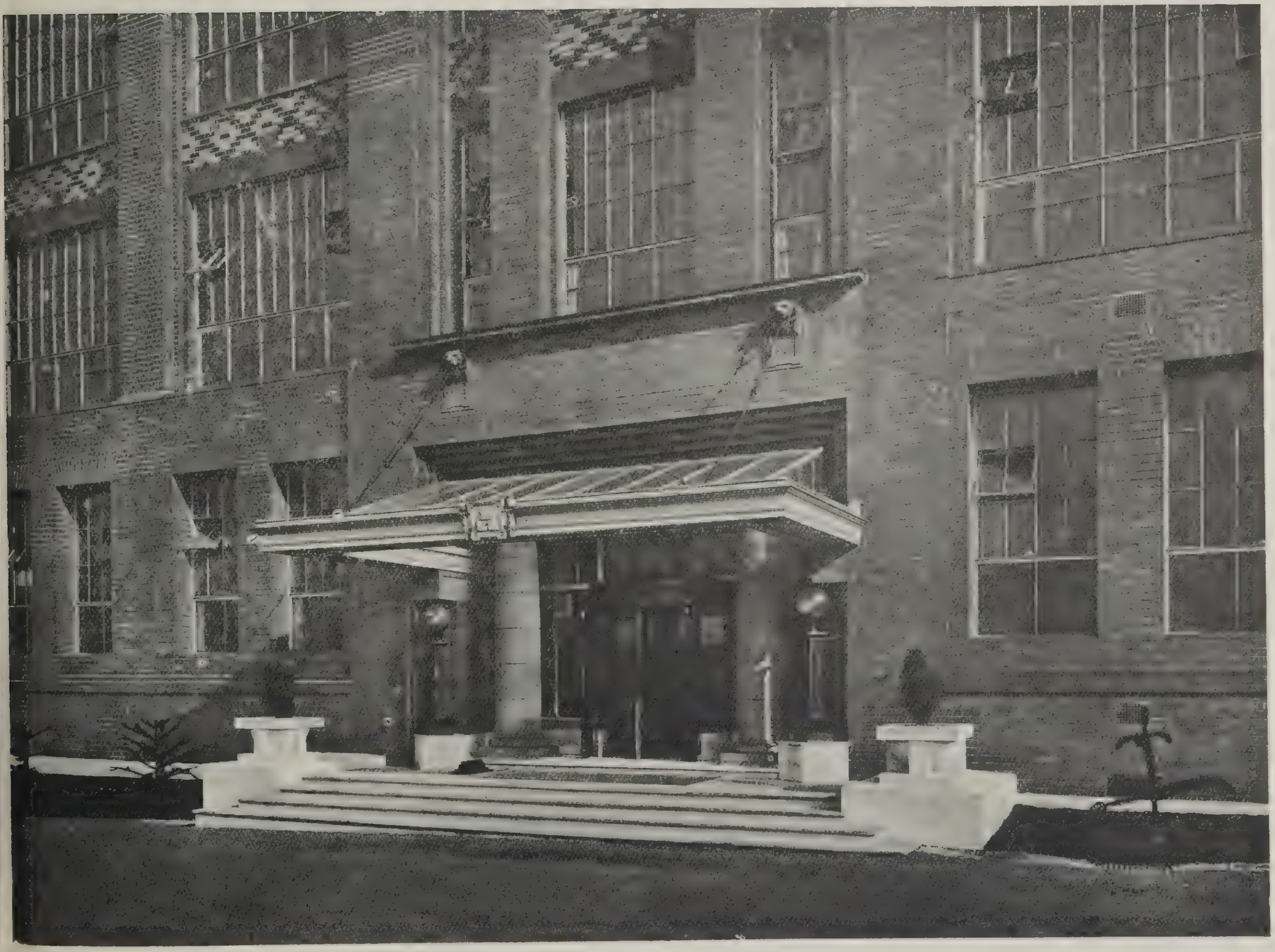
THE NEW EXTENSION OF THE SELFRIDGE STORE
GRAHAM, ANDERSON, PROBST AND WHITE, AND SIR JOHN BURNET AND PARTNERS, ARCHITECTS.



THE WALLACE-SCOTT TAILORING INSTITUTE, GLASGOW.
SIR JOHN BURNET, SON, AND DICK, ARCHITECTS

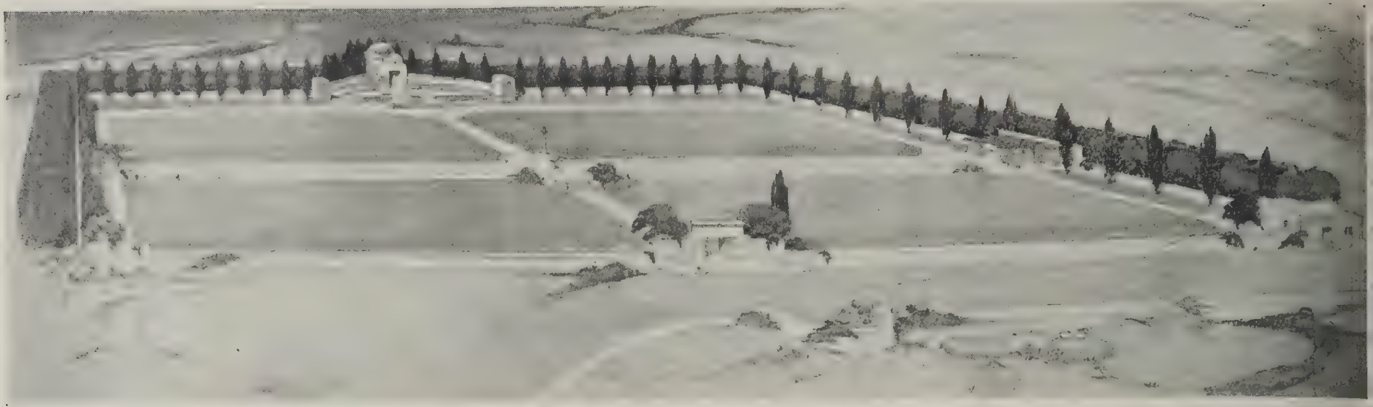


THE ENTRANCE HALL.

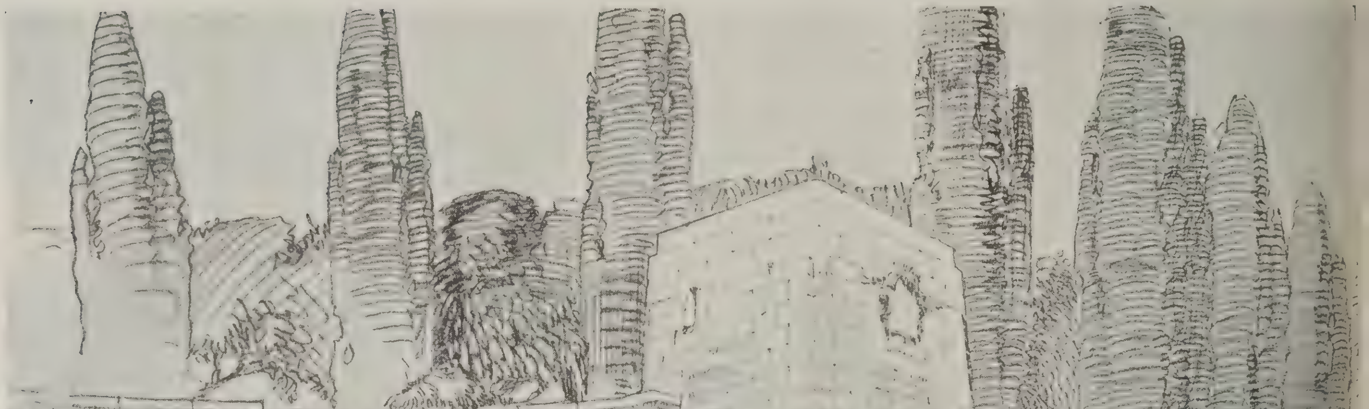


A DETAIL OF THE PRINCIPAL ENTRANCE.

THE WALLACE-SCOTT TAILORING INSTITUTE, GLASGOW. SIR JOHN BURNET, SON, AND DICK, ARCHITECTS.



A GENERAL VIEW OF THE CEMETERY


JERUSALEM WAR CEMETERY MEMORIAL PYLON

Royal Academy Exhibition.

JERUSALEM WAR CEMETERY: A DETAIL OF THE MEMORIAL PYLON.
SIR JOHN BURNET, A.R.A., ARCHITECT

# "Hawthorndene," Stanmore

## DOUGLAS WOOD, Architect

EVEN housing commissioners are not exempt from the great national house shortage. Like other folk, if they want a home to meet their own particular requirements then they must build one.
Douglas Wood is no
eption to the rule, and
has built himself a house
the beautiful, but little
own, village of Stanmore,
ldlesex.

he site has a north
ntage to the road, and
mands fine views to the
th over the Stanmore
f course. In planning and
igning the house he took
opportunity to make the
st of the views and to en-
to the full the other ad-
tages offered by the as-
t of the site. Thus the
ncipal rooms face south.
s will be seen from the
strations (on this and
e 1112) the "L"-shaped
n has been successfully
pted to a small house.
main entrance is by way of a lobby into the hall,
n which easy access is obtained to the kitchen and to
important rooms. On the right of the hall are the
ts" and the w.c., and on the other side larder, servants'
., the yard, and the tradesmen's entrance. Between the kitchen and dining-room is a useful serving hatch; and at the back of the former are the scullery, coals, tool houses.

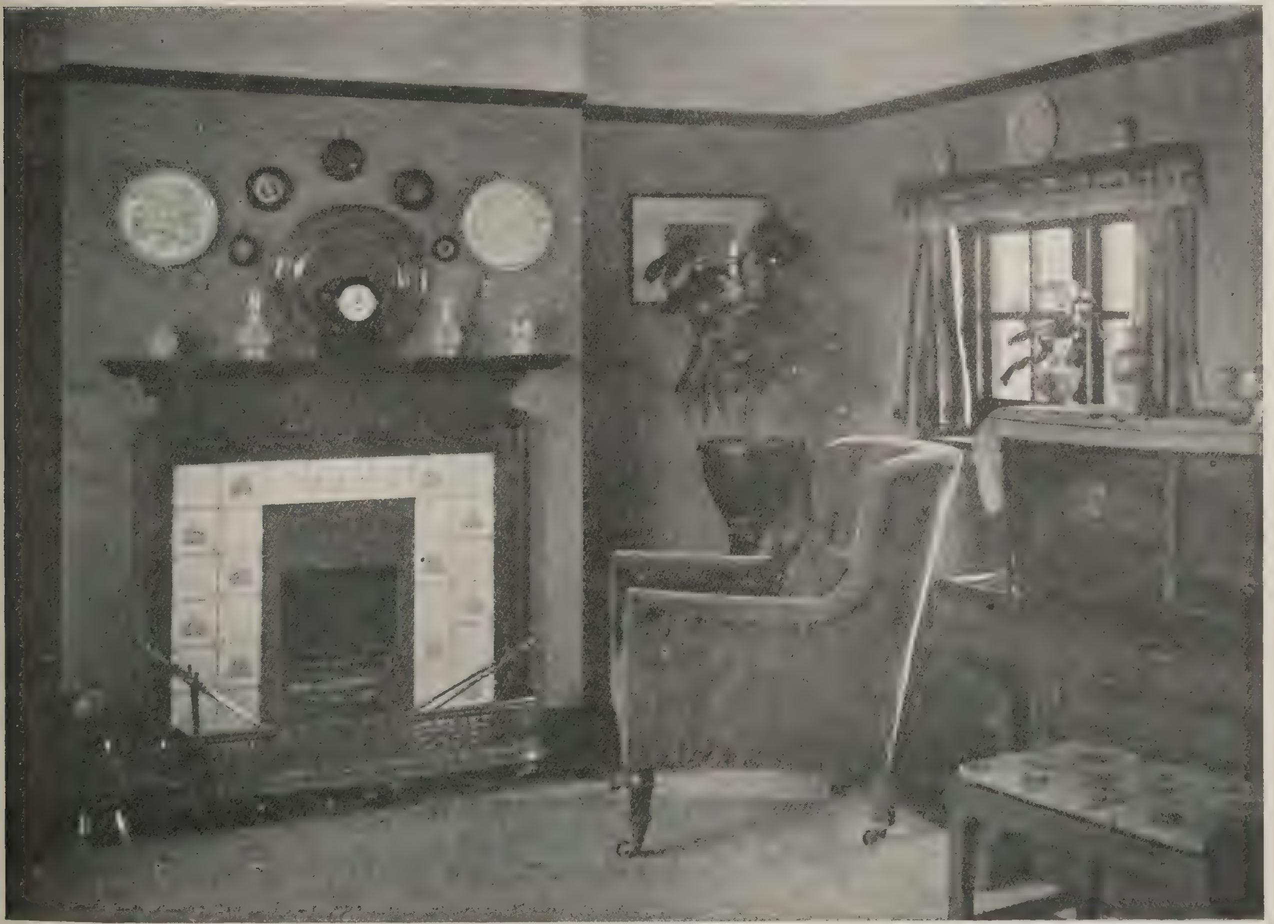
THE DINING-ROOM.

On the first floor, which is reached by a staircase from the hall, there are four bedrooms, study, bathroom, w.c., and linen boxes. All the bedrooms are well arranged, and the two larger ones have been fitted with lavatory basins. The small study, which is provided with a desk for a drawing-board, is cleverly planned over the hall and stairs.

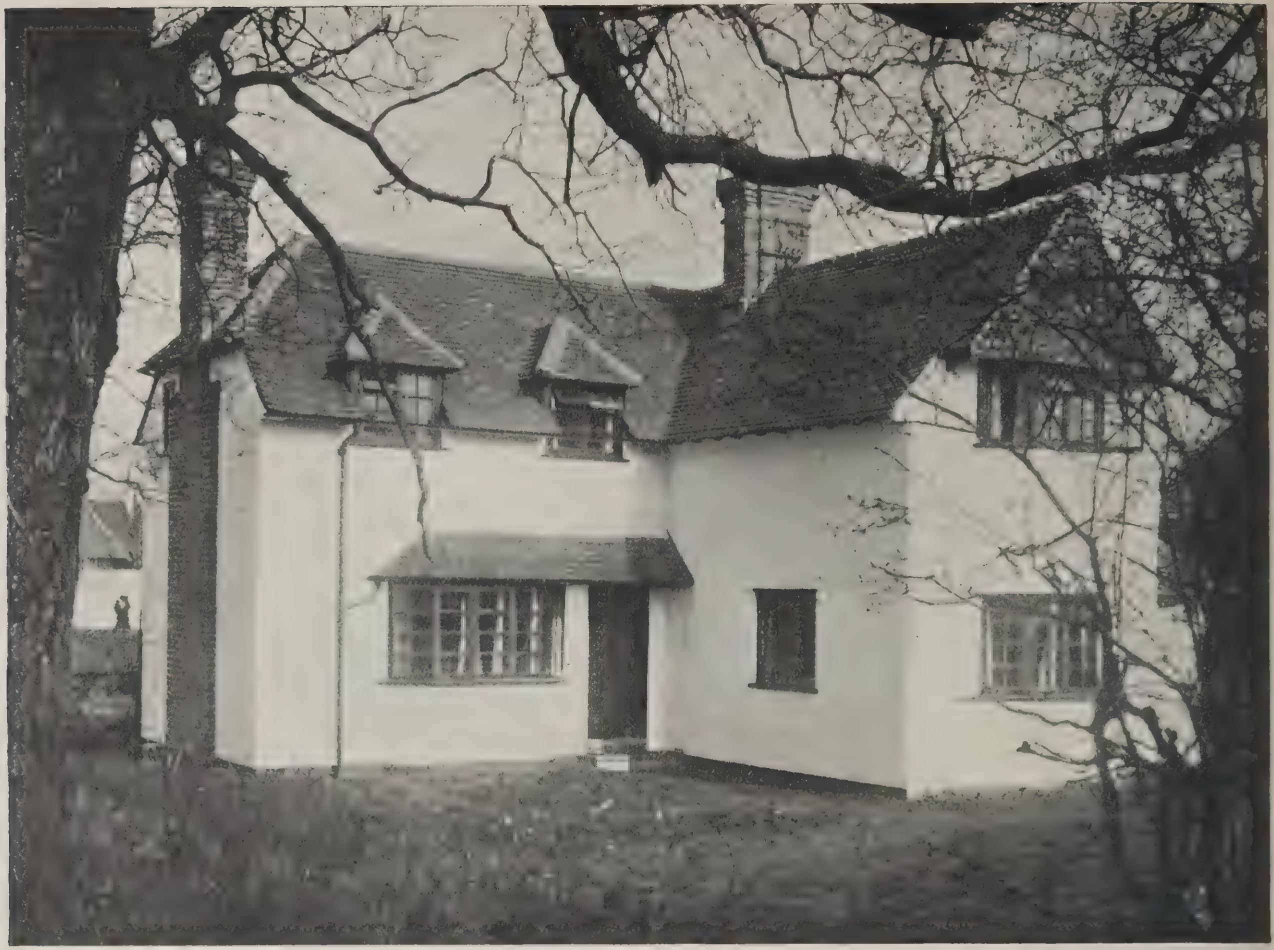
The hot-water supply is obtained from an independent "Sentry" boiler, which also heats the radiators in the dining-room and the hall. Cooking is done by gas.

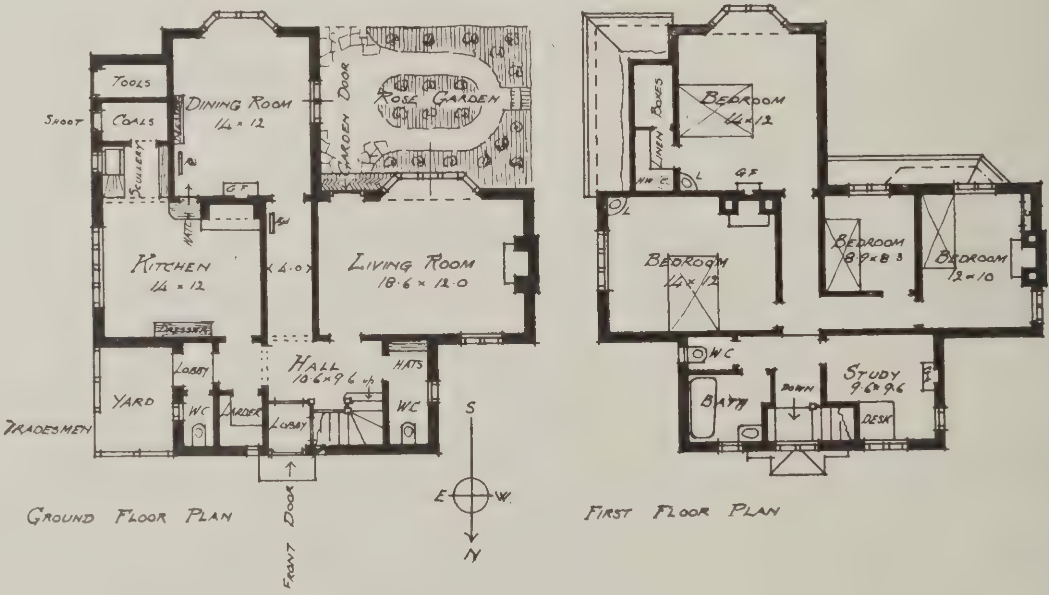
In the inside of the "L" formed by the plan of the house a rose garden has been laid out. This is a veritable sun trap, and is reached from the living-room.

Externally the house has been treated with great simplicity. Unnecessary ornament has been omitted, the architect relying entirely upon the disposition of the various parts of the building and the colour and nature of the materials to secure architectural effect. The house was built for just under £1,300.



THE LIVING-ROOM, SHOWING MANTELPIECE AND OLD DUTCH TILES.





"HAWTHORNDENE," STANMORE, MIDDLESEX.

DOUGLAS WOOD, ARCHITECT

*(See preceding page,)*

# The Business of an Architect

## 7.—Book-keeping and Accounts

By C. MURRAY HENNELL, F.S.I.

AS I have already stated, the book-keeping required in an architect's office is very much simpler than is necessary in a commercial concern, and it would appear to be out of place to attempt in these pters any lessons on the elements of double-entry book- ping, knowledge of which is essential in the conduct of business. The purpose of the books is accurately to ord all monetary transactions, balances in hand, and is owing by and to the principal or firm. Although the ks are balanced periodically, probably once a year, the purpose of preparing a "Profit and Loss" account l balance sheet, it should be possible at any time to ve at a very close estimate of one's financial position.

n many architects' offices the books are written up rterly or half-yearly, or even only annually, by auditors, in most practices this is an unnecessary expense, as a rthand-typist has generally had sufficient training in k-keeping to enable him or her to do all that is required the intermittent periods when not otherwise fully upied.

he following books are needed :—

. *Cash book*, whose entries and balances should agree h those in the pass book, issued by the bank.

. *Journal*, which is really only a book kept for drafting tings and transfers from one account to another in the ger.

. *Ledger*, which should be divided into three separate ts, containing "Nominal" accounts, "Personal" ounts, and "Private" accounts. These parts are best t bound in separate books, and in any case the "Private" ger should be one apart, but it should be remembered t however many ledgers there may be in a set of books, y are really all one, and that they are only bound separ- y for the sake of convenience.

hese are the principal books, the petty cash book, tage book, telephone call and other minor books that be required being merely of a subsidiary nature.

he sample "Profit and Loss" account and balance sheet ge 1114) will give an indication of the majority of ounts that should be opened in the ledgers, and suggest seful form for the closing of the books at the end of the r, such as will be acceptable to the Income Tax authori- .

lthough advisable to write off an agreed depreciation h year, this will not be recognized as a charge against me for taxation purposes. Consequently, in the example en the taxable income of the firm would be net profit 11 17s. 2d., plus depreciation charged £35 4s. 0d. equals, 47 1s. 2d.

he profit and loss account and balance sheet do not, of rse, show the "Personal" accounts, these being mostly nts' accounts, recording fees and disbursements charge- and paid. For small jobs the fees and expenses can e posted to one account, but for works of considerable it is best to keep these separate. Expenses paid by que are posted to the client's account direct from the h book, and postings are made of items from the petty , postage and telephone call books periodically, prefer- monthly.

h the preceding chapter it was suggested that every r should bear initials indicating the job or client to which it referred, and that the clerk or office boy who stamped the letters should enter these initials against the amount of the postage. At the end of the month these can all be abstracted, credited to the "Postage" account in the ledger and debited to the respective clients' accounts. As postages are chargeable, unless otherwise agreed upon, to the clients, so are telephone calls, the use of the telephone being often not only quicker but cheaper, and enabling one to explain matters better than by any amount of correspondence.

I recommend that a small book be kept with each instrument, and the practice be made of entering every call. This book can have the following headings :—

| Date. | Number. | Name. | Job. | Call Made By. |
|---|---|---|---|---|

It takes very little time to enter one's calls, in fact, all that is required can usually be filled in while the exchange is getting the number. Furthermore, this book saves frequent references to the telephone directory. At the end of the month, the entries will be abstracted, as in the case of the postages, credited to the "Telephone" account in the ledger and debited to the clients. The charge made for calls should be at the same rate as that made by the Post Office to the subscriber, the rental of the line and instrument, which are part of the architect's establishment, not being chargeable to the clients.

The costing of works in the office is highly desirable, and acts as a guide in showing not only which jobs are profitable or unprofitable, but also which assistants turn out the work at lowest cost to their employers. The assistant, however, should never be judged by this alone—it is only one of many factors to his credit or discredit.

Every technical assistant should keep a time sheet, which should be filled in daily, showing the number of hours spent upon each item of work. Time sheets, which can be weekly or monthly, are checked by the chief assistant and regularly collected by a clerk, who works out the cost in salary of each item. In some architects' offices cost books are kept, but in the average practice these seem to be unnecessary, as there is always plenty of room in the ledger accounts to record the costing of a commission, preferably in different coloured ink, so as not to be confused with the ordinary book entries, and then one can see the whole of the financial aspect of a job on one page. It is, of course, practically impossible to analyse the salaries of the clerical staff, and a principal's time spent on different works and the value of that time can seldom be gauged. The cost of his labours is dependent upon the net profits of the practice.

In costing work in an architect's office an ascertained figure has to be taken for expenses not shown in the technical assistants' time sheets, and using the hypothetical "Profit and Loss Account" given on page 1114, let us assume that "Salaries and Wages—£963 4s. 6d." consist of £800 to draughtsmen, etc., who keep time sheets and £163 4s. 6d. to clerks who do not. As the total expenses of the office for the year amount to just over £1,400, there is approximately £600 going in office expenses which cannot be analysed and attributed to any particular works. Such expenses have, therefore, to be spread over all work in the office, and this can only be done by making a percentage addition to the "time sheet wages." This may give quite a false cost to some works, as in cases where no drawing is done, but the whole of the architect's work consists of reports, evidence and correspondence. However, it will give as close an estimate of cost as can reasonably be expected in the office of a professional man.

In the above example it will be seen that 75 per cent. should be added to the wages cost, taken from time sheets, for other office expenses, which include what are known as "Overhead Charges."

The "Personal" account (page 1115) shows the method of entering the monetary transactions with clients, a how the costing of the work can be recorded on the sa page of the ledger. In this example the fees and exper are posted to the same account, but, as already stat these had better be kept separate in cases of works of c siderable size.

From this account it will be seen that as soon as building contract is signed, the fee for survey of site a

## HARRISON AND WADE.

### PROFIT AND LOSS ACCOUNT FOR THE YEAR ENDED 31ST DECEMBER, 1922.

| *Dr.* | | | | £ | s. | d. |
|---|---|---|---|---|---|---|
| To Office Rent | | | | 200 | 0 | 0 |
| Lighting | | | | 9 | 10 | 0 |
| Heating | | | | 24 | 3 | 6 |
| Cleaning and Attendance | | | | 30 | 8 | 0 |
| Furniture Repairs | | | | 2 | 17 | 2 |
| Salaries and Wages | | | | 963 | 4 | 6 |
| ,, Insurance—Office Furniture and Employer's Liability | | | | 4 | 8 | 6 |
| ,, Printing and Stationery | | | | 18 | 2 | 6 |
| ,, Drawing Paper and other expendable materials | | | | 26 | 8 | 4 |
| ,, Photographs and Prints of Drawings for office use | | | | 18 | 1 | 10 |
| ,, Travelling Expenses (not chargeable to clients) | | | | 24 | 1 | 8 |
| ,, Postages and Telegrams (ditto) | | | | 5 | 4 | 9 |
| ,, Telephones (ditto) | | | | 14 | 8 | 9 |
| General Expenses | | | | 10 | 2 | 4 |
| Bank Charges (cheque books) | | | | 1 | 13 | 4 |
| ,, Law Charges | | | | 13 | 6 | 8 |
| ,, Fees to Professional Institutions— | | | | | | |
| A. G. Harrison, F.R.I.B.A. | £5 | 5 | 0 | | | |
| G. N. Wade, F.R.I.B.A. | 5 | 5 | 0 | | | |
| | | | | 10 | 10 | 0 |
| ,, Agreed Depreciation— | | | | | | |
| 10% off Furniture and Fittings | 27 | 0 | 0 | | | |
| 20% off Drawing and Surveying Instruments | 8 | 4 | 0 | | | |
| | | | | 35 | 4 | 0 |
| ,, Balance, being net profit— | | | | | | |
| A. G. Harrison, one-half share | £1,455 | 18 | 7 | | | |
| G. N. Wade, do. | 1,455 | 18 | 7 | | | |
| | | | | 2,911 | 17 | 2 |
| | | | | £4,323 | 13 | 0 |

| | | | | *Cr.* | |
|---|---|---|---|---|---|
| | | | | £ | s. |
| By Fees for Professional Services— | | | | | |
| New Works | £3,184 | 4 | 7 | | |
| Alterations to existing buildings | 659 | 12 | 0 | | |
| Consultancies | 243 | 3 | 9 | | |
| Dilapidations and other minor services | 138 | 4 | 3 | | |
| | | | | 4,225 | 4 |
| Interest on Investments— | | | | | |
| £1,200 5% War Loan | £60 | 0 | 0 | | |
| £300 7% India Stock | 21 | 0 | 0 | | |
| | | | | 81 | 0 |
| Interest on Deposits at Bank | | | | 17 | 8 |
| | | | | £4,323 | 13 |

## HARRISON AND WADE.

### BALANCE SHEET AS AT 31ST DECEMBER, 1922.

| *Capital.* | | | | £ | s. | d. |
|---|---|---|---|---|---|---|
| A. G. Harrison | £750 | 0 | 0 | | | |
| G. N. Wade | 750 | 0 | 0 | | | |
| | | | | 1,500 | 0 | 0 |
| *Partners' Current Accounts.* | | | | | | |
| A. G. Harrison— | | | | | | |
| Balance from last year | 293 | 2 | 5 | | | |
| Share of Profit | 1,455 | 18 | 7 | | | |
| | 1,749 | 1 | 0 | | | |
| Less Drawings | 1,200 | 0 | 0 | | | |
| | | | | 549 | 1 | 0 |
| G. N. Wade— | | | | | | |
| Balance from last year | 293 | 2 | 5 | | | |
| Share of Profit | 1,455 | 18 | 7 | | | |
| | 1,749 | 1 | 0 | | | |
| Less Drawings | 1,200 | 0 | 0 | | | |
| | | | | 549 | 1 | 0 |
| Sundry Creditors | | | | 26 | 12 | 6 |
| | | | | £2,624 | 14 | 6 |

| *Cash at Bank.* | | | | £ | s. |
|---|---|---|---|---|---|
| Deposit Account | £500 | 0 | 0 | | |
| Current Account | 97 | 2 | 9 | | |
| | | | | 597 | 2 |
| Cash in Hand | | | | 3 | 14 |
| Investments at Cost. | | | | | |
| £1,200 5% War Loan | 1,203 | 6 | 4 | | |
| £300 7% India Stock | 341 | 2 | 3 | | |
| | | | | 1,544 | 8 |
| *Office Furniture and Fittings.* | | | | | |
| At cost, less agreed depreciation | | | | 243 | 0 |
| *Drawing and Surveying Instruments.* | | | | | |
| At cost, less agreed depreciation | | | | 32 | 16 |
| *Sundry Clients.* | | | | | |
| Fees due | 182 | 4 | 0 | | |
| Refund of disbursements due | 21 | 8 | 6 | | |
| | | | | 203 | 12 |
| | | | | £2,624 | 14 |

o-thirds of the commission on the building is regarded due, in accordance with the R.I.B.A. scale. On this date, refore, that part of the fees is credited to the "Fees Professional Services" account and debited to the client's count, as it then constitutes an asset of the architect and lient's liability. A bill for this and for expenses incurred sent to the client in the course of reasonable time, and en he pays up the cash book is debited and the client's count credited with the sum paid.

In the example given it is assumed that no further instal-nt of fees is asked for until the end of the job, but the ok procedure is precisely the same however many ad-nces on account of fees are demanded.

National Health and Unemployment Insurances add to the expense and clerical labours of all offices, as every employee earning up to £250 a year comes within the scope of the Act. The employees' contributions are collected from them or deducted from their wages, and the employer's contribution can be charged either to a separate "National Health and Unemployment Insurance" account or posted direct to the "Wages" account. If the latter course is adopted it is as well to reserve the inner money column in the account for insurances, leaving the outer column for the actual wages.

[*The previous articles in this series appeared in our issues for April* 4, 11, 25, *May* 9 *and* 30.]

JAMES COX, Esq. HOUSE AT BARNET.

*Dr.*

| :2. | | | £ s. d. |
|---|---|---|---|
| 1. 31. | To Postages .. .. .. .. | | 0 2 6 |
| | ,, Telephones .. .. .. .. | | 0 2 0 |
| | ,, Petty Cash—Travelling .. .. | | 0 14 2 |
| ). 2. | ,, Cash—Payment to Sunlight Co. for Prints of Drawings .. .. | | 1 8 6 |
| ). 28. | ,, Postages .. .. .. .. | | 0 4 0 |
| | ,, Telephones .. .. .. .. | | 0 1 6 |
| | ,, Petty Cash—Travelling .. .. | | 0 7 1 |
| r. 4 | ,, Fees for Professional Services (Building Contract being signed this day)— | | |
| | Survey of site .. | £8 8 0 | |
| | ⅔ of 6% on amount Contract £2,500 | 100 0 0 | |
| | | | 108 8 0 |
| | | | £111 7 9 |
| r. 31. | To Postages .. .. .. .. | | 0 3 6 |
| | ,, Telephones .. .. .. .. | | 0 1 6 |
| | ,, Petty Cash—Travelling .. .. | | 0 14 2 |
| r. 30. | ,, Postages .. .. .. .. | | 0 2 0 |
| | ,, Telephones .. .. .. .. | | 0 0 9 |
| | ,, Petty Cash—Travelling .. .. | | 0 14 2 |
| y 6. | ,, Cash—Payment to Sunlight Co. for Prints of Details .. .. | | 0 9 2 |
| y 31. | ,, Postages .. .. .. .. | | 0 2 0 |
| | ,, Telephones .. .. .. .. | | 0 1 0 |
| | ,, Petty Cash—Travelling .. .. | | 0 7 1 |
| ie 3. | ,, Postages .. .. .. .. | | 0 1 0 |
| | ,, Petty Cash—Travelling .. .. | | 0 14 2 |
| v. 30. | ,, Postages .. .. .. .. | | 0 2 4 |
| | ,, Telephones .. .. .. .. | | 0 1 6 |
| | ,, Petty Cash—Travelling .. .. | | 0 7 1 |
| | ,, Fees for Professional Services—6% on amount of Contractor's agreed Final a/c (£2,520) | £151 4 0 | |
| | Less received .. | 100 0 0 | |
| | | | 51 4 0 |
| | | | £55 5 5 |

*Cr.*

| 1922. | | | £ s. d. |
|---|---|---|---|
| Mar. 15. | By Cash. Fee .. .. | £108 8 0 | |
| | Expenses to Feb. 28 | 2 19 9 | |
| | | | 111 7 9 |
| | | | £111 7 9 |
| Dec. 7. | By Cash. Fee .. .. | 51 4 0 | |
| | Expenses from Mar. 1 to Nov. 30 .. | 4 1 5 | |
| | | | 55 5 5 |
| | | | £55 5 5 |

*Cost to Office from Time Sheets.*

| | | | | | |
|---|---|---|---|---|---|
| *Jan.* | *A. J. Black* | *56 hrs. @* | *3/-* .. | *£8 8 0* | |
| | *L. Clarke* | *5* ,, | *1/9* .. | *0 8 0* | |
| *Feb.* | *A. J. Black* | *11* ,, | *3/-* .. | *1 13 0* | |
| *Mar.* | ,, | *24* ,, | *3/-* .. | *3 12 0* | |
| *April.* | ,, | *10* ,, | *3/-* .. | *1 10 0* | |
| | *L. Clarke* | *6* ,, | *1/9* .. | *0 10 6* | |
| *June.* | *A. J. Black* | *12* ,, | *3/-* .. | *1 16 0* | |
| *July.* | ,, | *5* ,, | *3/-* .. | *0 15 0* | |
| *Sept.* | ,, | *6* ,, | *3/-* .. | *0 18 0* | |
| *Oct.* | ,, | *10* ,, | *3/-* .. | *1 10 0* | |
| *Nov.* | ,, | *4* ,, | *3/-* .. | *0 12 0* | |
| | | | | *21 13 3* | |
| *Add 75 % for other office expenses* .. | | | | *16 4 11* | |
| | | | | *£37 18 2* | |
| *Fees received* .. .. | | | | | *£108 8 0* |
| | | | | | *51 4 0* |
| | | | | *159 12 0* | |
| *Net profit to office* .. .. | | | | *£121 13 10* | |

(*To be continued.*)

# The East Kent Art Society

The East Kent Art Society has decided to include works architecture in its exhibition this year, especially models d mural decoration designs. The rules governing the mission of architecture are similar to those in force at Royal Academy. The sending-in day is July 20, and exhibition opens on July 25. Forms and labels can w be obtained by application to the hon. sec., Miss udia Gale, Belmont, Harbledown, near Canterbury, nt, or to Mr. Trenwith Wills, A.R.I.B.A., 5 Bedford w, W.C.1. As this is the society's first venture into architecture it is hoped that a large number of architects will submit works.

All paintings, carvings, etc., for the exhibition, which is to be held in the Sidney Cooper School of Art, Canterbury, must be sent to the School of Art on Friday, July 20, between 9 a.m. and 5 p.m. Only two works can be accepted from non-members, six from all members of the society, three of which are subject to the decision of the hanging committee. Members of the committee are entitled to exhibit six works.

# Defaulting Clients and the Architect

### By LEONARD LAIT

THE case of the architect who, having completed works or designs which he has been instructed to carry out, finds himself unable to recover his fees from the building owner, is one of considerable interest to all members of the profession, since most architects find themselves at one time or another in this position.

The present writer has repeatedly received suggestions for the introduction of an insurance against this particular form of loss.

In examining the practicability of such an insurance it is necessary first to consider the causes which give rise to the losses in question; always keeping in mind the most obvious condition of any contract of insurance—namely, that such a contract can only be effective in the case of a fortuitous loss; by which is meant a loss which it does not lie within the power of the assured, by his own intention, to incur or to obviate.

The causes of losses of fees may be broadly classified under three heads :—

(1) The insolvency of the building owner.

(2) The abandonment of the building scheme and the unwillingness of the building owner to pay for work which will, in consequence, be useless to him; or a refusal to pay merely, without any pretext at all, and

(3) Refusal to pay on the ground that the architect's work is unsatisfactory.

In regard to the first case, that of insolvency, this clearly comes under the heading of fortuitous loss, and as such should be, theoretically at least, within the scope of insurance. As a fact, insurance against insolvency, known as credit insurance, is regularly effected in regard to commercial transactions. Without going exhaustively into the subject of credit insurance here, it may be stated that the conditions under which this is applied to commercial transactions are not easily adaptable to the case of the architect and his client. The safeguards which are essential in the case of commercial transactions would be very irksome to the architect; moreover, it is very doubtful indeed whether, under existing conditions, any of the organizations which undertake this form of insurance could be induced to extend their field of operations to include the case now under consideration. Insolvency, however, is in all probability the least frequent cause of losses to the architect, and the question of credit insurance by itself is therefore of relatively minor interest to him.

Passing over the second case for the moment, we come to case No. 3—that of refusal to pay fees, founded on an allegation of unsatisfactory work. This is in effect a claim for damages, to the extent of the fee involved, against the architect. If, therefore, the architect in this case takes action, or threatens action, so as to compel the building owner to counterclaim for damages, while admitting his liability for the fees as such, the counterclaim is one which is covered by the existing architect's indemnity policy; and where the architect has availed himself of this insurance he will be entitled to recover the amount of the counterclaim under this policy.

The remaining case, that of a simple refusal to pay, is undoubtedly that which is of most frequent occurrence, and is therefore the one of the greatest practical interest to the architect. In such a case, of course, the architect's legal remedy is to sue for his fees, when he would in most cases recover, unless a defence were set up in the form of a counterclaim such as would bring the case into category No. 3.

But here we touch upon the crucial point, namely, that the architect in such a case is very frequently unwilling to have recourse to his legal remedy; either because the amount at stake is not worth the trouble and loss of time involve or as a matter of policy, or for purely personal reason In this case it is obvious that the matter is wholly exclud from any possible form of insurance by the fundament consideration from which we started. The archite himself is in fact, from the technical point of view, causi the loss by his refusal to take proper steps to recover.

Since, therefore, the case which is of most practic interest to the architect is excluded from the field insurance, it has to be considered what other steps may taken to safeguard architects against this frequent cau of loss.

It is perhaps a matter for regret that the R.I.B. found itself unable to proceed with the proposals f dealing with this matter, among others, by means of Professional Defence Union; but on this subject the writ is in no way entitled to speak. It may be assumed, howeve that the decision of the Council was influenced by man considerations other than the one immediately befo us; and that therefore there is nothing in this decisio to inhibit members of the Royal Institute from takin independently or jointly with the members of oth societies, such steps as might serve to achieve their objec

The writer necessarily feels considerable diffidence tendering advice to the members of a profession with whic he is not himself associated. Facts, however, which ha been from time to time brought to his notice by man architects, and which have given rise to the foregoin brief survey of the subject, have suggested what appea to be a practical solution of the difficulty. Briefly t solution appears to be in the registration, under t Friendly Societies Act, of an organization to be know say, as "The Architects Legal Aid Society" with t initial object of affording legal and all other possib assistance to members in the contingencies previous discussed. The membership fee of such a society shou be very small, say, £1 1s. 0d. per annum, and the fir object should be simply to provide legal advice an assistance where necessary. Surplus funds should be allowe to accumulate to form an insurance fund which would time enable the society to afford insurance against loss from insolvency and, possibly, against successful resistan by the building owner to the architect's claim on groun other than that of negligence. Power to do this shou be taken in the first place when registering the society.

Undoubtedly, however, the actual benefits to be derive from the activities of such a society would greatly excee the direct benefits just set forth.

In the first place, by bringing every claim to the noti of one body, a mass of information would be collecte which would be of the greatest service to that body dealing with difficult cases.

Secondly, resolute pursuit of certain defaulters wou undoubtedly have its effect on others, who under prese conditions are tempted to rely on the probability of t architect's allowing his case to go by default; and t directors of the society, being themselves architects a having an appreciation of their members' difficultie would exercise their discretion in every case as to t desirability of taking action.

The knowledge, however, that such an organizati existed to look after the architect's interests, with amp funds available for the purpose, would of itself cause t client to pause before entering into a dispute which mig be costly to him; thus reversing the present state of affai in which the client, if a man of means, may frequent consider that, should litigation result, he can afford it a the architect cannot, and that the latter therefore w tend to give way without a fight.

Thirdly, it should be observed that the organizatio

ing in this respect a fighting organization only, and not
fering any insurance against losses where the architect's
gal right has not been exercised, would in no way tempt
e client to initiate a dispute in the belief that the
chitect, being insured, would be indifferent in the prose-
ution of it.

And finally, incorrigible non-payers would become known
the Central Organization, and it would be possible for
members to refer to it for confidential information
fore accepting commissions from doubtful clients, which would, of course, result in the client, who objects to paying the architect for his services, experiencing considerable difficulty in obtaining these services.

Summarizing, it may be asserted with confidence that the formation of such a society as that indicated, while it would be of direct assistance where a dispute actually arises, would be of far greater service to the profession as a whole in reducing the number of such disputes by eliminating the conditions which are at present a temptation to a certain type of client to initiate them.

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# Contemporary Art

### *The Greatorex Galleries.*

most interesting and varied exhibi-
here includes coloured wood engrav-
by C. W. Bartlett, who set out for
erica some years ago and only got as
as Honolulu, where he makes his
ks for colour-printing in the leisurely
pursued in China and Japan. He
ws pull after pull from the blocks re-
ed to complete the finished print.
some cases only a couple of spots of
ur are required of a block, in others
e, apparently unmeaning masses of
l co'our. When the finished product is
ilable it is found to be a most in-
sting, homogeneous study, glowing
colour and compact of good draw-
The artist seems to have visited
ia and China on his way to America
, but his stay in Honolulu would
ear to have been the most produc-
period.

show of Timothy Cole's wood-cuts
ves again how good a really bad work
rt can sometimes seem. Timothy Cole
undoubtedly the greatest tone-
raver on wood there has ever been.
J. Linton told him years ago how
ng he was, but he ceased not, but
itably pursued his career of repro-
tive engraving in tone on wood, and
his prints are eagerly collected, and
in some cases unattainable.

o also are some of the etchings and
points of small animals and birds of
ifred Austen, R.E., who uses the
biting process for her textures in
s where her subjects are static, as in
eautiful example of a "Rabbit," and
drypoint where a more rapid record
movement has to be secured, as in
"Flight of Mallards." There are
e perfectly delightful nature studies—
ormouse, for example, is exquisitely
e.

roy Kinney's drypoints of dancers—
okova, Gené, Nijinski, and Bolen are
e of them—also show how well the
needle serves for rapid movement.

### *The Camera Club.*

the beautiful chamber in John
et in the Adelphi, with its Adam
gestions, the fifty prints by fifty
ers attached to the walls have a very
ting appearance. What is a source
reat satisfaction to me is the presence
considerable percentage of figure-
jects; we want more figure work in
lish etching, and it is obvious from
a Klinghoffer's print, and from those
number of other etchers, that the
ply is ready whenever the demand is
le. There are some charming land-
es, and some interesting architectural subjects; there is some humour, as in F. Hill's "Synthesis," and there is fine etching quality in "The Passing of the Storm," by G. Williams, and "Landing Herrings, Tarbert," by W. Westley Manning, a fine plate. Aquatints are included with drypoints and bitten work as well as one or two coloured, of which I do not greatly approve.

### *The Leicester Galleries.*

The exhibition of smaller works by Sir James J. Shannon is more interesting and more instructive than a show of his finished works. It not only tells of a great painter in his hours of ease; it tells also of his methods and fancies; it tells of a great and sincere love for ideal beauty and gentleness of character in woman, and finally it discloses the secret of a singularly beautiful technique. Here, in the thirty pieces, from the obviously early portrait of a girl to the equally obvious beginning of Shannon's stereotyped portraits—"Ellen," his career in painting can be traced, and it is refreshing amongst all the feminine beauty displayed to dwell on the strength of the "Sir John Martin Harvey," the most virile of any portrait I have yet seen of this distinguished actor, and the most virile of Shannon's male presentations, and one of the most detailed in its style.

It is the series of sketches and studies that is so alluring in this exhibition, from the small half-figure in the nude (No. 1) to the exquisite "Bathers" and "The Green Apple," painted so surely and, I should think, so swiftly and with so certain a feeling of place and time, all seized within the compass of a few unerring brush-strokes. There is such directness, too, in a sketch for a portrait (No. 8), in "Audrey," in "Kitty in Fancy Dress," and much completeness of statement, indeed richness of quality, in "The Dropped Stitch," and "Michaelmas Daisies." These two latter works, however, conform more to the picture standard which Shannon raised to so high a level. It is depressing to think that no more work of this kind will ever be given to the world, which cannot ever feelingly enough deplore the misfortune and the early death of so fine an artist.

Clara Klinghoffer is a born draughtsman whose faculty has been raised to a high degree of intensity by the admirable teaching of drawing at the Central School of Arts and Crafts and the Slade, and by the intensive study of such masters of line as Augustus John. There is living line in most of her studies here shown, and in one or two of the larger ones a sense of living material—of skin, flesh, and bone—especially of flesh, which is quite exceptional except in the cases of the finest masters. Clara Klinghoffer is a Pole with the sensitivity of the Slav nature highly developed, which perhaps explains the physiological building up of her structures and the nervous susceptibility of them when achieved.

### *Etchings and Drawings.*

A pleasant exhibition is provided by Gyrth Russell at 57 Pall Mall, the Agent-General for Nova Scotia's offices. It includes some items which were favourably noted in the Canadian War Memorial Exhibition in 1919. Since then the artist seems to have spent his time mostly in South Devon, and his etching of "The Mouth of the Axe" at Seaton is a typical example of his quiet, impressive style. The Topham studies produce the same effect of peacefulness which is quite as much due to style as to subject. The drawings in various media are similar in character and subject.

### *The Dorien Leigh Galleries.*

The Danish artist, Curt Lüttichan, shows a number of water-colours of scenes in France, Italy, Africa, and Denmark. These are largely architectural in subject, and some of them are very similar in treatment to those of William Walcot. They are very good drawings, and show that their author is a good observer and a skilful draughtsman.

### *Alpine Club Gallery.*

Among all the thirty-three portraits by Flora Lion I like best the "Mr. R. P. Amato"; it is the least affected and has the most character. "Mrs. Lewis Baumer" is a good one too. Flora Lion gets a good likeness, and she does not overburden her subjects with detail or treat them with too much technique. They are for the most part pleasant representations of people more or less pleasant in appearance and prosperous as to position, I should imagine. KINETON PARKES.

### *Jubilee Exhibition of the Birmingham Architectural Association* (1873-1923).

The Jubilee Exhibition of the Birmingham Architectural Association (1873–1923) is a very interesting summary of modern architecture. Its triumphs, failures, strength, and weakness, are revealed almost at a glance. The early work of the Association has very properly been put on the landing; it is terrible to see how these splendid opportunities for civic architecture were cast away. Most of them are piles of imitation Gothic detail (O Ruskin, what crimes were committed in thy name!), and some equally atrocious classic attempts of the same period. But the ordeal on the landing over, we can proceed to the æsthetic feast in the long gallery.

The monumental work, amongst which are designs for the Manchester Art Gallery and Library, by Crouch, Butler, and Savage, designs and a large scale model of the Birmingham War Memorial Hall, by Cooke and Twist, and a gloriously impossible scheme for rejuvenating and reforming Birmingham, by William Haywood, is very fine and grand, but is rather fettered by certain classic principles. The needs of our time undoubtedly call for the simple massing and refinement of line founded on the Acropolis, but we are still too apt to shackle design with the extravagances of ancient Rome. But emancipation is coming. The Birmingham Repertory Theatre, by S. N. Cooke, is one example of it. "Simple, erect, austere, sublime," and yet obviously a theatre—almost unbelievable, but thus it is. Another example is the Hockley Brook Cinema, by L. Dussault. The water-colour sketch hardly does justice to it; but it is impossible to express such a work on paper. It has proportion, commonsense, dignified scale, colour, and yards and yards of plain surface, and yet it is, and looks, a cinema—there is some hope for us yet!

Another astonishing sight, a bank at Letchworth, by Peacock and Bewlay, with—what do you think?—Portland stone, marble, swags, and cupids? No; but, as I live, plain brickwork with a small quantity of refined stone enrichment; and it is a bank to the manner born.

The domestic work is very nice. Half-timber, rough-cast, faked bricks and tiles; but in spite of these there is some really fine work, sturdy and beautiful.

Commercial architecture is well represented. I recall a few lines that somebody wrote: "The man who builds a factory builds a temple; the man who works there, worships there; to both of them is due reverence and praise, not scorn and blame." Well, here there are many such factories, and they are the best and most human feature of the exhibition.

I was agreeably surprised with the ecclesiastical architecture—I never hoped for such a profusion of good, commonsense work. Taking the Byzantine and Romanesque styles as, well, something less than a basis, say, a germ, a certain school of architects are developing a style of ecclesiastical architecture, vigorous, beautiful, and well expressive of modern needs and ideals. The Church of St. Germain, Edgbaston, by Edwin Reynolds, is the best example here. It illustrates what a rich, pliable material brick is when handled with understanding. A small amount of stone-dressing is used with very fine effect. Another example is the Church of the Sacred Heart and St. Catherine, Droitwich (illustrated in the JOURNAL on February 15, 1922), but the qualities of the brickwork are not so well developed here.

This fifty years' review proves one thing, that we have advanced a little way towards true civilization since that barbarian Victorian era. Everybody passing through Birmingham would do well to visit the Royal Society of Artists' rooms; they are at the top of New Street, near the Town Hall, and but two minutes' walk from the station.

EDGAR LUCAS.

# Correspondence

## The R.I.B.A. Elections

*To the Editor of* THE ARCHITECTS' JOURNAL.

SIR,—As the result of the election was published prematurely we have had plenty of time in which to turn things over in our minds. Many architects of an ungrateful or callous turn of mind will be thinking: "What a good job that lot has gone." Those who are thinking this will be thinking a little on the surface. Let us go deeper. What dangers were ahead of the Institute before we appeared on the scene? There was the danger of "Unification First." There was the danger of self-satisfaction. There was the danger of pride—not so much for the Institute, but for a few in high places. There was the mutual admiration danger. There was the "happy family party" danger. There were the coat-tails of the Royal Academy—most dangerous and always being dangled most attractively. There was the danger of nepotism, beloved by the Popes of old. There was the mind-rot danger. It would, perhaps, be unkind to revive the glaring examples of nepotism. We had better forget them; but there is one example of the mind-rot danger which is almost comical. Like mediocre medical practitioners some actually believed that all diseases are curable by means of either dope or external applications; that art is a kind of poultice or soft composition for external sores or commercial ulcers, and that we shall achieve our much needed renaissance by bestowing medals for street elevations and keeping our architectural education skeleton well shut up in its cupboard! The best way to be healthy is to lead a healthy life. To lead an unhealthy life and then go to the medicine chest for drugs and ointments is not such a good plan.

The papers read at general meetings (those of our year of office having been fixed by the last Council) have been so dull that only the strongest sense of duty could make one suffer the boredom of an evening in that super-ventilated room! This is how they were going on, and this is how they would have gone on had it not been for "that lot."

In order to put a stop to this what was wanted? Something that would make a loud noise and frighten them—a good 5.9 right in the middle of them. This 5.9 was successfully made. It was put in the breach. The howitzer was well laid and the lanyard pulled, and we scored a direct hit.

This warfare has not been pleasant. No warfare is pleasant. Especially has been unpleasant to hurt people's feelings. But reforms cannot be carried out by mutual admiration. Where tender spots become dangerous there is no alternative but to hit them. After all, why shouldn't we be hurt? I don't mind being hurt because I know when I am being hurt that I am getting on. What is life for if it isn't, amongst other things, to hurt our feelings so that we may learn, suffer, and grow? Of course, one has an advantage when one has arrived at that happy state when the plums of this world don't matter—but this is wandering.

It is my belief that no one really wants Registration. Perhaps the old Council's Unification scheme was a red herring to draw us off the Registration scent. so this was not straight politics and is saying a good deal, for I don't th the most honest politics can be anyth but crooked. But it does not m matter. They were in a mess, and mess had to be cleared away, just as late Lloyd Georgian stables had to cleared away by the present Gov ment. So all this business of letter the papers—new ideas about Acade Dress (surely a more far-seeing prop than medals for elevations)—throw out drawings sent in for exhibition w out fear or favour—Registration—U cation—complementary arts—register craftsmen and dozens of other refo which nearly turned the old mem silly—all these things have had desired effect. There has been a rec poll. The provinces are alive enthusiastic to be represented on Council. The new Council knows t it must not, cannot, carry on in the s old way. It knows that there is alm a complete Council out in the profes again with inner knowledge. Theref it will, like Agag, have to walk delicat It cannot do just as it pleases any m They will have to consider whether s external treatments as "Committees Taste," even if they emanate from highest of the high, are really going cure our inner troubles or whether would be better to put our own house order first.

Gold medals, titles, and so on necessary evils, but a little of this goe long way. There are two things, howe which simply will not do, and we s watch this matter closely: one is nepoti and the other is hanging on to Academy's coat-tails. Have we gotten the Great War and what that of names means and meant? How, w threatened with annihilation, we promised not to be naughty any mo Have we forgotten all the ideals wh supported those in their hours of tria those who died for a greater and a no England? Is that splendid spirit brotherhood and anti-snobbery alre dead? Did it die with those gr Englishmen who created it?

If the new Council is prepared to the Institute squarely for the benefit all and not for the few; if it can u the profession once more in brothe enthusiasm for its true welfare and the welfare of our country and count men without thought of self-interest it can help the under dogs, all those often, with more ability than many w known men, are struggling against pove and continual disappointment; if it do something towards bringing out of shadow and into the light all those u whom reputations are founded in sec but who remain underpaid and kept shadow; if it can help the real cra man by giving him the support he serves; if it can bring about a real unif tion of arts, which is more import than a unification of house agents w architects; if it can abolish snobbery nepotism and rekindle us with love enthusiasm for our job—then many think all, are willing to sacrifice time labour in loyal support; to undert work however humble, for in such serv we should be serving indeed.

I am, sir,
Yours faithfully,
W. W. SCOTT-MONCRIEFF

# The Architecture Club at Dinner

## Mr. Squire on the Success of the Club's Exhibition

HE fourth quarterly dinner of the
Architecture Club was held last
Thursday at the Hotel Cecil, when,
Mr. J. C. Squire, the president, in
hair, there was a large gathering of
bers and guests, as follows :—

d, Professor S. D.
Mrs.
Mr. William.
Major the Hon.
M.P.
r, Dr. J. F.
r. and Mrs. Lough-
gh.
, Mr. C. A.
, Mr. Oswald (Com-
e) and Mrs.
, Mr. H. Mont-
ry.
Mr. and Mrs.
.
Ir. Detmar.
, Mr. R. S.
d, Mr. Herbert T.
Mr. Harold (Com-
e).
Mr. E. Stone.
ir Algernon Tudor,
E.
Ir. A. J. Tudor.
Mr. Ewart G.
Mr. Arthur J.
Mr. Rudolf.
uncan, Mr. J. H.
tary) and Mrs.
Mr. G., D.S.C.
Mr. and Mrs. G.
er.
Mr. W. Curtis,
A., and Mrs.
r. H. Austen (Hon.
urer) and Mrs.
Mr. and Mrs. Stan-

, Mr. E. T.
Mr. E. Vincent
mittee) and Mrs.
, Mr. W. Alex.
, Mr. R. Heywood.
, r. Ambrose.
y, Mr. A. G.
th, Mr. P. D.
, Mr. A. P.

Hind, Mr. and Mrs. C. Lewis.
Hudson, Mr. Edward.
Hussey, Mr. Christopher.
Inge, The Very Rev. Dean.
James, Mr. C. H.
Knott, Mr. Ralph.
Lanchester, Mr. and Mrs. H. V.
Lindsay, The Hon. Lionel.
Lloyd, Mr. Nathaniel, O.B.E.
Luning, Mr. W. A.
Marriott, Mr. and Mrs. Charles.
Marillier, Mr. H. C.
Milne, Mr. Oswald P. (Committee) and Mrs.
Murray, Mr. George.
Phipps, Mr. and Mrs. Paul.
Pick, Mr. Frank.
Plume, Mr. W. T.
Poole, Mr. Henry, A.R.A., and Mrs.
Powys, Mr. A. R.
Ramsey, Mr. and Mrs. Stanley C.
Ridley, The Viscountess.
Rowntree, Mr. and Mrs. Douglas.
Sims, Mr. Charles, R.A.
Squire, Mr. J. C. (President) and Mrs.
Stevenson, Mr. J. A.
Sullivan, Mr. L. Sylvester.
Tapper, Mr. Walter.
Thorp, Mr. Joseph.
Tilden, Mr. Philip.
Waddington, Rev. P.
Ward, Mr. H. J.
White, Mr. C. S.
Williams-Ellis, Mr. and Mrs. Clough.
Wilson, Mr. W. R.
Worthington, Mr. J. Hubert (Committee).
Wright, Dr. Maurice.

the conclusion of dinner the toast
he King," proposed by the chair-
was drunk. Mr. Squire then rose,
proposing the toast of "Architec-
coupled with that of "Mr. Curtis
, A.R.A.," explained that he wished
ote his speech to the achievements
club during the past year.

their last dinner, he said, their
tion was not finished, and he rose
t occasion and made certain rather
istic statements. They would be
to hear that their hopes were
d, and that the guarantors would
called upon for one penny. Some-
more had happened since that
. There was present on that even-
gentleman from Manchester who
ome up on purpose to see whether
xhibition was good enough for
ester. He gave a favourable
, and the show in due course pro-
l to Manchester. They had had a
from the curator at Manchester
uring the time the pictures were on
lls 22,000 people came to see them.
present time they were negotiating
our provincial cities, and it seemed
he show was going on more or less
itely like a travelling circus. They
considering having another one
ear, and a great many suggestions
ached them. One was that they
have an exhibition of entirely
uildings. He thought they might
s without difficulty. Allied to this was a suggestion that they should organize an incendiary branch which should arrange for another great fire of London, and that the second one should begin at about the place where the first left off. The originator of this suggestion did not wish to destroy Wren's churches in the City, but beyond the borders of the City there were large areas that might very well be destroyed without injury to anyone except the owners of the property. He could do nothing in public but treat such a suggestion with reprobation and leave it at that. It was, he said, his pleasure to propose the toast of architecture coupled with the health of Mr. Curtis Green. When one said architecture one was thinking of the present of architecture and the future of architecture. He would not stand there to drink to the architecture of the past, particularly not within those walls. Mr. Curtis Green, he said, was one of the first members of the club, and he was an architect of whom all who knew his work well approved.

Mr. Curtis Green, replying, said it was a very great honour to be asked to respond to architecture. He was afraid he had little to say and nothing amusing. They had been told that architecture was the "Cinderella" of the arts. There was nothing amusing about Cinderella. She was very nice, and she came into her own, and he thought that with so many present that was an indication that architecture was coming into her own. He did think that the number of the faithful and clear-sighted was a growing number, and that the younger men who had been educated since the war had a much better interest in it. He thought we owed a great deal to the schools of Manchester, Liverpool, and the colonies. In speaking of the improvement of architecture, Mr. Curtis Green said he could hear the pessimist say : "How about Regent Street ?" The new Regent Street was not being built by the new men, it was being built by the old men, who were trying to catch up the new. Further, there were to-day several living architects who had produced much greater work than any in Nash's time. The garden was full of weeds, but the people had got sight of the flowers in spite of the rapidity with which the weeds grew. They wanted more faithful and educated service. They wanted greater understanding from the public. It was a curious thing that in America all the big buildings went to the big men. Here, if the big buildings went to a prominent man it was an accident.

Mr. A. P. Herbert, in proposing the toast of "The Club," said as he was a member they could not expect him to say complimentary things about his club. He had nothing to say in favour of the club; it seemed to him to be a very dangerous performance. If they brought such a lot of architects together it would not be long before one of them dropped a brick. He thought architects ought to get themselves talked about, that was, exploit themselves among the public as great artists did. He lived among a lot of architects and they were most respectable and God-fearing men. There was an architect before him at the table who always left his wife and family during the week-end and he (the speaker) was always told he was inspecting a church or had gone to Folkestone. He would never get himself talked about. The speaker said further that he did not see why if his friend built a house his name should not be plastered upon the building.

Replying to the toast, Mr. Oswald Barron, F.S.A. (better known as "Londoner," of "The Evening News"), and a member of the club committee, said he disliked plan. He remembered, he said, Mr. Belloc once saying that we should make all the buildings round Westminster monumental. That, said the speaker, was what we fought the French for. We did not want plan. He should use his influence as long as he remained on that committee to keep the work from being (in the words of Joe Gargery) too "architectural." Their chairman lived in a place called "Poppin's Court." He (Mr. Barron) would like to see architects who would build such buildings and call them by such names as "Poppin's Court" and "Hanging Sword Alley."

### *The Council*, 1923–4.

Four members of the 1922–3 Executive Committee—Mr. A. Clutton-Brock, B.A., Professor C. H. Reilly, O.B.E., M.A., Mr. G. Gilbert Scott, R.A., and Sir Lawrence Weaver, K.B.E., F.S.A., retired at the end of the club year on May 31 under the rules. Sir Edwin Lutyens, R.A., Mr. Harold Child, M.A., Mr. R. M. Barrington-Ward, D.S.O., M.C., B.A., and Mr. J. Hubert Worthington, M.A., were elected at the annual general meeting of members to fill the vacancies.

The council (composed of the past and present members of the committee) for the current year is as follows :—

* R. M. Barrington-Ward, D.S.O., M.C., B.A.
* Oswald Barron, F.S.A.
* James Bone.
A. Clutton-Brock, B.A.
* Harold Child, M.A.
* E. Vincent Harris, F.R.I.B.A.
* Ralph Knott, F.R.I.B.A.
* Sir Edwin Lutyens, R.A., F.S.A., F.R.I.B.A.
* Oswald P. Milne, F.R.I.B.A.
Professor C. H. Reilly, O.B.E., M.A., F.R.I.B.A.
G. Gilbert Scott, R.A., F.R.I.B.A.
* J. C. Squire, M.A. (chairman).
Sir Lawrence Weaver, K.B.E., F.S.A., Hon. A.R.I.B.A.
* J. Hubert Worthington, M.A., F.R.I.B.A.
Hon. treasurer : H. Austen Hall, F.R.I.B.A.
Secretary : J. H. Elder-Duncan.

* Signifies member of the Executive Committee.

# Glasgow School of Architecture

The following awards have been made in the Glasgow School of Architecture. The assessment was made by the Examining Committee, with Mr. Paul Waterhouse, M.A., representing the Scottish Education Department :—

Diploma of the School.—J. A. Coia, J. D. Ferguson.

Recommended for Haldane Travelling Scholarship.—J. A. Coia.

Bourdon Memorial Studentship.—G. F. Shanks.

Minor Travelling Bursaries.—L. G. Farquhar, F. Wylie, D. M. Inglis.

Glasgow Institute of Architects' Prize. (£3 3s.).—L. G. Farquhar.

Glasgow Institute of Architects' (Measured Drawings) Prize (£2 2s.).—James Watson.

Glasgow Institute of Architects' (Freehand Drawing) Prize (£2 2s.).—(Withheld).

Gilt Medallion.—G. F. Shanks.

Silver Medallions.—D. L. Crawford, T. V. Deas, R. W. Elder, A. Lipp.

Bronze Medallions.—G. Bartholomew, W. A. Macdonald, P. McNeil, R. Ross, F. Wylie.

Whitelaw Silver Medallion.—L. G. Farquhar.

Whitelaw Bronze Medallion.—F. Wylie.

Honorable Mentions.—J. C. Scotland, T. S. Cordiner, J. T. King, J. B. Russell, Miss M. J. McEwan, Miss J. T. Baillie.

Hon. President : Thomas Hardy, O.M., LL.D., D.Litt.

President : J. C. Squire, M.A.

# The Crittall Freeman Atelier Competition

A very interesting experiment has recently been entered upon in connection with the three associated ateliers in London, the "First Atelier," the University of London Atelier, and Mr. Fernand Billerey's Atelier. Messrs. Crittall Freeman Bronze, Ltd., of 246 High Holborn, offered a prize of £10, to be competed for by the members of the above ateliers, the subject being the treatment in bronze of the shop front for a high-class perfumier's business. Five designs were submitted, two from the "First Atelier," and three from the University Atelier.

The jury, having examined the drawings, awarded the prize to Mr. Montague, of the "First Atelier." Their decision was influenced by the fact that the author of the winning design had placed the importance of small windows for small goods above all other considerations, and in addition, had prepared his design in sympathy with the metal treatment required. Not only did Mr. Montague arrange his shop front on good lines, particularly with regard to his placing of an entrance, but the sub-division of the windows was considered to be eminently suitable for the specified purpose. Mr. Montague's section needs revision; he had allowed for roller blinds, but the deep recessing created a series of rims which, if carried into being, would detract from the character of the scheme. The jury were of the opinion that every consideration had been given to the placing of blinds, shutters, and other fitments, and that in every way this design was workable and suited to its purpose.

The design of Mr. W. F. Scarlett, of the University Atelier, was highly commended, but while admitting the beauty of the composition, the jury considered that the work was more suitable to wood or marble with bronze enrichments than to a treatment wholly metallic. In addition, the motif was slightly monotonous in repetition. Mr. Scarlett's drawing was one of the best submitted in the competition.

Mr. A. R. Dent, another competitor, entered a design of Baroque character which was far too heavy in treatment for bronze. From the presentation marble was suggested rather than metal. Mr. Dent had thought of the treatment as requiring exclamatory expression, and in the opinion of the jury this defeated the plans of the shopkeeper.

On the whole the jury were much gratified with the result, and take the opportunity of congratulating Messrs. Crittall Freeman Bronze, Ltd., for their enterprise in promoting this competition, which had in view the betterment of commercial conditions.

The jury of assessors consisted of Messrs. Fernand Billerey, James Burford, Hector Corfiato, C. Sandford Freeman, Geoffrey Lucas, and Professor A. E. Richardson.

# Competition News

*Masonic Temple at Adelaide.*

The design of Mr. W. H. Harral, of Adelaide, Australia, architect, has been placed first in the competition for a new Masonic Temple at Adelaide.

*Bournemouth Pavilion Competition.*

Ninety-seven competitors entered for the Bournemouth Pavilion competition. Sir Edwin Cooper, F.R.I.B.A., the assessor is expecting to issue his award within the next few days. The plans will be open to public inspection in the Grand Hall at the Town Hall during office hours, from Wednesday to Saturday, July 4 to 7, inclusive.

*International Labour Bureau at Geneva.*

The Administrative Council has decided to commission Mr. Epitaux of Lausanne, the author of design No. 46, which the jury placed first, to carry out the building. The jury made certain unanimous recommendations as to slight alterations in plan, affecting somewhat the elevation towards the lake. The price indicated, of 2,500,000 Swiss francs, is equivalent to just about £100,000. The awards of the jury were published in our issue for June 13.

*Proposed Sunday School Competition, Twickenham.*

The following notice has been issued by the R.I.B.A. : "Members and Licentiates of the Royal Institute of British Architects must not take part in the above Competition because the conditions are not in accordance with the published Regulations of the Royal Institute for Architectural Competitions." A similar notice has been issued by the Society of Architects.

# List of Competitions Op

| Date of Delivery. | COMPETITION. |
|---|---|
| June 30 | National War Memorial at Melbourn cost £250,000. Competition, in two s Apply Agent-General in London, Vi House, Melbourne Place, Strand. posit £2 2s. |
| June 30 | Pavilion to serve as Public Hall at L Premium £25. Apply Mr. Peter M Town Clerk, Largs. |
| June 30 | The National Painters' and Decorators' Education Committee and the Incorpo Institute of British Decorators are off a prize, value £10 10s., for the best d for the decoration of a room in whi least one panel is of a pictorial char Candidates must be over 18 and un on May 1, 1923, and must be engaged preparing to follow the craft of pa and decorating. Designers to the and instructors are eligible. Apply M A. D. Englefield, Secretary, Incorp Institute of British Decorators, Pai Hall, Little Trinity Lane, London, or Mr. Will Mellor, Secretary, Na Painters' and Decorators' Joint Edu Committee, 9 Albert Square, Manche |
| June 30 | The Swansea Masonic Hall Committee Competitive Designs (limited to mason Architects having an office or tising in the Provinces of South Wal Monmouthshire) for new premis St. Helens Road, Swansea, at an ap mate cost of £13,500. Mr. Arthur F.R.I.B.A., is the assessor. Apply tary of the Committee, Mr. A. E. Th 5 Mirador Crescent, Swansea. |
| July 3 | Pavilion in Calverley Gardens, Tun Wells. Assessor Mr. E. Guy Dawber, F.R.I.B.A. Premiums £150, £100, an Apply Town Clerk. |
| July 5 | The Slough Urban District Council architects who are willing to join limited competition for the lay-out a velopment of a site providing for th tion of new council offices, shops, send in their names to Mr. F. R. Du Clerk, Council Offices, Slough, by 1 on July 5, together with particul their experience, with illustrations o work, or such other information candidate may think likely to advan claim to be admitted to the compe It is intended to invite a limited num selected architects to join in the co tion, each competitor to receive a sp sum for the preparation of his design |
| Aug. 25 | Public Swimming Baths and Wash East Greenwich. Assessor, Mr. He Ashley, F.R.I.B.A. Premiums: £300 £100. Apply Mr. Frederick J. Si Town Clerk, Town Hall, Greenwich |
| Sept. 12 | Masonic Temple in Broad Street, Bi ham. Premiums: £500, £300, and Sir Banister Fletcher, F.R.I.B.A., assessor The competition is restri architects who are masons subscri Lodges in the Province of Warwic Apply Mr. J. P. P. Dutfield, 65 Templ Birmingham. |
| Sept. 30 | Designs for a series of plaquettes in illustrative of London as the capital the Empire, or of one or more of he architectural features. Designs sho submitted in the form of models in The following prizes are offered prize of 100 guineas, two prizes of 50 g three prizes of 25 guineas. Apply Master of the Royal Mint, London, |
| Nov. 5 | Art Gallery for Hull. Assessor, Mr. J Simpson, PP.R.I.B.A. Apply (with for £2 2s.) to Mr. H. A. Learoyd, Clerk, Guildhall, Hull. |
| No date | The Student Welfare Committee, Uni of Glasgow, invite Competitive (limited to Architects having an o and practising within the Municipal daries of the City of Glasgow) Pavilion to be erected on the Uni Athletic Ground at Westerlands, land, at a cost of £10,000. Assess Alexander N. Paterson, A.R.S.A. Honorary Secretary, Student Committee, The University, Glasg |
| No date | Erection of a Cenotaph on a site in Square, Hull, belonging to the Corp Conditions of the Competition with a plan of the site will be sup the Town Clerk on receipt of a che one guinea. which deposit will be r to competitors on receipt of a b design. The estimated cost of th amounts to £4,000. and premiums £75, and £50 are offered for the placed first, second, and third resp The assessor is Mr. Stanley F.R.I.B.A. |

THE EDINBURGH CONFERENCE: A PHOTOGRAPH OF MEMBERS ON THE CASTLE ROCK.

*Note : The group, being too wide for reproduction as a whole, has been divided into two, the top section reading on to that below from left to right.*

# The Week's News

### *£300,000 Building for Swansea.*

A large cold-storage building is to be erected at Swansea at a cost of £300,000.

### *Change of Address.*

Mr. E. B. Musman, A.R.I.B.A., has moved to 73 Gower Street, London, W.C.1.

### *Big Housing Scheme for Nottinghamshire.*

In connection with the sinking of a new colliery at Carlton-in-Lindrick, near Worksop, a village of approximately 1,000 houses will be erected.

### *Ivinghoe Old Town Hall.*

Lord Brownlow has given for a nominal sum the old town hall at Ivinghoe, Bucks, for conversion by the parishioners into a village hall.

### *New Laboratories for Swansea.*

The new laboratories of Swansea University College, which have cost over £65,000, will be opened on July 10 by Sir Alfred Mond, M.P.

### *Pannal Ash College War Memorial.*

Pannal Ash College, Harrogate, is to have a library building constructed to perpetuate the memory of masters and old boys who fell in the war. The cost is to be £1,600.

### *Austrian Industries Exhibition.*

An exhibition of Austrian products will be held at the Central Hall, London, S.W.1, from July 2 to 11, under the patronage of the Viennese Chamber of Commerce and the Austrian Legation in London.

### *Professional Practice.*

The partnership of Messrs. White and Stephenson has been dissolved by mutual consent. Mr. S. J. Stephenson has now commenced practice on his own account at 20 Saville Row, Newcastle-on-Tyne, as an architect and surveyor.

### *The Housing Fees Tribunal.*

The R.I.B.A. have asked us to give notice that the Housing Tribunal appointed by them to deal with cases for fees in connection with abandoned housing schemes cannot consider any further cases submitted after July 14.

### *Westminster Hospital.*

Westminster Hospital, London, is to be shut down for six months for repairs, and for the first time in 200 years its doors will be closed. It was first established in Petty France, and afterwards in James Street. About 1830 the Inwoods designed the present building.

### *Big School for Becontree.*

Becontree will shortly have one of the finest elementary schools in the country. Essex County Council, as the education authority, is about to commence the erection of the first school on the housing estate. The plans are by Mr. John Stuart, F.R.I.B.A., the county architect.

### *German Granite Banned.*

The Scottish Monumental Sculptors' Association and the Building and Monumental Workers' Association have agreed that employers are to expel from the association any member who purchases German granite goods, and the men have decided not to handle such goods and are prepared to withdraw their labour from any yard into which German goods are brought.

### *More Baths for Bethnal Green.*

Bethnal Green Borough Council is being recommended by its Baths Committee to approve of a scheme for the provision of additional public baths on a site in Cambridge Road originally intended for a public library.

### *New Art Building for London.*

Plans have been prepared and approved for the erection of a new building at the rear of the Tate Gallery, London, for the purpose of housing examples of modern foreign works of art. Sir Joseph Duveen has agreed to defray the cost of the building.

### *Colliery Owner's Housing Gift.*

Sir D. R. Llewellyn, the wealthy South Wales colliery owner, has announced his intention of giving £5,000 to encourage building houses at Glynneath, by workmen of the Vale of Neath Colliery Company. The intention is to give £50 as a free gift to every man who builds a house.

### *Architect's Gift to Clerk.*

Mr. William Harrington Scrymgour, of Hampstead and London, E.C., architect and surveyor, who left £144,778, bequeathed the artisans' dwellings, known as the Bells, Drury Lane, to his clerk, Albert Edward Steel, he to execute a mortgage thereon for £1,500, repayable by half-yearly instalments of £71.

### *Dewsbury War Memorial.*

The Dewsbury War Memorial Committee have decided to erect the memorial from the designs of Messrs. W. N. Adams, A.R.I.B.A., and E. R. Arthur, B.Arch. Messrs. Adams and Arthur's design, placed first in the recent competition out of a total of 140 designs sent in, was illustrated in our issue for May 16.

### *New School for Brighton.*

Plans for the erection of a secondary school for girls on the Varndean estate of thirty acres, on the outskirts of Brighton, have been before the Education Committee, and the Town Council is to be asked to approve them. The cost is estimated at £63,800. The school will provide accommodation for 535 students.

### *Birmingham Hall of Memory.*

The Prince of Wales laid the foundation stone of the Hall of Memory at Birmingham. It is being built to "symbolize the achievements of the men and women of Birmingham during the Great War." Messrs. S. N. Cooke and W. N. Twist are the architects, and Mr. Albert Toft is the sculptor.

### *Incorporation of Scottish Architects.*

The annual general meeting of the Incorporation of Architects in Scotland was held in Edinburgh, Mr. T. P. Marwick, F.R.I.B.A., Edinburgh, presiding. Messrs. J. Begg, F.R.I.B.A., Edinburgh; J. A. Morris, F.R.I.B.A., Ayr; and J. Salmon, F.R.I.B.A., Glasgow, were elected incorporation representatives to the council for the ensuing year. Mr. Marwick was re-elected president.

### *The Birmingham Hospital Fire.*

The following committee has been appointed to enquire into the cause of the recent fire at the Pensioners' Hospital, Highbury, Birmingham: The Parliamentary Secretary to the Ministry of Pensions (Captain Craig), chairman; Mr. G. Topham Forrest, F.R.I.
architect to the London County Cou
Mr. A. R. Dyer, A.M.I.C.E., Chief O
of the London Fire Brigade; Mr.
Baines, O.B.E., Chief Engineer, Offic
Works; Dr. H. Lightstone, M.D., D.
M.C., Headquarters Inspector, Mini
of Pensions; Mr. T. A. Pole, A.R.I.
Architect to the Ministry of Pensi
The committee's terms of reference
"To ascertain the cause of the fire w
recently took place at Highbury Hosp
and to consider whether any, and i
what, further precautions are requ
to prevent similar accidents in futur
hospital buildings for which the Mini
is responsible."

### *L.C.C. Housing Scheme.*

In anticipation of the passing of
Housing, etc. (No. 2) Bill the Hou
Committee of the London County Cou
have had under consideration the
rangements to be made for develop
of a part of the Grove Park est
Lewisham. The site comprises a
183 acres, on which it is estimated
some 2,000 houses can be erected,
vision also being made for schools, sh
public buildings, etc.

### *Whitgift Hospital.*

When the Croydon Corporation
came before the Select Committee of
House of Lords, the Duke of Wellin
presiding, Mr. Tyldesley Jones,
said he was authorized by the Corpora
to state most deliberately that, the H
of Lords having decided that the W
gift Hospital should not be touched,
Corporation was putting forward
present scheme on the distinct un
standing that it was not to be the bas
a future attempt to touch the hospit

### *The Empire Theatre for Sale.*

The Empire Theatre, Leicester Squ
is to be put up at auction on July 1
buyer will also be able to secure the
licensed Queen's Hotel adjoining, and
vacant area, 40 Lisle Street, and 10
12, and 13 Leicester Place, forming
of the most important and best-kn
sites in the world, and covering near
acre. Opened in 1884, and for years
home of the ballet, the Empire stands w
once was Leicester House, built in
seventeenth century by the Ear
Leicester.

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## Coming Events

### *Thursday, June 28.*

British Museum.—"Roman Rema
By Miss Claire Gaudet. 3.15 p.m.

### *Friday, June 29.*

A.W.G.—"The Craftsman and
Commercial Man." 8 p.m.

### *Monday, July 2.*

London Society.—River Trip. St
ing from Westminster Pier at 1.30 p

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## Corrigenda

We regret that in the descriptio
the work of Messrs. Braddell and D
at Grosvenor Place, illustrated in our
issue, two names were wrongly gi
The general contractors were Me
A. Busset & Co., and the metalwork
carried out by Messrs. Escaré and Der

# Architecture in the Lay Press

### *A Brighter Country.*

good deal is heard nowadays of the for a brighter London and brighter s—all of which is most excellent; it will be still more excellent when of the much-discussed brightness lly materializes—but it is a pity nothing is heard of the need for ter country, for in many ways it is eat. Buildings in the country should orthy of their surroundings, but too the reverse is the case, the contrast een their state of neglect and the ty of the country being most painful. ailway stations are the most frequent ders in this way; there are so many obviously have not been cleaned epainted for several years, and the of this neglect is dismal in the me. Some of the money which the ay companies spend in telling the of the glories of the countryside l be far more effectually employed inting their stations and making worthy of the surrounding country vhich the companies, judging by placards, have such a great admira- Of even greater importance is the tion of country inns. Many of are, of course, a pleasure to behold, still greater pleasure to enter, for supply that comfort and quiet fulness which an Englishman expects appreciates. Unfortunately, there any exceptions. There are many directions in which the country brightening, and as it concerns both and country dwellers it is to be that this matter will no longer be ted by those who realize the impor- of brightness and cheerfulness.— Daily News."

### *Civic Pride and Development.*

as been truly said that "the appear- of a city is the symbol of its worth," verybody will agree that the robust exhibited by the individual in the of his birth is one of the most able characteristics of human . To make Cardiff a better city desire of every citizen worthy of ame; but to accomplish this is sible except it be by the active ration of city authority, private duals, and organizations.

n planning is, of course, of the st importance in the development y city, but there are many other rs which vitally affect the appear- the beauty, and the usefulness of ties which hardly come under the r interpretation of town planning. is the preservation of all objects of and buildings of historical worth. quisition of land for the provision n spaces for recreative purposes, he lay-out of parks, squares, and s.

designs of bridges, fountains, rials, shelters, and even such details p standards, tramway masts, and e, and the adoption of the highest rd of architecture for business and tic as well as for public buildings.

a common fallacy that good design increased cost, whereas the con- s often the case.

there are the things which tend to destroy the beauty of our cities; take, for instance, advertisement hoardings and electric sky signs.

The sky signs have made Piccadilly Circus a nightmare. Cast your eyes on the pavements and you are asked to use somebody's soap, look up and clouds invite you to drink everybody's syrup.

The public are, however, awakening to the evil. Edinburgh and Dover have taken a stand against the abuse. In France they are reducing the hoarding by taxation, and even America is moving in the matter.—Percy Thomas, O.B.E., F.R.I.B.A., in "The Western Mail."

### *Ideals in Building.*

It is one of the most encouraging signs of our times that so much interest should be taken in questions of architecture and building. Considerable tasks of urban reconstruction are thrust upon our generation. We dare not hope that the way in which we perform them will be thoroughly satisfactory to posterity, but we may claim that the energy with which the problems are discussed, the care and ingenuity employed in seeking solutions, and the amount of public attention given to every important change in our city prove that we are well aware of our civic responsibility and anxious that the citizens of the future shall have no cause to regret the work of the Georgians. It is natural that public criticism of architecture should be chiefly concerned with æsthetics. But the architect and those for whom he works have to consider what critics find it convenient to ignore, the economics of building. In America, Mr. Bossom tells us, architects and engineers co-operate to reduce the amount of steel in a building to the necessary minimum, here "very often the contrary is the case." We build not for an age, but for all time, whereas the American holds that "it is not a first consideration that buildings should endure for ever; circumstances are constantly changing and buildings may have to change to suit them." Mr. Bossom is no blind enthusiast for American practice. He would not, we are glad to see, have us build "skyscrapers." What we have to do in this, as in so many other questions of reconstruction and town planning, is, in fact, to arrange a satisfactory compromise. It is desirable to use the central districts of London for larger buildings, but it is very undesirable to bring there more people than the traffic conditions permit.—"The Daily Telegraph."

### *Regent Street and Kingsway.*

By an interesting coincidence the builders are hard at work—in the one case completing, and in the other destroying—in both of the two principal streets constructed in the heart of London during the past hundred years. Regent Street and Kingsway form roughly the boundaries of London's theatre area, and in present conditions are main channels of West End traffic. But it would be hard to find two streets standing in sharper contrast, in origin as well as in aspect. Regent Street was built in order to give the Prince Regent a pleasant driving route from Carlton House to Regent's Park; Kingsway was built as a piece of slum-clearing enterprise; and the difference in purpose well illustrates the influence of an abstract idea like democracy on so practical a business as the lay-out of a town. That change in sentiment is all to the good. What is less satisfactory is that in all the architectural qualities of street building Regent Street is immeasurably the finer of the two—and it is Regent Street which is now being pulled down. Gashes have already been made in its symmetry, but for a few months longer it will still be possible to judge it for what it was. The two thoroughfares thus point the contrast between eighteenth-century and nineteenth-century thought, but, most interestingly, the very last building to be put up in Kingsway is an attempt to reconcile the modern desire for strength with the older instinct for form.—H. M. S. in "The Birmingham Post."

### *London—New and Ugly.*

To my mind, the present chaotic condition of building in London to-day is that we have no tradition of building, no national character in our work, and but little sense of proportion.

It is idle to shut one's eyes to the fact that we nearly always miss fine opportunities to do great things. Trafalgar Square and its surroundings are feeble compared with the Place de la Concorde in Paris. Piccadilly with its narrow streets and houses of all shapes and sizes, compared with the dignity of the Rue de Rivoli, is unsatisfying. Throughout the eighteenth century in particular, there was one standard of building throughout the country, a similarity of design and detail which was most pleasing, a tradition of excellent craftsmanship and proportion. It is seldom one sees an old building of that period without being satisfied with its delightful and restful outline. Look at the simple quiet repose of Church Street at Hampstead—or the work of so many of our unspoilt country towns.—E. Guy Dawber in "The Weekly Dispatch."

### *Regent Street.*

It has been a changing spectacle, the thoroughfare of Regent Street, as day by day some new building shows clear of its scaffolding, some brown and dilapidated fragment of Nash's scheme disappears in a puff of dust and rattle of bricks. The suave lines of the street named after the First Gentleman in Europe will be forgotten in time, and no one will have his works in remembrance. What is wrong with the new buildings? In the first place, they are too tall, and will block the sunlight. Even in Rome, in Nero's time, the height of private houses, in Severus's and Celer's rebuilding scheme, was not allowed to exceed double the width of the street; and in London sunlight is still more to be hoarded. In the second place, they are inconsistent units.

While Nash worked for unity in his simple white masses, which were varied with a pediment now and again, and regulated by cornice and colonnade, the modern intrusions have deserted horizontal emphasis for vertical, and unity for diversity.—"The Weekly Westminster Gazette."

# Societies and Institutions

### *R.I.B.A. Council Meeting.*

Appended are notes from the minutes of the last meeting of the Council of the R.I.B.A. :—

Competitions.—It was decided that Members and Licentiates of the Royal Institute must not take part in the following competitions: Fauldhouse Infant School competition; Yeovil Burial Ground lay-out competition; Largs Pavilion competition.

St. Paul's Cathedral Fund.—A cheque for £300 was sent to the Dean and Chapter of St. Paul's Cathedral as a contribution to the Cathedral Fund. This sum represents the amount raised by the R.I.B.A. and the allied societies.

Loan Library Catalogue.—It was decided to complete and print a new edition of the loan library catalogue.

Middlesbrough.—The County Borough of Middlesbrough was transferred from the Province of the York and East Yorkshire Architectural Society to that of the Northern Architectural Association.

Retired Fellowship.—Mr. E. H. Bourchier was transferred to the class of retired Fellows.

### *R.I.B.A. New Members.*

At the last general meeting of the R.I.B.A. the following new Members were elected :—

AS FELLOWS (12).

Bhedwar, S. K., B.A.
Birkett, I. R. E.
Gunton, W. H.
Harrison, J. S.
Hedges, W. F.
Jenkins, G. H.
Jewell, H. H.
Lofthouse, J. A. E., M.S.M.
Lofthouse, T. A.
Mayhew, R. H. J., F.S.I.
Sutherland, G.
Wigfull, J. R.

AS ASSOCIATES (58).

Barton, F. J.
Bennett, F. E.
Blain, R.
Bradford, S. V., M.C.
Bridgwater, D. L.
Briggs, R. W., B.A.
Brown, A. W. G.
Brown, J. G.
Button, C.
Clark, H. S.
Crombie, A.
Finlayson, M.
Godwin, W. J. T.
Graham, R. D.
Haile, W. L.
Hardie, J. S.
Hart, E. G.
Henderson, W. A., C.M.G., D.S.O.
Higginson, F.
Howard, G. G.
Hunt, S. G. W.
Illsley, H. P.
Jeffrey, J. R.
Jones, I. R.
King, W.
Kingston, J. L., B.Arch.
Kirby, S. C.
Lindley, C. J. W.
McKay, J. S.
MacKay, R. S. S.
Mackey, N. C.
Marrotte, E. S., B.Arch.
Marshall, F. W.
Martin, M. W.
Mee, C. E.
Morton, H. C.
Nesbitt, J. K.
Norcliffe, A. J.
Nunn, J. P., B.A.
Paxton, N. R., M.C.
Phillips, H. E.
Pictor, A. R. D.
Pope, F. K., A.R.C.A.
Prideaux, A., M.M.
Radford, T. R.
Roberts, C. H.
Scott-Williams, P.
Simms, H. G.
Simpson, S.
Smith, I. G.
Stott, T.
Symcox, E. J.
Warr, B. G.
Webber, E. B.
Wiggs, H. R., B.Sc.
Williams, J. C.
Wort, W. S.
Wright, A. T.

### *A. & S.A.P.U. Visits.*

Members of the Metropolitan Branch of the Architects' and Surveyors' Assistants' Professional Union recently paid a visit of inspection to the new Marylebone Town Hall. The members assembled in the reception-room and were introduced to the Mayor, Alderman A. E. Hughes, F.R.I.B.A., J.P., who gave the members a retrospect of the new Town Hall, after which he conducted the party and explained the details throughout the building. After a very interesting and educational visit a vote of thanks was passed to the Mayor for his great courtesy in conducting the party, by Mr. J. A. Gould, hon. sec. Met. Branch. The Mayor in reply stated that as an architect he felt privileged to explain the details of the building, and as Mayor of the Borough, felt proud to be able to do so. On June 30 a visit will be paid to Messrs. Esdaile & Co.'s Saw Mills, Wenlock Road, City Road, N.1. Members assemble outside the works at 2.15 p.m. Tea will be provided.

### *Structural Engineers visit Gloucester.*

Under the auspices of its Western Counties Branch, who were responsible for the arrangements, a large number of members of the Institution of Structural Engineers paid a visit to Gloucester. A civic reception was accorded to the party by the Mayor of Gloucester in the afternoon, and afterwards visits were paid to Gloucester Cathedral, an exhibition of artificial stone, and the Exhibition of Gloucester Industries. A meeting in the evening was addressed by the President of the Institution, Mr. Etchells, the President-Elect, Major Petrie, and the Chairman of the Western Counties Branch, Mr. Pimm; and reference was made to the recent remarkable growth and development of the Institution.

### *Hants, Dorset, and South Wilts Surveyors.*

The summer meeting of the Hants, Dorset, and South Wilts Branch of the Surveyors' Institution will be held at Bournemouth on Friday, July 20. The party will first of all lunch at the Royal Bath Hotel. After luncheon the members will motor through the district and will have an opportunity of seeing modern Bournemouth. At the invitation of Mr. and Mrs. Ernest Fox and Mr. and Mrs. William Fox, the company will be entertained to tea in the garden of "Woodbridge," Branksome Park. All members of the Institution will be welcomed if intimation of intention to attend is given to the branch hon. secretary, Mr. A. S. Burnett, 2 High Street, Southampton.

### *Institution of Heating and Ventilating Engineers.*

The summer meeting of the Institution of Heating and Ventilating Engineers was held at Folkestone, under the presidency of Mr. John Watson. At the business meeting Mr. J. Roger Preston in an interesting paper, remarked that the cooling of air had been mostly carried out as a necessity in specialized industrial processes, either for the purpose of reducing the humidity by condensing part of the aqueous vapour, or for the production of low temperatures. The use of same in this country for the purpose of obtaining comfortable and healthy conditions in our buildings had been very limited, except to the extent of cooling the air within a few degrees of the initial wet bulb temperature, with the usual air-washer recirculating the spray water. Modern physiological research tended to prove the necessity of keeping the wet bulb temperature within narrow limits, say, from 54 deg. to 58 deg., if it was desired to ensure comfortable and healthy conditions. His paper dealt with the means of obtaining conditions approaching this ideal in a building, when hot and humid outside. It was in the memory of many that an ordinary air-washer, for the purpose of cleansing the air, was considered to be a luxury and an expensive one. The air-washer was now quite
common, and they might see the
when a modern heating and ventilat
plant would not be considered in
way complete without a properly
signed equipment for cooling and
humidifying.

### *Civic Survey of Belfast.*

In view of the prospect of the erect
of the Northern Law Courts and Bel
war memorial, and the risk of pick
sites without regard to the future devel
ment of the city, the Ulster Society
Architects held a special meeting to
its members' ideas on the question of
most suitable sites. Members were
quested to submit sketch maps embo
ing their opinions, and quite a numbe
interesting schemes were sent in. E
scheme was explained by its aut
after which it was discussed in detail
those present. It was the gen
opinion that a civic survey of the city
now a necessity as the basis of a to
planning scheme on the most mod
lines.

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# Parliamentary Notes

[BY OUR SPECIAL REPRESENTATIV

### *Housing Assessment Concessions.*

The following concessions with reg
to assessments under Schedule A were
nounced by Sir W. Joynson-Hicks du
the Committee stage of the Finance
Allowances for repairs—quarter of
annual value up to houses of a renta
£40 a year; one-fifth between £40
£100; and on the amount by which
rental exceeds £100, one-sixth. The
of inhabited house duty is to be : £20
under, no duty; between £20 and
3d. in the £; between £40 and £60,
over £60, 9d. These concessions will
altogether, £1,500,000.

### *Decontrol of Houses.*

Standing Committee D, which is
sidering the new Rent Restriction
have decided, by thirty-two votes
twenty-two, to agree to "decont
coming into force on June 24, 1925.
amendment to leave out sub-section
of clause 2, which decontrols a dwel
house, the landlord of which is in po
sion, or comes into possession after
passing of the Bill, was withdrawn
the Minister promising to insert a pr
that the sub-section shall not appl
cases where the landlord comes into
session through an eviction order
arrears of rent, unless by special
of the Court.

Lord Eustace Percy, Parliamen
Secretary to the Ministry of He
informed Capt. W. Benn that
approximate number of houses contr
under the Rent Restriction Acts
Under the 1915 Act, 7,300,000; unde
1919 Act, 700,000; under the 1920
150,000.

### *New Housing Schemes.*

Replying to Mr. Willey, Lord E.
said that proposals submitted by
local authorities had been approve
coming within the scope of the
Housing Bill. Eleven of these pro
related wholly or partly to the ere
of houses by private enterprise.

# Trade and Craft

### *A Valuable Stock of Timber.*

Messrs. W. Nicholson and Son (Leeds), td., of Prospect Saw Mills, Sheaf Street, eeds, builders and timber merchants, ave purchased the whole of the stock f walnut, mahogany, and other hardoods from Mr. Parkinson, of Liverpool, ho had a great reputation in the trade or his knowledge of all kinds of figured nd plain hardwoods. Messrs. Nicholson ow hold one of the largest stocks of dry alnut, figured walnut, and mahogany the north.

### *A Handy Diary.*

Messrs. Simplex Conduits Limited, of arrison Lane, Birmingham, have issued very attractive diary which should be f great service to architects and others uring the coming year. In this issue he firm have departed from their usual ast-bound booklet in favour of an inset nd a loose solid-calf cover. The secional ruling has been retained, and cerain tables in the back portion of the iary have been replaced by others conidered more useful and those remaining ave been carefully checked and revised here necessary. Such fluctuating figures s prices, etc., are given correct at the ime of going to press, but accurate details f these will always be supplied immeiately on application to the firm. The iary is most useful and attractive. It s, in fact, one of the best we have seen.

### *New Premises at Birmingham.*

The new premises of Messrs. Metroolitan-Vickers Electrical Co., Limited, at aimler House, Paradise Street, Birmingam, include a large showroom for the isplay of electric light fittings, heating nd cooking apparatus, and electric omestic appliances, and a special indusrial showroom containing a complete ange of appliances to cover all the ndustrial applications of electricity. aimler House will now be the only ddress of the firm in Birmingham, and will include, in addition to the showrooms, the whole of the offices and stores. The firm will make it a practice to keep in stock a large range of electric light fittings of the most artistic type, together with a large selection of silk and ornamental glass shades. On the industrial side the firm are catering for all the requirements of the contractor, including accessories, conduit, "Cosmos" lamps, etc., and a portion of the showroom will be devoted to the exposition of Radiophones. The Radiophone products of the company include the "Crystal Set" and a complete range of valve receiving sets, all of which are made in accordance with the Postmaster-General's requirements and have the seal of the Broadcasting Committee. The new premises were opened on December 14.

### *Magnet Electric Cookers.*

We have received from the General Electric Co. a copy of their leaflet No. H.2867 giving particulars and prices of a series of "Magnet" electric cookers. The range of apparatus covers a wide field, from cookers suitable for the modest requirements of a bachelor flat, to substantial full-sized ranges capable of catering for a family of twelve persons. The new portable cooker, catalogue No. H.5670, is particularly interesting, and has been specially designed to meet the demand for an inexpensive range for use in medium-sized houses, where the number in family does not exceed from six to eight persons. Of substantial sheet metal construction, double cased, and well finished in black enamel with bright metal relief, this oven measures 25½ in. high by 18 in. wide and 15½ in. deep, overall, the oven space being 17½ in. by 10½ in. by 12½ in. There are three heating elements, two at the sides of the oven and one at the top. The top element is used not only as an auxiliary heat for the oven, but also for grilling, toasting, and boiling. The maximum loading of this oven is 2,700 watts, variable in fifteen steps, down to a minimum of 300 watts.

### *Two B.R.C. Roads.*

The accompanying illustrations show portions of Epping New Road, Buckhurst Hill, and Glenboig Road, Airdrie, two of the many roads in this country which have been constructed of concrete reinforced B.R.C. fabric.

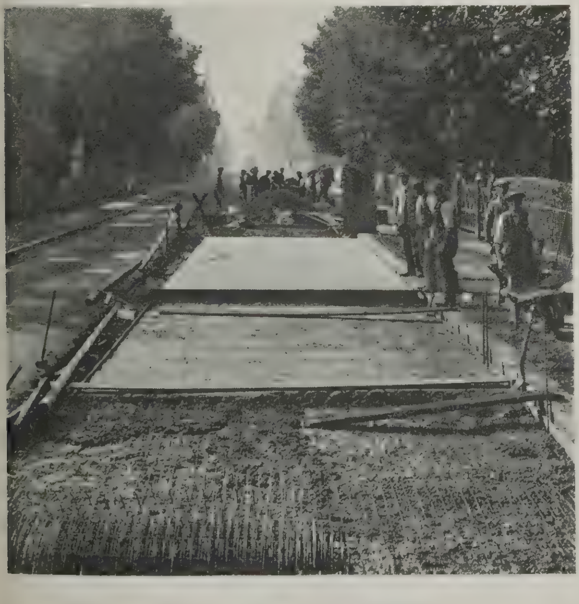
Epping New Road, Buckhurst Hill, forms part of the great highway which runs from London to Newmarket, and the photograph shows the portion which has been laid in concrete. It carries a weight of traffic of some 1,500 tons per day. The Epping New Road at this point is 27 ft. wide. It was constructed of concrete 7 in. thick reinforced with B.R.C. fabric ref. No. 9. The road has been down nearly three years, and to-day is in first-class condition. This road was constructed for the Essex County Council, the county surveyor at the time being Mr. P. J. Sheldon, M.Inst.C.E.

Glenboig Road, Airdrie, is a single course concrete road 6 in. thick, reinforced with B.R.C. fabric ref. No. 9. The road was constructed in August 1921, and traffic since then has included the passage of a 16-ton tractor engine with steel tyres, several times per day. Underlying the road there is a bed of peat bog 40 ft. thick. There is not a sign of any subsidence, crack or wear in the concrete. This road, considering the nature of the foundation and the weight of the load, provides additional evidence of the efficiency of a single layer of No. 9 B.R.C. fabric placed near the bottom of the concrete. The road was constructed under the direction of Mr. W. A. Chapman, road surveyor, County of Lanark, Airdrie.

B.R.C. fabric is made by the British Reinforced Concrete Engineering Co., Ltd., Manchester.

### *A Correction.*

In our description of "Africa House," Kingsway, in our issue for November 29, we stated that the "Malcrete" flooring of the Grano-Metallic Paving and Plastering Co., Ltd., had been put down in the basement. This should read "Metalcrete" flooring.



EPPING NEW ROAD, BUCKHURST HILL

GLENBOIG ROAD, AIRDRIE.

## A Staff Dinner

On Friday, December 22, at the Town Hall, Leamington, the employees of Messrs. Sidney Flavel & Co., Ltd., were entertained to dinner by Mr. Percival Flavel, J.P., the managing director.

The chairman's health was proposed by Mr. Thomas Sanderson, who has been associated with the firm for fifty-three years. He referred to the fact that he had known three generations of Flavels, Mr. Percival being the fifth in the business, which, in recent years, had increased four times in size.

There were present between seven and eight hundred guests, who spent a most enjoyable evening in music and dancing.

## New Inventions

*Latest Patent Applications.*

31507.—Adair, W.—Erection of concrete, etc., buildings. November 17.

31001.—Butler, G. W.—Tar-macadam roads, etc. November 13.

31137.—Heenan, J. N. D. — Smoke abatement. November 14.

31572.—Lord, F.—Handling mortar, etc. November 18.

31443.—Manifold, A. C.—Shuttering for cement buildings. November 17.

31229.—Moxon, A. E.—Concrete floors, etc. November 15.

31547.—Parkinson, E. H.—Buildings. November 18.

31508.—Rawlings, E. J.—Window-framing. November 17.

32091.—Copner, C. J.—Chimney-tops. November 23.

31891.—Flaxman, W. — Corrugated sheeting for building, etc. November 22.

31986.—Hall, R.—Rubber-faced flooring-tiles, etc. November 22.

32202.—Hamilton, F. B.—Factory, etc., chimneys. November 24.

32135.—Linn, J. — Surveyors' levels. November 24.

32173.—McLeod, R. G.—Binding-bars in reinforced concrete construction. November 24.

32311.—Struben, A. M. A.—Surveying, etc., instruments. November 25.

*Specifications Published.*

167173.—Picot, G.—Machine for making bricks, tiles, and other building materials.

188041.—Lycock, H. and E.—Girder or beam attachment for electrical conduits, gas or water-pipes, and the like.

188185.—Wessel, K.—Building-slabs and bungalows and like buildings formed therewith.

188207.—Hurden, E.—Fencing.

188249.—Have, A. A.—Reinforced concrete.

188406.—Woolcock, J.—Construction of floors and the like.

188604.—Cafferata, B. J., Cafferata, L. W., Cafferata, H. M., Cafferata, R. B.—Apparatus for the manufacture of slabs, plates, and the like of plaster or similar plastic materials.

*Abstracts Published.*

186809.—Sectional buildings.—E. Darby, 39 Broad Street, Birmingham.—A portable or permanent building is formed of three or more self-contained units each comprising a single apartment, the units being arranged in staggered relationship but overlapping so that through communication is obtained by end doors. The central space may be enclosed by a roof and wall, and the corner spaces may be roofed in to form verandas. The units may be built of wood, brick, concrete, or other material with two or more stories and may be mounted on wheel or rollers.

186531.—Wall piers.—Airey, Sir E., o 25 Victoria Street, Westminster.—Concrete piers or pillar *d* are cast in situ at intervals i a double slab wall by means o a detachable framework consisting of two wooden or meta uprights *f*, $f^1$ which close th gaps in the front and back face of the wall and are secured together by metal loops *l* on cros pieces *j* bolted to the upright Wires *i* secure the uprights together at the base, and th spaces *c* in the wall are closed by wedges *u* with pull-out wires *v* The upright *f* may pivot on the bolt *k*, and is adjusted by a screw *q* working in a nut *r* and carrying a plate *t* which bears against the upright $f^1$. Levers or cams may replace the screw *q*. A plumb-bob *o* and handles *w* are provided.

FIG.4.

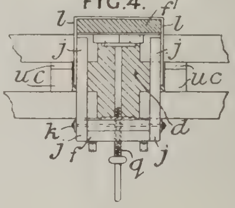
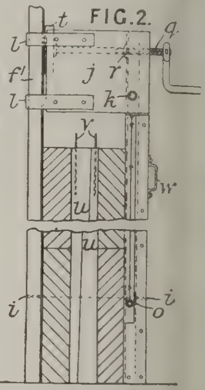


FIG.2.



The above particulars are specially prepared by Messrs. Rayner & Co., registered patent agents, of 5 Chancery Lane, London, W.C. 2, from whom readers of the Journal may obtain all information free relating to patents, trade marks, and designs. Messrs. Rayner & Co. will obtain printed copies of the published specifications and forward on post free for the official price of 1/- each

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# Law Reports

## ousing and Town Planning Act

*ance Economic Investment Co.* v. *Berton and others.*

Dec. 7. King's Bench Division.
Before Justices Darling and Salter.

n interesting question under section
of the Housing and Town-Planning
of 1919 was raised by this appeal by
on and others, the Estates Governors
lleyn's College, Dulwich, against a
sion of the Lambeth County Court
ge in favour of the Alliance, &c., Co.

r. Hawke, K.C., argued the case for
appellants, and Mr. Scholefield, K.C.,
the respondents. The Corporation of
berwell were joined as a party, and
represented by Mr. Croasdell.

r. Hawke said the respondents had
ase of Tollgate House, College Road,
wich. The house had seventeen
s and a garden of two acres. They
difficulties in letting the house, and
wanted to cut it up into seven tene-
ts, with a common kitchen, lavatory
bathroom. Their covenants pre-
ed them altering the house into
ments, and on application to Judge
y, at Lambeth County Court, that
ge decided that, owing to a change
he character of the neighbourhood,
house could not be easily let as a
e tenement, but could readily be let
ccupation if converted into two or
tenements, suggesting that the
e might be made into three or four
, and that plans should be submitted
that purpose. The appellants con-
ed that the County Court Judge had
vidence of any change in the neigh-
hood to justify his decision, and that
Judge was wrong in taking into con-
ation in deciding the matter sur-
ding districts, such as Tulse Hill and
mark Hill. So far as he (counsel)
, "neighbourhood" for section 27 of
Housing and Town-Planning Act
not been defined. Counsel said there
no evidence of change in the neigh-
hood. The people who lived there
the same as before, with the same
ts and with the same social position.
clients were not unwilling that the
e should be changed into three flats,
f there were a finding of a change in
neighbourhood, that would apply
nly to Tollgate House, but generally,
that would render more difficult the
e of the trustees to preserve the
e as a high-class one. His sub-
ion was that the County Court Judge
misdirected himself as to the true
truction of "neighbourhood."

. Scholefield contended that there
abundant material for the County
t Judge to find that the inability
t the house was due to a change in
character of the neighbourhood.
changes had begun twenty years ago,
rding to the evidence, and there was
her house next door which could not
t for some time.

. Justice Darling, in the course of
udgment, said they had to consider
her there was any evidence to justify
County Court Judge's finding. He
of the opinion that in considering
was the meaning of the words of
tatute, which were "that any change
e character of the neighbourhood in which the house is situated," there must be evidence of a change in the character of the neighbourhood. That was not a general and universal change in the character of the social conditions of the people who might live there or elsewhere, but there must be a particular change, a local change. He was of opinion in that case there was evidence of such a change, as distinct from that change which they knew prevailed all over this country, and even to a greater extent in many other countries. The County Court Judge had grounds for his decision.

Mr. Justice Salter agreed.

The appeal was dismissed with costs, and leave to appeal further was given.

No costs were allowed the Corporation of Camberwell, the Court saying they need not have come to the Court.

## Reconstruction of Premises

*Jones* v. *Ramuz.*

Dec. 5. King's Bench Division.
Before Justices Darling and Salter.

This was an appeal by Mr. H. Jones from a judgment of the County Court Judge at Southend in favour of the defendant, Mr. F. F. Ramuz, refusing an apportionment of a house in Palmerston Road, Westcliff-on-Sea, which had been converted into flats, on the ground that the premises were excluded from the Rent Act as they had been structurally altered.

Mr. Giveen, for appellant, said he became tenant of a flat, consisting of two upper floors in Palmerston Road, in January 1921, for three years at a rent of £4 per week. In 1914 the whole house had been let at £60 per annum, so that was the standard rent. That contrasted with £208 rent for the two upper floors after the alleged conversion, and £200 for the lower part of the house. What was called reconstruction by way of conversion took place at the beginning of 1921. There was a matchboard partition put up so as to keep the two upper floors separate from the lower, but there was nothing really substantially done. What was done was in what was the bathroom. The bath supply was cut off and a wooden ledge put across the bath. To make it into a scullery they also put in a geyser and a length of gaspipe. The only approach to a sink was a lavatory basin. There were no means of taking refuse up and down the house, and there was no provision for coal. He believed there was nothing at all done in the lower part. The whole of the work in the house cost £122, of which only a portion was expended on the upper part, so that by the so-called reconstruction of a house let at £60 rent the place was afterwards let at £400 a year on an expenditure of £100. The respondent claimed there was a *bona fide* reconstruction into two or more separate flats. What he (Mr. Giveen) contended was, what was done could not be said to constitute a real, *bona fide* reconstruction. Some of the things done in the house were illegal under local building by-laws, as it was provided, amongst other things, that dwellings should be separated by solid material not less than 3 in. thick, and when they found that the substantial thing done was illegal, it could not be held that there was *bona fide* reconstruction.

The Court dismissed the appeal with costs and did not call upon Mr. Holman Gregory, K.C., to argue the case for the respondent.

Mr. Justice Darling said in this case the County Court Registrar had held on the evidence before him that a dwelling-house had been *bona fide* reconstructed, and where there was an appeal to the County Court Judge he also came to that conclusion. That Court could not interfere unless their Lordships were satisfied that there was no evidence upon which the County Court Judge could determine as he did. He (his Lordship) considered there was evidence of two self-contained flats or tenements having been created, and that they were created by way of conversion. There was the further question of a *bona fide* reconstruction. Appellant said there was no *bona fide* reconstruction because the building by-laws had not been complied with, but his Lordship thought a man might put up a strong building for his own enjoyment, and he might build it *bona fide*, but it might not comply with the Building Acts. That was not conclusive evidence he did not act *bona fide*. The County Court Judge had considered the question, and his Lordship could not see there was no evidence on which he could come to the conclusion that there was *bona fide* reconstruction into separate flats, because there was no sink in the room, because the bath was not always a bath, but sometimes had a top put on it and was used as a table, and because the partition was not a little thicker. That Court had no power to interfere with the County Court Judge's decision, and the appeal would be dismissed.

Mr. Justice Salter agreed.

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# Trade and Craft

### *The Royal Victoria Gate.*

Mr. J. Starkie Gardner, of 121 South Lambeth Road, London, S.W.8, metal worker to H.M. the King, has been instructed to make the new Royal Victoria Gate for Hyde Park.

### *The National Museum of Wales.*

In our issue for January 3 we incorrectly described the floor material laid by Korkoid and Ruboleum Tile Co., of 13-17 Summerfield Street, Bridgeton, Glasgow, in the National Museum of Wales, Cardiff, as Rubber flooring. The correct description of the material is "Ruboleum," not "Rubber."

### *"Magnet" Electric Cooking Appliances.*

The General Electric Co., Ltd., of Magnet House, Kingsway, London, W.C.2, have sent us a copy of their booklet (No. H.2860) which deals with "Magnet" Electric Cooking and Domestic Appliances. This booklet shows how wide a range of electrical appliances designed especially for kitchen use and for the preparation of meals is manufactured by the Company. From the large electric range and grill capable of cooking for a family to the little 6-in. "Magnet" hot plate that will cook an egg or boil a kettle on the table in the living-room—and, incidentally, has several other uses—the possibilities of selection are extensive. There is practically no operation of the household performed by heat that cannot be done by electricity, and the "Magnet" appliances are the result of prolonged experience in this class of electrical work.

Their principal features are an easily replaceable heating element of moderate cost, and the standardization of component parts. The greatest skill is devoted to the making of the element—the vital part—and the design of each appliance is such that perfect control is obtained instantly. With ordinary care in use no difficulties whatever can arise in the management of the many types of electric cooking appliances, the mere turning of a switch on or off being all the manipulation that is necessary.

Cooking plates and warming plates are useful accessories to the household, the "Magnet" cooking-plate, a handy table device, being the electrical equivalent of the gas-ring. Electric warming plates are designed to keep food warm, after cooking, until wanted, and the cost of using is very small indeed. The complete range of electric saucepans and boiling utensils ensures economy and satisfaction. The prices and particulars in the booklet have been completely revised to include all reductions in cost of labour, material, etc. Copies of the booklet may be had upon application to Magnet House, Kingsway, or to any of the Company's provincial branches.

### *Change of Name.*

The name of the Considère Construction Co., Ltd., of 72 Victoria Street, Westminster, London, S.W.1, has been changed to "Considère Constructions, Ltd." This has been done with a view, as far as possible, of avoiding any title which might give the impression that the Company is engaged in contracting work. The business of the Company (as for the past fifteen years) is confined entirely to the detail calculation and design of reinforced concrete. M. Pelnard-Considère and M. Caquot, of the French firm of Pelnard-Considère, Caquot et Cie, have joined the English board of directors.

## New Inventions

### *Latest Patent Applications.*

34424.—Beck, L. A.—Interlocking roofing tiles. December 18.

34593.—Davidson, T. G.—Means for building walls, etc. December 19.

35438.—Didier, C.—Method of protecting, etc., materials employed in construction. December 29.

35176.—Garland, J.—Cutting out patterns in floors and walls. December 27.

35341.—Geneve, C. A.—Reinforced concrete floors. December 28.

35330.—Kohler, W. C.—Hollow sheet piles of reinforced concrete, etc. December 28.

### *Specifications Published.*

189892.—Berry, H.—Manufacture of artificial stone, cement, or the like.

190021.—McLean, D.—Means for ventilating rooms and cavity walls.

190058.—Taylor, S.—Covering or means of coating for woodwork, walls, frames, such as doors, window-sashes, or the like, or other parts or members adapted to be covered or coated.

190267.—Friedrich, K.—Method for the production of a cold glaze upon building material, such as concrete, sandstone, clay, brickwork, and the like.

190291.—Dampney, G. F.—Concrete-slab building construction.

190323.—Lee, R.—Roofing and weather and wall tile.

### *Abstracts Published.*

188185.—Bungalows; slabs.—Wessel, K., of 1285 Como Boulevard, and Heimbach, A. H., of 1703 Hewitt Avenue, both in St. Paul, Minnesota, U.S.A.—Bungalows
and like buildings are forme
slabs of compressed pul
vegetable fibre, such as str
flax, hemp, or wood fibre,
such thickness and rigidity t
the roof is supported dire
by the slabs without the us
studding. The outer walls n
be double or single; each en
wall may consist of a single s
in which are formed the d
and window openings. R
forcing frames may be fitted
the openings, and the corner
the building are preferably
vided with inner and outer st
of wood, metal, or fibre bo
nailed or screwed in place.
inner and outer surfaces may
painted or plastered. The fl
ceiling, and roof are formed
heavy fibre slabs, the roof sl
being supported by trusses
covered with roofing paper,
Self-sustaining but remova
partitions for offices may
formed of the slabs descri
above.

188249.—D'Have, A. A. J., 11 Rue de
Chevre, Malines, Belgium
Precast reinforced - concr
beams, having lateral openi
and flanges, support holl
concrete or terra-cotta blo
laid with the apertures re
tering with the openings in
beams. The blocks have s
flanges which abut and fo
channels in which is pla
concrete with metal or fibre
inforcing rods which exte
through the openings in
beams. The bottom end ed
of the blocks are rabbeted
form a flush ceiling.

The above particulars are specially prepared
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The Room is intended for the leisurely consultation of books, portfolios and periodicals published by the Architectural Press, while numerous building papers and art magazines, both English and foreign, are provided for the use of visitors.

Architects, art-lovers, and all who are interested in constructional matters are cordially invited to make the fullest use of the Reading Room.

# The Week's News

### Kursaal for Skegness.

:egness has been offered a £30,000
aal, and is considering the offer.

### The Late Mr. A. Bramley.

Folkestone architect, Mr. Andrew
nley, has passed away.

### mber Imports into the Hartlepools.

1,000 loads of timber were imported
the Hartlepools during 1922.

### roposed Village Hall for Ruswarp.

village hall is proposed for Ruswarp,
Whitby.

### Proposed New Dock for Redcar.

ie railway company propose to build
w dock at the mouth of the Tees.

### oposed Garden City at Handforth.

andforth Urban Council has passed
s for the lay-out of a garden city
new roads near the village.

### Housing in Birmingham.

rmingham Corporation is to consider
oposal to lend mortgages to people
ous to build houses for themselves.

### Wesleyan Chapel at Welburn.

ie foundation stone has been laid
new Wesleyan chapel at Welburn,
Castle Howard.

### The New Delhi.

Edwin Lutyens, R.A., and Mr. Her-
Baker, A.R.A., the two principal
tects of new Delhi, have returned
their autumn visit thither.

### The Furnishing Guild.

the Manchester County Court
Honour Judge Mellor has issued a
ing-up order against the Furniture
Furnishing Guild, Limited.

### Government's Housing Scheme.

is stated that the Government's
ing scheme will be directed to stimu-
g private enterprise to build more
ing-class dwellings.

### New Arcade for Bridlington.

ans for an arcade and covered market
been prepared by Mr. Parkin, of Brid-
on, architect. The site is between
or Street and Hilderthorpe Road.

### Road Improvements at Margate.

ie Ministry of Health have approved
expenditure by the Town Council of
£26,000 for road improvements and
works.

### New Bridge at Shrewsbury.

rewsbury Town Council have de-
l to proceed at once with the recon-
tion and widening of the English
ge across the river Severn. The total
is estimated at £70,000.

### Housing at Dundee.

indee Town Council are to ask the
d of Health to sanction the erection
nements on the Dudhope site instead
atted houses, in view of the adapt-
ty of the site for tenements.

### rgentine Waterworks Construction.

ie Argentine Republic propose to
out extensive water and sewerage
s during the ensuing year. Full
culars of the schemes may be
ined from the Department of Over-
Trade, 35 Old Queen Street, S.W.1.

### Town-Planning at Batley.

Batley Corporation have appointed a sub-committee to act along with the Borough engineer in the preparation of draft proposals for a town-planning scheme.

### Westminster Hall.

It is hoped to have an official ceremony, attended by the King and Queen, to mark the completion in April of the restoration of the fourteenth-century roof of Westminster Hall.

### London Building Strike.

Because men employed by a London builder were asked to work forty-four hours in five days instead of five and a half a strike was called. Only ten men out of 120 responded.

### Sowerby Manor Sold.

The ancient manor of Sowerby, in the North Riding of Yorkshire, has been sold. This manor was owned for centuries by the ancient family of Lascelles of Breckenborough.

### Riccall Town-Planning Scheme.

Owing to the extensive building that has been going on at Barlby, near Selby, to establish industrial works, it has been decided to prepare a town-planning scheme at Riccall.

### New Thames Bridge ?

A scheme is under consideration for the construction of a new stone road bridge over the Thames at Teddington, in place of the suspension foot-bridge which was condemned as unsafe some months ago.

### New Church for Letchworth.

It has been decided by the Letchworth Free Church authorities to proceed with a scheme for the building of a new church. The present building is to be used ultimately as a school and social centre.

### "Business Efficiency" Exhibition.

A "Business Efficiency" exhibition is to be opened at Central Hall, Westminster, on February 7, by Mr. Neville Chamberlain, M.P., Postmaster-General. The exhibition will remain open until February 17.

### Euston Station War Memorial.

To complete the setting of the war memorial which stands in Euston Square, at the entrance to Euston Station, a number of lamp standards have been erected, approximately in a circular disposition around the monument.

### £50,000 Gift to a Memorial.

Mr. Alexander Park Lyle has given £50,000 to the funds of the Scottish National War Memorial. He is the chairman of the Lyle Shipping Company, Glasgow, and a brother of Sir Robert Park Lyle, the sugar refiner.

### Removing a Church.

Representative Melbourne architects are advocating the removal, stone by stone, of St. Paul's Anglican Cathedral, Melbourne, from its present site, at the corner of Flinders Street and Swanston Street, and its re-erection on a more commodious site elsewhere.

### The Late Mr. A. W. Sinclair.

Mr. Andrew W. Sinclair, J.P., past-president of the National Federation of Building Trade Employers and past-president of the Yorkshire Federation died suddenly at Scarborough, aged sixty-five.

### Steamship Company's New Offices.

The Royal Mail Steam Packet Company and their allied businesses are about to erect a huge block of offices. The cost is estimated at some million and a-half pounds. The new building will have extensive frontages to Leadenhall Street and East India Avenue.

### Architects for Manchester New Hotel.

The new hotel, which is to be erected in Manchester under the name "Hotel Majestic" by the Universal Finance and Development Corporation, Ltd., at a cost of £1,250,000, is to be designed by Messrs. Charles Clegg and Sons, Manchester.

### Sewerage at Blandford Forum.

The Council are applying to the Ministry of Health for a loan of £20,000 to carry out their sewerage scheme. The scheme was designed some years ago, but was deferred owing to the cost. The engineers are Messrs. W. H. Radford and Son, of Nottingham.

### Harrogate Royal Spa Rooms.

The Royal Hall Committee have approved of plans for the reconstruction and development of the Royal Spa Rooms at Harrogate, with a view to proceeding with the scheme next October. This will be one of the biggest schemes in Harrogate within recent years.

### Fulham Palace Moat.

The moat of Fulham Palace, which is said to have been made by the Danes in the ninth century as a defence of their camp, is being gradually filled in, and before many months are passed this ancient waterway will have wholly disappeared.

### York Architect's Estate.

Mr. E. Ridsdale Tate, of York, architect, who died June 12 last, intestate, left estate valued for probate at £356 16s. 3d., with net personalty £287 0s. 3d. He was well known in the north in connection with the restoration of old buildings.

### Peter Robinson's New Building.

The first section of Peter Robinson's new building, on one of the finest sites in London, has been opened. The next section will be completed very quickly, the retaining wall being already built. Mr. H. Austen Hall, F.R.I.B.A., is the architect.

### The College of Hygiene.

The Council of the R.I.B.A. have made representations to the Ministry of Health pointing out the desirability of holding an open architectural competition for the design of the new College of Hygiene in London, which is to be built with funds provided by the Rockefeller Foundation of New York. This course would give to American architects an opportunity of taking part in the competition.

### *Whitgift Hospital.*

Croydon Borough Council have held a special meeting to consider the position regarding the Council's proposal to promote a Bill in Parliament for the removal of the Whitgift Hospital. The proposal to take a poll was carried by forty votes to seven. The poll will be taken on January 25.

### *British Architecture and the United States.*

The Exhibition of Contemporary British Architecture which was on view in the galleries of the Royal Institute of British Architects before Christmas has been sent to New York at the invitation of the Architectural Leaue of that city. It has aroused so much interest that after the close of the exhibition in New York it is to be sent to Philadelphia and other great American cities.

### *New Buildings.*

Messrs. C. J. Dawson, Son and Allardyce, Barking, are the architects for Messrs. Barclays' new bank in Fleet Street, London.

Messrs. Whinney, Son, and Austen Hall are the architects for new premises Nos. 188-189 Fleet Street, London.

Mr. T. R. J. Meakin, Coventry, is the architect for new premises for the Rover Company, Ltd., being erected in Bond Street.

### *Housing Grants.*

A conference on Housing has been held in Manchester, presided over by the Lord Mayor of Manchester, and a resolution was carried by fifteen votes to one to the effect that local authorities represented at the conference were of opinion that any revision by the Government of the financial terms of assistance should be on a basis of contributions by the Government to local authorities during the loan period of six pounds per house per annum, or 50 per cent. of the net annual loss if such loss was in excess of twelve pounds per annum, and that supervision by the Government should be limited to being satisfied that the houses to be erected did not fall below a standard to be specified.

### *The Newcastle Election.*

The result of the East Newcastle by-election to fill the vacancy caused by the death of Mr. J. N. Bell (Lab.) were as follows : Mr. A. Henderson (Lab.), 11,066; Major H. Barnes (L.), 6,682; Captain Gee, V.C. (U.), 6,480; Majority, 4,384.

The following were the figures at the General Election last November : Mr. J. N. Bell (Lab.), 10,084; Major H. Barnes (L.), 6,999; Mr. G. Stone (N.L.), 6,273; Labour majority, 3,085.

### *The War Memorial at Edinburgh Castle.*

Sir Robert Lorimer, A.R.A., R.S.A., who is the architect for the proposed Scottish war memorial at Edinburgh Castle, is prepared to lower the external proportion of the shrine, which many critics consider stands too high above the skyline. Nothing definite has yet been arrived at, and the wooden framework is still standing to give all interested an idea of the dimensions of the stone structure when erected.

### *Japanese Art.*

The Prince of Wales has lent to the Victoria and Albert Museum an interesting example of the groups of models formerly arranged in Japanese houses on the occasion of the "Boys' Festival" (*Tango*) on the fifth day of the fifth month in each year. The group lent by the Prince has been placed in the West Hall of the museum, near those lent by Princess Mary, which relate to the "Girls' Festival," celebrated on the third day of the third month.

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## Blind Telephone Operators

It is St. Dunstan's proud boast that they have made "useful citizens again" of nearly 2,000 war-blinded men, and we gladly direct the attention of employers amongst our readers to the way in which very practical help can be given to St. Dunstan's work at the present moment. Many of St. Dunstan's men have been specially and very thoroughly trained as telephone operators, and have filled positions all over the country in this capacity with success. Five or six of these men are waiting for positions at the present time. They are mainly late arrivals to St. Dunstan's, who have just completed their course of training, but they include also one or two who have had the misfortune to lose their positions through trade depression and the consequent closing-down or reduction of staff. St. Dunstan's always endeavours to secure positions for their men as near their own homes as possible, and we are informed that Manchester, Liverpool, Bristol, and London are the areas in which it is at the moment desired to find positions for the men. The secretary of St. Dunstan's After-Care Organization, at the Headquarters of St. Dunstan's Work, Regent's Park, N.W.1, will give every information to firms who may be able to engage a blinded soldier as telephone operator.

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## Trade and Craft

### *London County Hall.*

We are asked to state that the mosaic paving at the London County Hall was carried out by The Art Pavements and Decorations Ltd., whose name should have been mentioned in the list published in our issue for January 3.

### *Steel Construction.*

The whole of the steelwork (some 200 tons) for the new warehouse for Messrs. John Stevenson and Sons, Ltd., of Cumberland Street, Manchester, was supplied and erected complete by Messrs. Homan and Rodgers, 10 Marsden Street, Manchester. Messrs. W. T. Gunson and Son, Manchester, were the architects.

Messrs. Homan and Rodgers carried out the whole of the structural steelwork and fireproof flooring to the new secondary school, Farnworth, near Bolton, for Mr. Henry Littler, architect to the Lancashire County Council.

The reinforced concrete balconies to the Palace Cinema, St. Annes-on-Sea, and Hale Picture House, near Altrincham, Cheshire, were laid complete by Messrs. Homan and Rodgers. Mr. W. Thornley, M.S.A., of Blackpool and Wigan, was the architect.

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Architects, art-lovers, and all who are interested in constructional matters are cordially invited to make the fullest use of the Reading Room.

# The Week's News

### York Savings Bank Extension.

rk Savings Bank is shortly to be
ded on the adjoining site.

### Architectural Practice.

Alex. Cullen, A.R.I.B.A., P.A.S.I.,
ommenced practice at 88 Cadzow
t, Hamilton, N.B.

### Town Planning at Leatherhead.

is probable that the Leatherhead
will not proceed further with the
of town planning in their district.

### British Empire Exhibition (1924).

President of the R.I.B.A. has been
nted a member of the Art Council
British Empire Exhibition (1924).

### New Nottinghamshire Village.

nodel village, with church, chapel,
ıtes, and shops, is to be built at
on, Notts.

### Big Brick Combine.

elve of the largest brickyards in the
oorough area have been merged into
control output and fix prices.

### A Tall War Memorial.

hester firm of contractors are now
ed in erecting a Blackpool war
rial at a cost of £15,000. The main
e of the memorial is a 90-foot obelisk.

### Society of Arts Keith Prize.

Royal Scottish Society of Arts has
ed the Keith Prize to Principal A.
wrie for his paper on "'The Pier
d' of Building Brick Walls."

### iverpool Architectural Society's Dinner.

Paul Waterhouse, P.R.I.B.A., is to
chief guest of the Liverpool Archi-
al Society at their commemoration
in March.

### olonnade at Southend-on-Sea.

thend-on-Sea Town Council have
d to construct a colonnade from
ll house to the pavilion on the pier
approximate cost of £15,000.

### Housing at Chesterton.

ıbridge Town Council have decided
ply to the Ministry of Health for
on to borrow £100,000 to build 239
ıg-class houses at Chesterton.

### New Pall Mall Flats.

y bachelors' flats are to be erected
ost of £40,000 in Pall Mall, London,
te Marlborough House. Mr. E.
d, of Messrs. Howard and Partners,
architect.

### New Flats for Scarborough.

Town Council have approved a
for the erection of blocks of flats
east ward. Each flat will consist
ıg-room, three bedrooms, scullery,
th.

### Ilford Housing Scheme.

otiations are afoot for the sale of
cant part of the large estate at
It is understood that an offer
en made by a builder, who proposes
elop the land for building purposes.

### A Kursaal for Skegness.

A Kursaal is to be built at Skegness. The building will have entertainment, concert, and dance halls, wireless lounge, and sea-water baths. The cost will be about £30,000.

### Help for Birmingham Builders.

A scheme, formulated by the Birmingham Bank and Estate Committee, who proposed to finance builders for the execution of housing and other building schemes, is to be laid before the Birmingham City Council.

### Bath for Hammersmith.

Hammersmith Council have accepted the tender of J. McManus, Ltd., of Hammersmith Road, amounting to £13,149, for the construction of an open-air swimming bath on the Wormholt housing estate at North Hammersmith.

### New Super-Cinema.

The contract for the super-cinema, seating 1,700 persons, with tea-room and dance-floor in the basement, which is to be erected on the island site at the corner of Haymarket and Jermyn Street, W., has been given to Messrs. Arthur Vigor, builders, Knightsbridge.

### New Yorkshire Factories.

Yorkshire farmers are considering the establishment of a bacon factory. The capital required for the building is £25,000. The leader of the scheme is Mr. Lion C. Paget, Middlesthorpe. A similar factory is proposed for Lincoln at a cost of £20,000.

### Exhibition of Locks and Keys.

An exhibition of ancient locks and keys has been held in York. Some of the locks dated from the tenth to the fourteenth centuries, and all the forged work on view was prior to the sixteenth century. Ornamental keys of the latter part of the seventeenth century were also shown.

### Highgate Garden Suburb.

The "Holly Lodge" Estate, Highgate, covering an area of some fifty-five acres near Kenwood and Parliament Hill Fields, has been acquired for the purpose of forming a garden suburb, which will include about 500 houses of the modern type suitable for occupation by middle-class residents.

### London's Best New Building.

Nominations in connection with the R.I.B.A. Medal to be awarded to the designer of the best street façade should be sent to the Secretary of the R.I.B.A., 9 Conduit Street, W.1, by February 28. The nominations are to be in favour of any building within four miles of Charing Cross completed during the twelve months ended December 31, 1922.

### New Pictures at the National Gallery.

Two interesting Dutch pictures have just been placed on view in Room XII at the National Gallery, Trafalgar Square. The first is a little painting representing a musical instrument dealer at his booth in the open air, one of the four signed and dated works of Carel Fabritius. The second is "The Fish Stall," by Emanuel de Witte.

### Obituary.

At the last meeting of the R.I.B.A. the deaths were announced of Messrs. John Bennie Wilson, Charles Glynn Evans, G. G. Fleming, and Percy Walker. Mr. John Bennie Wilson was elected an Associate in 1882, and a Fellow in 1910. He was president of the Glasgow Institute of Architects in 1910, and represented that body on the R.I.B.A. Council during the session 1910–1911. Mr. Charles Glynn Evans was elected an Associate in 1912, and a Fellow in 1921. Mr. G. G. Fleming and Mr. Percy Walker were elected Licentiates in 1911 and 1910 respectively.

### R.I.B.A. Examinations.

The R.I.B.A. Intermediate and Final (and Special) Examinations will be held this year on the following dates :—

### Intermediate Examination.

June 1, 4, 5 and 7, 1923. (Last day for receiving applications, April 28.)

November 23, 26, 27 and 29, 1923. (Last day for receiving applications, October 27, 1923.)

### Final (and Special) Examinations.

June 14, 15, 16, 18, 19 and 21, 1923. (Last day for receiving applications, May 5.)

December 6, 7, 8, 10, 11 and 13, 1923. (Last day for receiving applications, November 3.)

### R.I.B.A. Annual Conference.

The annual conference of the R.I.B.A. and its allied societies will take place in Edinburgh on June 13 to 16, 1923. The conference will be held in conjunction with the annual convention of the Incorporation of Architects in Scotland and the arrangements for the conference have been entrusted to the council of that body, by whose invitation Edinburgh was selected as the place of meeting. A fully detailed programme will be published at an early date. In the meantime, it is hoped that all members will make a note of the date and endeavour to arrange their engagements so as to permit them to make the journey to Edinburgh to take part in the conference.

### Alterations to Premises at Regent's Park.

On January 15 Mr. Thomas G. Brown, of 4 Gt. Quebec Street, Marylebone, was summoned in the Marylebone Police Court by Mr. Lawton R. Ford, district surveyor for St. Marylebone, for failing to serve the statutory notice in respect of certain alterations to premises in Huntsworth Mews, Upper Gloucester Place, Regent's Park. It appeared from the proceedings that the district surveyor was telephoned to as to the unsatisfactory manner in which the work was proceeding, and as he had received no notice he at once visited the premises, by which time he found that the whole front of the building, owing to lack of needling, had fallen into the roadway, several persons narrowly escaping with their lives. The defendant was fined twenty shillings and three guineas costs.

## Hardware Exhibition for Ontario

His Majesty's Trade Commissioner at Toronto reports to the Department of Overseas Trade that the eighteenth Annual Convention and Exhibition of the Ontario Retail Hardware Association will be held at The Armouries, Toronto, from February 13 to 16. The Trade Commissioner strongly recommends that British firms with local managers or agents should participate in the exhibition, pointing out that although the exhibition is promoted by the Retail Hardware Trade, Ontario, wholesale manufacturers and their agents exhibit annually in order to stimulate the demand from the retailer. He further suggests that British firms, interested in the exhibition but having no agents in Canada, might wish to avail themselves of the offer of a local manufacturer's agent who is prepared to display at the exhibition the samples of any firms who may appoint him as their agent in Ontario and Quebec provinces. Further particulars of this offer may be had on application to the Department of Overseas Trade, 35 Old Queen Street, London, S.W.1. (Reference E.D. 4103.)

## The Architects of Ireland

At a meeting of the Council of the Royal Institute of the Architects of Ireland, the president, Mr. Lucius O'Callaghan, occupied the chair. There were also present: Messrs. L. F. Giron, J. H. Webb, A. E. Murray, F. Hayes, S. M. Ashlin, T. J. Byrne, F. G. Hicks, H. Allberry, R. H. Byrne, R. Caulfeild Orpen, G. P. Sheridan, and G. F. Beckett, hon. secretary.

A report was received from the Examination Committee stating that eight candidates had submitted themselves for examination for admission to the studentship class. Of these, Messrs. Arnold F. Hendy, and Bernard G. Joyce satisfied the examiners in all subjects; one applicant failed, and the remainder were relegated for further examination in one or two subjects. Mr. Hendy was awarded a special prize for obtaining the highest marks.

Messrs. A. E. Murray and R. C. Orpen were appointed scrutineers for the ballot of the new Council.

On a report of the scrutineers of ballot for membership, Mr. T. J. McLynn, 42 Thorndale Avenue, Belfast, was declared duly elected a member of the Institute.

## Polden & Co.'s Annual Dinner

The staff of Messrs. Francis Polden & Co., Ltd., of London, electrical and mechanical engineers and contractors, held their annual dinner under the presidency of Mr. Polden, the managing director of the company. In giving the toast of the "Indoor and Outdoor Staffs," Mr. Polden thanked them for their loyal and energetic co-operation during the past twelve months. He expressed the conviction that with a continuance by them of this spirit, the company would be able to maintain throughout the present year regular employment not only to the existing staff, as in the past year, but he hoped to even a larger staff. The dinner was followed by an excellent musical programme.

## Hospital Accommodation in South Africa

The South African Press are calling attention to the need for a new hospital in Pretoria and to the proposed extension of the Bloemfontein Hospital. The equipment of the Pretoria Hospital will fall within the province of the Department of the Provisional Administration at Old Government Buildings, Pretoria, while the building, when it is decided upon, will be put up by the Public Works Department, Union Buildings, Pretoria. The address of the Hospital Committee is Potgieter Street, Pretoria, P.O. Box 201. The director of the hospital is Dr. A. H. Louw, and it is thought that literature in Dutch from United Kingdom manufacturers might be appreciated.

## Air Purification

The utilization of ozone, commercially generated, as an adjunct to ventilation was the theme of a paper given by Mr. Chas. G. Huntley to a meeting of the Institution of Heating and Ventilating Engineers at Birmingham. The question of the purity of the air we breathe was always one of the most engaging and serious problems, whether the place was the home, the office, the workshop, the vehicle, or the place of amusement. It could scarcely be too emphatically asserted that more than half of the ills we suffered from were due to the bad effect of foul air on the nervous system. Physiologists had now decided that the atmosphere conditions that really did affect the human being were those more intimately associated with its smell motion, temperature, and moisture rather than its percentage of carbonic acid gas or other chemical constituents The fact was we were constantly throwing off from the skin and lungs the waste products of the body, which putrified, and combined with supersaturation, overheating, and motionlessness of the air were the main causes of fetid atmospheres. To rid the air of those contaminating bodies would accomplish a great part of the problem of air purification. Ozone attained the result with the highest degree of satisfaction. Referring to reports of tests made at some St. Louis schools, in America, it was stated that the introduction of ozone in ventilation would probably remove the necessity fo open-air schools, as the ozone produced a mild exhilaration resembling that of a sea breeze or the air of the morning afte a thunderstorm. When used in a prope concentration for ventilation it had n odour itself.

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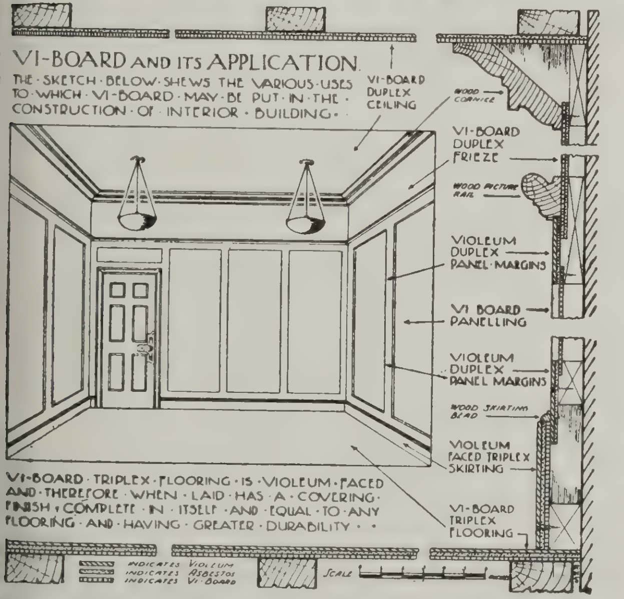
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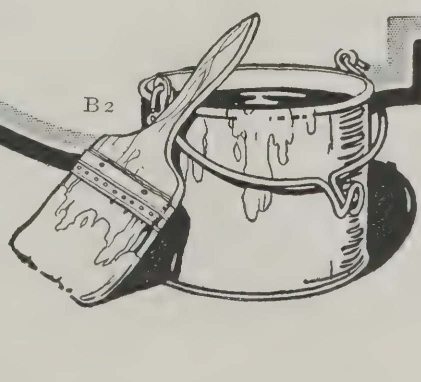

# Electrical Notes

## Training in Illuminating Engineering

An interesting discussion on the above subject was opened by Mr. C. E. Greenslade and Mr. J. E. S. White at the meeting of the Illuminating Engineering Society on January 16. The discussion covered a wide field, comprising not only the training of experts in lighting, but also general educational measures designed to bring about a better appreciation of the value of good illumination. The authors remarked that a great variety of subjects had been dealt with by the Society during the last fourteen years. Now that definite principles had become crystallized, it would be useful to arrange for papers before other bodies composed of architects, medical men and engineers of various kinds, treating in each case the aspects of lighting that appealed to them. The application of light also lent itself very well to interesting demonstrations, and appeals to the eye might be made the subject of popular lectures, both before adults and in schools. Children should be taught the value of good lighting, so that they grew up with an appreciation of its benefits in their own homes and in the vocation they ultimately pursued. The experience of the "Safety First" movement showed how much might be done by influencing children at an impressionable age.

Mr. Greenslade urged that in colleges and polytechnics lighting should be more fully dealt with in existing courses. The treatment in courses on electrical engineering, wiring and gas-fitting needed to be modernized; but the subject should be brought before students in other fields besides engineering, notably in architecture and medicine. The lighting of many important buildings rested in the hands of the architect, and it would be very useful to architectural students to gain some insight into modern lighting methods in the course of their training. Similarly, engineering students should get some acquaintance with the principles that guided architects in designing the lighting of public buildings, museums, picture galleries, etc. Electric, gas and other systems of lighting should be dealt with and the important question of natural lighting should not be overlooked.

The paper was concluded by a series of queries, which led to an interesting discussion, opened by Dr. F. T. Chapman of the Board of Education. Dr. Chapman agreed that the most hopeful method was to graft suitable instruction in illumination on to existing courses. Some degree of uniformity of treatment might be promoted by a few lectures before teachers in technical institutions and in schools, so that they could get information that would be useful to them in the courses they supervised. If the Society could prepare a series of suitable lantern slides for loan, this would be helpful. For those who intended to devote themselves to the expert consideration of lighting problems, a special post-graduate course might perhaps be arranged.

A number of principals and professors at various educational institutions joined in the discussion, and Mr. L. Gaster gave a summary of replies received in response to a list of queries circulated amongst colleges prior to the meeting. In almost all cases the replies had welcomed cooperation on the part of the Society.

## Registration of Electrical Contractors

A voluntary scheme of Registration of Electrical Contractors has been approved by a Committee set up by The Institution of Electrical Engineers, and invitations have been issued to the constituent bodies of this Committee, as under, to nominate representatives should they desire to be represented on the Registration Authority :—

The Institution of Electrical Engineers; The Electrical Contractors' Association (Inc.), including N. Ireland; The E.C.A. of Scotland; The Electrical Contractors of the Irish Free State; The R.I.B.A.; Provincial Electric Supply Committee of the United Kingdom; Incorporated Municipal Electrical Association; Incorporated Association of Electric Power Companies; Conference of Chief Officials of London Electric Supply Companies; Association of Consulting Engineers; British Electrical Development Association; B.E.A.M.A.; Fire Offices Committee; Electrical Wholesalers' Federation.

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# The Week's News

### *Sayes Court Sold.*

Sayes Court, near Chertsey, 600 years old, has been sold, and houses are to be built on the estate.

### *Bridlington Sea Front Scheme.*

Bridlington Corporation is offering £750 for the best scheme for the development of the sea front.

### *Bentley's Housing Scheme.*

The township of Bentley-with-Arksey, West Yorkshire, have decided to embark on a housing scheme.

### *Change of Address.*

Mr. J. Woodfield Smith, L.R.I.B.A., architect and surveyor, has moved to 24 St. Peter's Square, Manchester. Telephone : 112 Central.

### *The late Mr. F. Litchfield.*

Mr. Frederick Litchfield, one of the pioneers of the garden suburbs movement in Britain, has died at Golders Green.

### *York Housing Proposals.*

It is suggested that the York Corporation under the provisions of the Small Dwellings Act, 1899, shall finance private builders in respect to the erection of houses on Corporation land.

### *Dublin's Great Building Scheme.*

The Dublin Corporation has approved of the Housing Committee's report, recommending the erection of 428 houses on a fifty-acre site at Marino at a cost of £747 each.

### *Old London Bridge.*

Three large stones from the recently uncovered arch of old London Bridge have been presented to the Church of St. Magnus-the-Martyr, which adjoins the City end of the old bridge.

### *Radcliffe Housing.*

The Radcliffe District Council has decided to buy nine and a half acres of land with a view to the erection of eighty-six houses.

### *Proposed Humber Tunnel.*

The Lord Mayor of Hull has interviewed the Ministry of Transport with regard to the tunnelling of the Humber to afford improved communication between Hull and Lincolnshire, and the Midlands and London.

### *Improvements at Stone Asylum.*

In order to effect urgent structural improvements at the City of London Lunatic Asylum at Stone, near Dartford, the Corporation are about to expend £5,000 at once, with further large sums during the next five years.

### *Houses of Parliament Stonework.*

Scaffolding has been erected in the Central Hall of the Houses of Parliament and the stonework of the dome, which is believed to be in need of renovation owing to the subsidence of the foundation, is to be inspected.

### *Relics of an Ancient Nottingham Monastery.*

Many traces of the old White Friars Monastery, in Nottingham, have been brought to light. Amongst the discoveries made is the uncovering of what is believed to be a genuine section of the Carmelite Friary wall, which, it is supposed, had been destroyed hundreds of years ago.

### *Safety of Lambeth Bridge.*

It was stated at a meeting of the London County Council by the Chairman of the Highways Committee, that Lambeth Bridge was under constant inspection, and he was advised that it was safe for pedestrian traffic.

### *The late Mr. George Thow.*

It is with deep regret that we announce the death of Mr. George Thow, of Edinburgh. He was the son of the late Captain John Thow, of Montrose. A journalist by profession, he had for many years contributed to the columns of the JOURNAL.

### *York Architect in Hong Kong.*

His Excellency the Governor in Council of Hong Kong has been pleased to appoint Mr. E. F. Ronald Sample, A.R.I.B.A., M.S.A., an authorized architect to practise in Hong Kong, under the Public Health and Buildings Ordinance of the colony.

### *Imported Tiles for Housing.*

In consequence of a statement that French imported tiles were to be used for fifty houses at Penge, a deputation interviewed Sir Charles Ruthen, Director-General of Building of the Ministry of Health. The latter gave an assurance that the Ministry of Health did not insist on the use of foreign tiles, or give preference to them.

### *A.A. New Members.*

The following new members were elected at the last ordinary general meeting of the Architectural Association : Messrs. F. C. Holland, W. Maitland, A. W. White, G. L. M. Jenkins, P. G. Bentham, L. M. Tye, E. Wilensky, W. McIntyre Raeburn, L. F. Baker, C. J. Keeling, R. B. Saunders, Miss E. L. Caldicote, and Messrs. R. W. Atkey, and A. F. Ure.

### *The Glasgow School of Architecture Club.*

There was a large attendance at the annual dance of the Glasgow School of Architecture Club, and a most enjoyable evening was spent. Much originality was shown in the costumes, and the bright colours added to the gaiety of the evening.

At the fourth meeting of the School Club an interesting paper on "Professional Practice" was read by Mr. John Watson, F.R.I.B.A. Mr. S. Lipson presided. The first prize in the competition for the decoration of a vestibule for Messrs. Parsons has been awarded to a student of the Glasgow School of Architecture, Mr. Edwin Robertson.

### *Stowe as a Public School.*

The work of altering and adapting Stowe, Bucks, the seat of the Duke of Buckingham, as a public school, has been entrusted to Messrs. W. H. Gaze and Sons, Ltd., of Conduit Street, W.1. The figure at which the contract was placed is stated to be in the neighbourhood of £10,000. To complete the alterations and equipment of the mansion, according to the plans prepared for the management committee by Mr. Clough Williams-Ellis, the architect, a further £10,000 will probably be spent.

### *Sheffield Architect Honoured.*

Mr. J. R. Wigfull, the president of the Sheffield, South Yorkshire, and District Society of Architects and Surveyors, was at the annual dinner of the society presented with a gold watch in recognition of his services as secretary for seventeen years. Among the guests were the Lord Mayor of Sheffield, and Mr. Paul Waterhouse, P.R.I.B.A., who made the presentation.

### *National Building Guild Affairs.*

The scheme of arrangement sanctioned by the creditors of the National Building Guild has been approved by the Manchester County Court judge. The creditors, other than those of the London and Scottish Guild who take over the responsibilities in their areas, accept 10s. in the pound and 6 per cent. until the amount is paid. The scheme was passed by an overwhelming majority of creditors. There was no opposition.

### *Fourteenth-century Pictures Discovered.*

Mural paintings, dating from the fourteenth century, have been discovered in the Church of St. Margaret, near North Walsham, Norfolk. During last winter stains appeared in the interior through the peeling of a flake of plaster. The vicar consulted a neighbour, Mr. H. Loraine, whose work has now brought to light a painting of Saint Christopher and the Holy Child, some "ornamental texts," and other groups of figures.

### *A French Restoration Scheme.*

The credits which M. Henri Lapauze showed in "The Revue de l'Art Français" to be necessary to restore the historic palace and grounds and the Trianon have been unanimously voted by the Chamber of Deputies. An annual sum of 31,350,000f. (nominally £1,254,000) is to be placed at the disposal of the Fine Arts Department for this purpose for a period of five years. The work is to be put in hand at once. The groves and bowers will be restored, the basins and balustrades reconstructed, and the splendid gardens created by the genius of Lenôtre will resume the aspect that they bore in the days of the Roi Soleil.

### *Whitgift Hospital, Croydon.*

A fully attended conference of representatives of societies and other bodies opposed to the demolition of the Whitgift Hospital was held at the Royal Institute of British Architects on February 6, Mr. Paul Waterhouse, P.R.I.B.A., in the chair. It was decided to take joint action in opposition to the Bill promoted by the Croydon Borough Council. The following bodies were represented : R.I.B.A. Art Standing Committee, Society for the Protection of Ancient Buildings, Society of Antiquaries, Surrey Archæological Society, Civic Arts Association, Town-Planning Institute, National Trust, Commons and Footpaths Preservation Society, London Survey Committee, Governors of the Whitgift Hospital, Whitgift Hospital Preservation Committee, Whitgift Foundation, and the Whitgift Hospital Anti-Demolition Committee.

## William Blay's Staff Dinner

The London and Dartford office staffs of Messrs. William F. Blay, Ltd., builders and contractors, were the guests of the directors at a dinner held at the Royal Adelaide Rooms, Strand, the company—a large one—including several members of the architectural profession.

Mr. Wm. F. Blay occupied the chair, and in proposing the toast of the evening, coupled with it the names of four gentlemen, who, he said, were now in complete control of the business and spent their whole time in furthering the interests of the firm. He referred in the first place to Mr. H. S. Trehearne, the governing director. "He has been connected in business with me," Mr. Blay proceeded, "for many years, and in all that long period—in trying and worrying times as well as good times—we have never had a mis-word. The staffs will agree with me that in Mr. Trehearne they have a governing director who is generous and fair in all his dealings. Next I want to mention the name of one who is responsible for the financial position of the firm—Mr. R. Baker Smith—who has been for the past five years in charge of the Dartford Branch." After referring to Mr. Smith's constant attention to the business and his loyalty, the chairman said that Mr. Paine, another director, had a wonderful practical knowledge of the trade, so that when he gave instructions for a thing to be done in any department, he knew exactly how it should be done. Such ability in the building trade was a very great asset. The other director was Mr. Dyer, and the only thing Mr. Blay had to say against him was that he worked too hard, and that he should have some one to assist him. Together, these directors had maintained the best traditions of the firm. They had endeavoured to treat everyone fairly, and from such a policy as theirs success must ensue.

Among the staffs his circle of friends was much more extensive. The position held by the firm to-day was due largely to their loyalty to the heads of the concern. The very best intentions of the directors would be useless and of no avail unless properly interpreted, as they were, by the staffs. To Mr. Cooper (London office), Mr. Pearce (Dartford, secretary to the company), Mr. Kent and Mr. Fox (surveyors), and all the other members Mr. Blay extended a very hearty welcome as guests, with thanks for their loyalty.

The toast was enthusiastically pledged. Speeches were also made by Mr. Trehearne, Mr. Smith, Mr. W. E. Cooper and Mr. E. L. Haynes.

## Hyde Park Dance Club Anniversary

In March the Hyde Park Dance Club will celebrate its fourth anniversary by a combined charities bazaar, a dinner, and dances. The combined charities bazaar will be held at the Hyde Park Hotel on Tuesday and Wednesday, March 6 and 7 (2s. 6d. on Tuesday and 2s. on Wednesday): the Dîner Dansant on Thursday, March 8, 8 p.m. to 3 a.m. (dinner and dance, members 15s. 6d.; guests, £1 1s.; dance only, usual club prices, 7s. 6d. and 12s. 6d.): and Thé Dansant on Saturday, March 10, 4 p.m. to 6.30 (members, 3s.; guests, 5s.). Corelli Windeatt's orchestra will play at all the functions. Tickets may be obtained from Mr. E. R. B. Graham, the hon. secretary, 222 Strand, W.C.2. Telephone: 7572.

## Chubb's Press Luncheon

A large number of newspaper representatives was sumptuously entertained by Messrs. Chubb recently, when a luncheon to the Press was given at the Victoria Hotel.

Sir George Hayter Chubb, Bt., J.P., who was in the chair, welcomed the guests, and explained that they were about to show a film illustrating the process of safe manufacture. Chubb's, he said, considered themselves a preventive institution designed to rid the world of burglary. They had perfected a new metal which successfully resisted the oxy-acetylene blow-pipe.

Lord Marshall, on behalf of the visitors, thanked Sir George for his hospitality, and remarked that the firm had always been noted, among other things, for the attention paid to the welfare of its workpeople. An excellent film was then shown. One was impressed by the meticulous accuracy exercised in every stage of manufacture as much as by the apparently invincible solidity of the firm's products. Enormous strength, combined with utmost delicacy of adjustment, appear to be the outstanding features of the security appliances whose evolution from molten masses of metal was graphically displayed.

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# The Week's News

### New Public Baths for Greenwich.

Greenwich Council are to erect baths ad washhouses at a cost of £50,000.

### A Wolstanton Architect's Estate.

Mr. A. R. Wood, of Wolstanton, taffordshire, architect, left £33,119.

### New Building Guild Works.

New works have been opened at Acton y the recently formed Guild Housing, td.

### Nottingham Housing.

Forty-four additional houses are to be ected by the Nottingham City Council t a cost of £14,871.

### New Infirmary for Cardiff.

The Cardiff Board of Guardians are to ect a new infirmary at a cost of nearly 250,000.

### The Old G.P.O. Site Sold.

Negotiations have been completed r the sale of the vacant General Post ffice site in St. Martins-le-Grand.

### The Restoration of a York Church.

St. Helen's Church, York, has been estored under the superintendence of r. Geo. Benson, A.R.I.B.A., of York.

### Extension of "Barts." College.

New laboratories, lecture rooms, etc., e to be added to the Medical College of t. Bartholomew's Hospital, London.

### Westminster Hall.

It is possible that royalty may perform e re-opening ceremony of Westminster all. Ten years have been spent in estoring the roof, at a cost of £120,000.

### Nurses' Home for Wakefield.

A nurses' home is to be built at Wakeeld in memory of the men of the town ho lost their lives in the war. Mr. V. Harold Watson is the architect.

### More Houses for Darlaston.

The Urban District Council has reeived the sanction of the Ministry of ealth to a loan of £6,760 for the erecon of houses.

### Izaak Walton's Cottage.

The cottage at Shallowford, near Stafrd, where Izaak Walton lived, is to be ansformed into a memorial to the uthor of "The Compleat Angler."

### New Canal Bridge for Nelson.

Nelson Town Council has decided to ect a new bridge across the Leeds and iverpool Canal in Carr Road at a cost £3,937.

### The Late Mr. J. R. Naylor.

We regret to record the death of Mr. Reginald Naylor, of Derby, architect. uch architectural work, including the estoration of churches, was carried out his designs.

### The Condition of Escrick Church.

The church of St. Helen's, which was burnt down recently, is being examined by Mr. J. Bilson, of Hull, architect. If the damage to the old church is too great a new one may be built.

### Hampton Court Repairs.

The Great Hall at Hampton Court Palace, built by Henry VIII, is undergoing extensive repairs, principally to the timber roof, which has shown signs of decay owing to the ravages of insects.

### Housing at Radcliffe.

The Radcliffe Urban District Council has received the sanction of the Ministry of Health to a loan of £1,800 for the purchase of a site at Black Lane, near Ainsworth, for housing purposes.

### Manchester's Cenotaph.

His Majesty having raised no objection, Manchester City Council have decided to remove the Albert Memorial, erected to the memory of the late Prince Consort, which stands in front of the Town Hall, to make room for a war cenotaph.

### The Scottish National War Memorial.

Revised plans for the Scottish National War Memorial have been prepared by Sir Robert Lorimer, A.R.A., F.R.I.B.A.

### The Architectural Association.

Owing to the R.I.B.A. Wren Bi-centenary Celebrations having been arranged for February 26, the A.A. general meeting, when Mr. Gilbert Frankau was to have given an address on "Architecture and Literature," to be held on that evening has been postponed until March 5.

### Architectural Partnership.

Mr. W. Ravenscroft, F.S.A., F.R.I.B.A., formerly of Reading, and for several years of Milford-on-Sea, Hants, has been joined in practice by his pupil and assistant, Mr. Cecil Rooke, and the firm will now work under the name of Ravenscroft and Rooke, architects, Milford-on-Sea, Hants.

### Whitgift Hospital, Croydon.

Colonel Ashley, M.P., Parliamentary Secretary of the Ministry of Transport, has consented to receive to-day a deputation from the societies and committees interested in the preservation of the Whitgift Hospital. The deputation will be introduced by the Archbishop of Canterbury, and Sir Aston Webb, P.R.A., and others will speak on behalf of the deputation.

### The Royal Scottish Academy.

At a general meeting of members of the Royal Scottish Academy in Edinburgh the following were elected to fill four vacancies, the first three as painter academicians: Henry Lintott, St. Bernard Crescent, Edinburgh; John Duncan, St. Bernard Crescent, Edinburgh; George Pirie, Wardend, Torrance, near Glasgow; Percy Portsmouth, sculptor, George Square, Edinburgh.

### Proposed Embankment for Montevideo.

The municipal engineer has submitted to the municipal authorities at Montevideo a scheme for the construction of a new embankment, from Calle 25 de Agosto to join up with the existing embankment at the foot of Calle Jackson. Opportunity would be taken to widen, improve, and regularize some of the poorer streets in the south of the city, while it is also proposed to open a new avenue, thirty metres wide, running from north to south, from the site of the new municipal palace to the embankment.

### British Empire Exhibition.

It is the intention of the British Empire Exhibition authorities that the United Kingdom exhibits section, of which Sir Lawrence Weaver is director, shall be fully representative of every branch of industry in the kingdom. Fifty-four technical committees have been set up—some of these with sub-committees for special work—and every firm in every trade is being invited by the particular trade committee either to take space of its own in the exhibition or to join in any collective exhibit that may be organized by its own trade association.

### The R.A. Exhibition.

Following are the dates for the reception of architectural drawings, etc., for the summer exhibition of the Royal Academy: March 29—water-colours, pastels, miniatures, black-and-white drawings, engravings, and architectural drawings; March 31 and April 3—oil paintings; April 4—sculpture. The hours of reception are from 8 a.m. to 10 p.m. (except March 21, when the hours are from 8 a.m. to 2 p.m.). Labels and forms may be obtained, during March only, from the secretary, Burlington House, W.1.

### The Architecture Club Exhibition.

A "Twenty Years of British Architecture" exhibition is to be held at Grosvenor House (kindly lent by the Duke of Westminster) from March 6 to 24 inclusive. The exhibits will include photographs and models of executed works, models showing the development of the British house from the earliest times to the present day, and views of buildings projected by lantern slides. The exhibition is not confined to members of the club. Selected works by other architects submitted by invitation will be included.

Lectures have been arranged on the following dates. Time of lectures 5 p.m. :—

Thursday, March 8, "Historical Study and Modern Design in Architecture." By Walter H. Godfrey, F.S.A.

Tuesday, March 13, "Architecture and Literature." By Gilbert Frankau.

Thursday, March 15, "Architecture and the Theatre." By Nigel Playfair.

Tuesday, March 20, "Fashion and Style in Domestic Architecture." By Sir Lawrence Weaver, K.B.E.

Thursday, March 22, "Is Architecture the Mother of the Arts?" By Prof. W. Rothenstein.

Admission to exhibition and lectures 1s. 3d., tax included.

## An Associated Company's Dinner

The associated companies of Stanley Jones & Co., Ltd., and the Brilliant Sign Co. (1907), Ltd., held their annual staff dinner at the Restaurant Frascati on February 9, when the heads of departments and office chiefs, the town and country representatives, and the branch managers met under the presidency of the governing director, Mr. F. G. Lucas, who was supported by his colleagues and co-directors, Mr. W. D. Lambert and Mr. A. H. Trangmar.

The chairman, in the course of an address, said that 1922 was a record year for the company. As far as the Brilliant Sign section was concerned, the turnover was many thousands of pounds in excess of 1920, the previous best year. Both companies had started this year with a very big excess of orders over January 1922. In fact, the shopfitting section were responsible for as many orders in January 1923 as they were for the whole of January, February, and March, 1922. Out of a total of over 8,000 orders taken during the year in the sign section alone, Mr. C. N. Woodbridge was responsible for nearly 500 new orders. The turnover of the sundries department had increased in 1922 beyond the best year the company has ever had by over 75 per cent. Arrangements were being made to further increase this section by a special scheme of advertising. Although the new building and decorating department had started only this year, he had in his pocket a signed order for £2,000 for building and decorating work alone. This order was subsequent to one for over £3,000 for new shopfronts for the same customer.

Mr. Lambert, the work's director, in proposing the toast of "Our Works," referred very fully to the shopfitting section, especially with regard to the increased business that had come to the section since it had been reorganized.

Mr. Trangmar, the company's finance director, impressed upon the branch managers that they had the support of a business with a big bank balance, so that they need not lose nerve in making any suggestions to the directors that would tend to enhance the prestige of the company in their respective territories.

## Coming Events

*Wednesday, February 21.*

Royal Academy.—"The Everyday Crafts." By Henry Wolson.

*Thursday, February 22.*

Birmingham Town-planning Lecture.—"The Acquisition of Land Act." By Francis C. Minshull.

University of London.—"Acoustics." By G. A. Sutherland, M.A.

Institute of Structural Engineers.—"Shear Resistance." By Edward Godfrey, M.Inst.Struc.E.

*Friday, February 23.*

Royal Technical College Architectural Craftsmen's Society.—"The Reparation of Provands Lordship." By J. Jeffrey Waddell, I.A., F.S.A. (Scot.).

Architectural Association.—Members' Smoking Concert (Dinner 7), 8 p.m.

*Saturday, February 24.*

R.I.B.A. Visit to City Churches.

*Monday, February 26.*

Wren Bicentenary Celebrations: R.I.B.A. Dinner.

*Tuesday, February 27.*

R.I.B.A. Visit to Cambridge.

## London Master Builders' Sports Association

*League Table up to and including February 17th.*

| | Plyd. | Wn. | Lst. | Drn. | Goals F. | Goals A. | Pts. |
|---|---|---|---|---|---|---|---|
| Perrycobow .. | 8 | 7 | 1 | 0 | 26 | 10 | 14 |
| Minter .. | 6 | 6 | 0 | 0 | 20 | 6 | 12 |
| Trocoll .. | 7 | 2 | 5 | 0 | 7 | 18 | 4 |
| Holancube .. | 4 | 2 | 2 | 0 | 5 | 8 | 4 |
| Higadillo .. | 5 | 1 | 4 | 0 | 6 | 12 | 2 |
| Holloway .. | 6 | 0 | 6 | 0 | 4 | 16 | 0 |

Last Saturday: Minter, 4; Perrycobow, 5; Holancube 0, Trocoll 0.

## Private Enterprise and Housing

A deputation from the National Federation of House Builders has laid before the Ministry of Health some interesting suggestions for the assistance of private enterprise in the erection of houses. It is suggested for small working-class houses that the Government should grant a subsidy of £150 in cash to the owner, whether a local authority or a private person, of all new houses of approved type erected during a specified period. It is suggested as an alternative that the subsidy could be spread over a period of years, or that for houses built by private enterprise the grant could be given by exemption from the local rates for that period. To avoid unfairly penalizing the ratepayers an agreed sum per annum could be paid by the State to local authorities in respect of all exempted houses during that period. For houses for occupying owners who can find some small amount of capital it is proposed that the mortgagee, whether building society or bank, should advance 90 per cent. of the value of a house to an occupying owner on the usual repayment terms adopted by building societies, and that the Government should guarantee the mortgagee against loss to the extent of the amount advanced in excess of the usual proportion of about 75 per cent., the State guarantee to expire when the mortgage is reduced to a certain agreed amount. It is also proposed that persons should be further encouraged to buy houses for their own occupation by extending the exemption from local rates to all new houses not exceeding £50 in assessable value for a period of ten years from the date of completion. These proposals are regarded as most vital and pressing by the Federation, and they have been favourably received by the Ministry. The other matters considered by the Federation to seriously affect the building of houses are outlined in their suggested national housing programme, which was published in a recent issue.

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# The Week's News

### *Hornsey Isolation Hospital.*

Extensions to the Hornsey Isolation Hospital are under consideration.

### *Housing at Blackpool.*

Plans for 293 houses have been passed by the Blackpool Corporation.

### *Greenwich Housing.*

Greenwich Council has built 232 houses, and 80 more are being erected.

### *A New Church at Broadstairs.*

£2,231 has been subscribed towards the building completion fund of Holy Trinity Church, Broadstairs.

### *Architect Wanted at Haslingden.*

The Board of Guardians have decided to appoint a full-time architect for a period of two or three years.

### *Hampton Isolation Hospital.*

The plans of the proposed additions to the isolation hospital have been approved by the Ministry of Health.

### *London's Big Demolition Scheme.*

The London County Council are considering the demolition of the Prusom Street area of Wapping at a cost of £70,000.

### *Super-Cinema for Kensington.*

A new super-cinema, to cost £100,000, is to be erected in Edwardes Square, Kensington. Accommodation will be provided for 2,600 persons.

### *Bath Builder Wins a Motor Cycle.*

The past president of the Bath Master Builders' Association, Mr. E. W. Wooster, has won a motor bicycle and side-car in the Motor Club's competition.

### *New Buildings for Sutton-on-Sea.*

A new hotel, and a combined cinema, dance hall, and theatre are proposed to be erected at Sutton-on-Sea from the designs of Messrs. Calvert and Jessop, of Nottingham, architects.

### *York Minster Window Restoration.*

Princess Mary Viscountess Lascelles has intimated her approval of the scheme for the restoration of the "Five Sisters" window in York Minster by the women of Yorkshire in memory of all women who laid down their lives in the war. It will cost £3,000.

### *The Building Crisis.*

The executives of the unions affiliated to the National Federation of Building Trade Operatives have decided to submit the employers' proposals to a ballot vote of the members. The council, representing employers and operatives, will meet again on March 20 to consider the result of the ballot. It is agreed that existing wages, hours, and general working conditions shall remain in force until March 31.

### *North Wales War Memorial.*

Satisfactory progress is being made with the erection of the North Wales Heroes War Memorial. It takes the form of a gateway to the University College of North Wales, Bangor, at a cost of £15,000, and forms part of a larger scheme, which is to cost £120,000, and includes the erection of science buildings in close proximity to the college. It is expected the Prince of Wales will open the War Memorial proper in October.

### *Sir R. Blomfield's Son to Marry.*

A marriage has been arranged, and will take place in June, between Austin, second son of Sir Reginald Blomfield, R.A., Litt.D., and Lady Blomfield, of 54 Frognal, Hampstead, and Point Hill, Rye, Sussex, and Ivy Adeline Margaret, only daughter of Mr. and Mrs. T. R. Colquhoun Dill, of 1 Trevor Square, Knightsbridge.

### *A Mosaic Panel for Parliament.*

A mosaic panel of St. Andrew is now being put together in the central lobby of the Houses of Parliament. This will give Scotland the same pictorial representation as St. George for England and St. David for Wales. The fourth panel over the entrance from Westminster Hall is still blank as the builders left it.

### *St. Paul's Bridge.*

The London County Council have appointed representatives to sit on a subcommittee which has been appointed by the Ministry of Transport to consider the St. Paul's Bridge and street improvements scheme. Some members wished to commit the representatives to a scheme for a bridge at Charing Cross, but the Council decided to give them a free hand.

### *Victoria and Albert Museum Concerts.*

The series of concerts given under the auspices of the League of Arts in the Museum lecture theatre have proved so successful, and have been so well attended, that they will be continued during March and April. The concerts begin at 3 p.m. and last about an hour. Admission is free, but programmes are on sale at the entrance to the theatre, and the league hope that they will be purchased in order that part of the expenses incurred by them may be defrayed.

### *More Houses for Birmingham.*

Messrs. H. M. Grant, Ltd., of Kings Norton, are about to erect 110 houses in Brandwood End Lane, Kings Heath. These will be the first built by private enterprise in Birmingham since the war. Each house will contain three downstairs rooms, a small square hall, three bedrooms, a bath, lavatory, upstairs w.c., and will have a motor-house. If intending purchasers will pay down £50 the firm will advance the remainder on mortgage. There will be large gardens back and front.

### *Prudhoe Hall Colony Extensions.*

The first instalment of the extensions to the Prudhoe Hall Colony, near Durham, has been officially opened. When completed the colony will embrace three villages—each to accommodate about 700 persons—devoted to men, women, and children respectively. Messrs. J. H. Morton and J. G. Burrell, of Durham, Newcastle-upon-Tyne, and South Shields, are the architects. The general contractors for the work are Messrs. Harold Arnold and Son, Ltd., of Doncaster, and the engineering works on the estate are being carried out under the supervision of Messrs. D. Balfour and Son, of Newcastle, the contractors for the heating and steam installation being the Brightside Foundry and Engineering Co., Ltd., of Newcastle-upon-Tyne.

### *Strand-on-the-Green Wall.*

The General Purposes Committee of the Chiswick District Council have decided to proceed with the river embankment scheme at Strand-on-the-Green. The scheme has aroused opposition on the ground that it would spoil the charm of this relic of the early eighteenth century. As a concession to opponents the committee has decided to construct a vertical embankment of rubble instead of plain cement, and build a retaining wall on the pathway with a serrated top, instead of erecting iron railings.

### *British Architecture in America.*

The Exhibition of Contemporary British Architecture, which was sent over to New York on the invitation of the Architectural League of that city, was opened on January 26. The drawings and photographs sent over made so great an impression on their arrival that the arrangements for the exhibition were altered, and a court was constructed in what is known as the Vanderbilt Gallery of the Fine Arts Building and given up entirely to the English work. The Press comments upon the exhibition are of a very appreciative nature.

### *Woolworth Building for Liverpool.*

The preliminary work is about to begin in connection with the construction of the new Woolworth building in Church Street, Liverpool. The entire scheme will have a frontage to Church Street of 240 ft., and will rise 85 ft. above the pavement level. At present it is proposed to commence only the centre portion, having a frontage of 100 ft. The building will be steel-constructed, and will contain over 700 tons of steel. The contract for this has been placed with Messrs. Banister, Walton & Co., Ltd., of Trafford Park, steel constructional engineers, with whom are associated Messrs. Gay and Hunter, of Liverpool.

### *Housing Progress in Scotland.*

The following figures show the progress that has been made in State-aided housing schemes in Scotland to January 31, 1923: permanent houses completed, 14,548; temporary houses completed, 665; reconstructed houses completed, 89; houses completed under the private subsidy scheme, 2,234; total, 17,536. There are 5,967 houses at present under construction in connection with housing schemes carried out by local authorities and public utility societies. The total amount paid by the Scottish Board of Health in respect of the 2,234 houses completed under the private subsidy schemes is £540,120.

### *The Devastated Regions of France.*

In the devastated regions of France, according to M. A. Algoud, the French Secretary to the Reparation Commission, the number of buildings reconstructed on January 1 last was 553,000, as against 355,000 on January 1, 1922, showing an increase of 198,000 units (741,883 were destroyed). Only 171 public buildings have been rebuilt out of 6,575 destroyed, but 4,400 have been repaired provisionally—or about two-thirds of the total—3,674 definitely—or more than one-half of the result to be attained. On January 1, 1922, only seventy-two

(*Continued on page* xlvi.)

THE EMPIRE STADIUM.
BRITISH EMPIRE EXHIBITION (1924), WEMBLEY.

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public buildings had been completely reconstructed, and 2,300 definitely repaired. Up to January 1, 1923, 2,160 co-operative societies officially authorized, covering 2,602 communes, and grouping 152,773 adherents, had received from the State advances amounting to 2,253,395,417 francs for the year 1922.

### *The Captain Scott Memorial.*

As the result of the decision of the Captain Scott Memorial Fund Committee, held at the Mansion House, the piece of sculpture which has been selected to commemorate the heroic deeds of the great Antarctic explorer and his gallant comrades will be erected at Devonport on a magnificent site adjoining Admiralty House, and overlooking the Hamoaze. The work of erection will be proceeded with at an early date. The memorial takes the form of a granite pylon, surmounted by a bronze group, representing "Courage" sustained by "Patriotism" spurning "Fear, Despair, and Death," the first figure being crowned by "Immortality." The front of the pylon bears the names of the four heroes with their portraits in bronze medallions. At the back of the monument is a trophy consisting of a pair of snow shoes, a replica of the cross erected on "Observation Hill," and a wreath. At the foot are the memorable words of Captain Scott: "Had we lived, I should have had a tale to tell of hardihood, endurance, and courage of my companions which would have stirred the heart of every Englishman." There are other decorative features, and the monument, which is square, stands 37 ft. high. The sculpture is from the designs of the late Mr. A. H. Hodge.

## The Architecture Club Exhibition

The first exhibition of the Architecture Club will be opened by the Earl of Crawford on March 5. The exhibition will be held in Grosvenor House (kindly lent by the Duke of Westminster), where the spaciousness of the galleries has enabled the club to assemble what it is hoped will be considered the finest and most representative collection of architectural exhibits ever held in this country. The exhibition will illustrate "Twenty Years of British Architecture." It will include hundreds of large photographs, most of them taken for this exhibition, a series of models of contemporary buildings with an historical series of models of houses reaching back to mediæval times. Some of these models have been found in country houses where their existence had been almost forgotten. The exhibits cover all departments of modern architecture, and one of the sections will be of recent housing and town-planning schemes, including an important section from the Ministry of Agriculture. The exhibitors will include Sir Edwin Lutyens, R.A., Mr. Herbert Baker, A.R.A., Mr. Gilbert Scott, R.A., Sir John Burnet, A.R.A., Mr. Ralph Knott, Mr. Arthur Davis, Professor Adshead, and nearly all the most notable architects, particularly of the younger school whose life-work comes within the period.

During the three weeks of the exhibition there will be daily demonstrations, with lantern and screen, illustrating the architectural tendencies of the period. A series of afternoon lectures have been arranged at the exhibition, the lecturers including Sir Lawrence Weaver on "Fashion and Styles in Domestic Architecture," Mr. Nigel Playfair on "Architecture and the Theatre," and Professor W. Rothenstein on "Is Architecture the Mother of the Arts?"

The next quarterly dinner of the Architecture Club will be held on March 22 in the galleries of Grosvenor House. The speakers will include Mr. H. A. L. Fisher, M.P., Lord Charnwood, Sir Reginald Blomfield, R.A., and Sir Lawrence Weaver.

## Electric Light and Eyesight

*By an Engineering Correspondent.*

A considerable amount of attention has been devoted recently in the daily Press to a paper read by Mr. A. E. Bawtree before the Royal Photographic Society on February 13, suggesting various prejudicial effects of electric light on eyesight. The author was inclined to suggest a return to the milder illuminants of the past, but few people will seriously accept the idea that we should abandon the efficient lamps of the present. The chief point, in dealing with electric lamps, is undoubtedly the use of proper methods of screening. Discussions before the Illuminating Engineering Society have contained repeated references to the evils of "glare."

So far one may give support to Mr. Bawtree's views. But there is no evidence in support of the alarmist statements, quoted in the daily Press, to the effect that the eyesight of the nation is being ruined by the use of modern illuminants. The author referred to the presence of ultra-violet light as a danger. But it is well known that the proportion of such radiation in the light from electric incandescent lamps is minute, and considerably less than that in daylight, to which our eyes are accustomed.

Photographers are well aware of the greater actinic effect of daylight as compared with artificial illuminants, and the audience gave no support to Mr. Bawtree's views on this point. Moreover, is the presence of ultra-violet light necessarily a danger? One of the chief duties of architects, in designing buildings, is to make adequate provision for the admission of daylight. It is a familiar saying that "where the sun does not enter the doctor comes." Rooms from which the sun's rays are excluded become breeding-places for germs, and the ultra-violet rays in sunlight are now known to have a valuable germicidal action. In addition, recent researches have shown that sunlight has a most valuable influence on health, and that the presence of the ultra-violet rays has a direct relation with the constitution of the blood.

We may safely conclude that while excess of ultra-violet light may be injurious to eyesight—it is probable the cause of snow-blindness and the "electrical ophthalmia" following severe exposure to unshaded arcs, etc.—a moderate proportion of this form of radiation, not exceeding that in daylight, may be of actual benefit.

There is even less evidence in support of other alleged causes of danger vaguely referred to by the lecturer as "X-rays, electrionic, and undiscovered emanations." Members of the Illuminating Engineering Society who were present at the discussion urged that we should be grateful for the abundance of artificial light available and endeavour to use it wisely, without being disturbed by the fear of evils as yet undiscovered.

To professional men, such as engineers and architects, who are constantly dealing with the lighting of buildings, it is inconvenient to have the public mind disturbed by dissemination of these alarmist statements. It is characteristic that one paper, after having given publicity to these scare items, publishes an account of an alleged discovery by a young scientist that completely eliminates the ultra-violet trouble! As, however, the invention so-called consists merely of painting a blue varnish on the lamp-bulb (an obviously unsuitable means of checking the passage of ultra-violet), and as it is further stated that the light from lamps so treated is rendered identical with daylight (which, as stated above, contains more ultra-violet than electric incandescent lamps), one need not take this discovery very seriously.

## Coming Events

*Wednesday, February 28.*

St. Michael's, Cornhill.—"Address on Wren." By Sir Reginald Blomfield.

Central School of Arts and Crafts.—"Wren and his Works." By Sir Banister Fletcher, F.R.I.B.A. 6 o'clock.

Northampton Society of Architects.—"Address on the Life of Sir Christopher Wren." By J. A. Gotch, F.R.I.B.A., F.S.A. 8 p.m.

Institution of Civil Engineers.—"Recent Developments in Wireless Telephony." By Captain H. Riall Sankey, M.Inst.C.E. 6 p.m.

*Thursday, March 1.*

Glasgow Chapter of the Incorporation of Architects in Scotland.—"American Architecture." By Robert Atkinson, F.R.I.B.A.

Birmingham Town Planning Lecture. By F. C. Minshull, LL.M.

University of London.—"The Public Buildings of Sir Christopher Wren." By Professor A. E. Richardson. 5.30 p.m.

R.I.B.A.—"Architecture and the Countryside" (A Layman's Questions). By Sir Ryland Adkins, K.C., M.P., F.S.A. 5 p.m.

Institution of Mechanical Engineers.—"Inspection of Engineering Material." By R. D. Summerfield.

A. & S.A.P.U.—Dance at Social Hall, West Croydon.

*Friday, March 2.*

Art Workers' Guild.—"Early Scroll Ornament and its Developments." By Arthur H. Smith, M.A., F.S.A., Keeper of Greek and Roman Antiquities, British Museum.

*Saturday, March 3.*

A.A. Visit to the Bank of England.

A. & S.A.P.U. Visit to New County Hall.

*Monday, March 5.*

Architectural Association.—"Architecture and Literature." By Gilbert Frankau.

*Tuesday, March 6.*

Liverpool Architectural Society.—Dinner in Commemoration of the Seventy-fifth Anniversary of the formation of the Society. Midland Adelphi Hotel.

# New Inventions

*Latest Patent Applications.*

427.—British Reinforced Concrete Engineering Co., Ltd.—Metal reinforcements for concrete road foundations, etc. February 15.

373.—Brown and Tawse, Ltd.—Reinforcements for concrete construction. February 14.

695.—Jones, W. K.—Concrete floors. February 17.

288.—Jones and Laughlin Steel Corporation.—Metallic structural elements. February 13.

453.—Serjeant, J. P.—Ferro-concrete slab. February 15.

390.—Smith, E. Cozens.—Concrete, etc., walls. February 14.

558.—Stewart, A. W.—Ventilation system. February 16.

423.—Stokes, J.—Devices for securing roof slates, etc. February 15.

651.—Whiteley, H. — Lettering of stone, marble, etc., memorials. February 17.

898.—Ayles, W. J.—Roof tiles. February 20.

336.—Contractors Machinery Co., Ltd.—Hoists for building. February 23.

745.—Kaye, S.—Machines for erecting walls of bricks, etc. February 19.

266.—Low Laithes Colliery Co., Ltd., and Peace, H.—Manufacture of concrete blocks, etc. February 23.

217.—Major & Co., Ltd.—Reinforced concrete road foundations. February 22.

244.—Marshall, T.—Combined air and water-heaters for buildings. February 22.

*Specifications Published.*

481.—Tozer, F. M.—Horizontal slating and the like.

457.—Upton, C. J.—Construction of double or hollow concrete walls or the like.

549.—Shadbolt, R.—Roofing and walling tile.

554.—Lancashire, A. E.—Buildings or structures.

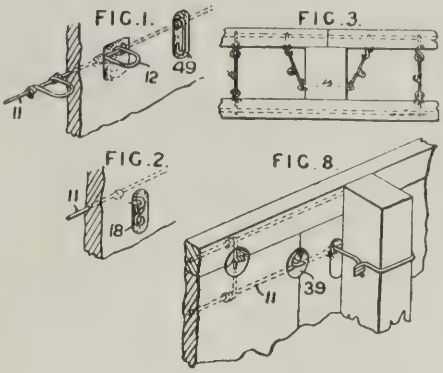
559.—Miki, Y.—Heat-insulating material.

359.—Parkin, L.—Building blocks.

393.—Littleton, H. S.—Instruments for use in ascertaining the camber of roadways, and for analogous purposes, where inclinations or gradients are required to be ascertained.

*Abstracts Published.*

91.—Building slabs, walls.—G. F. Dampney, Lynista, Turramurra, near Sydney, Australia.—Concrete building slabs are provided with pivoted bonding loops or tags 12, 49, 18, Figs. 1 and 2, which are housed in cavities to facilitate packing during transport and are opened out and connected to coupling-links or ties during erection. The loops or tags swing on reinforcing bars 11, the ends of which may project into recesses 39, Fig. 8, and be twisted together therein. Single slabs may be tied to studs or to each other at the corner of a wall, or double slab walls may be formed as shown in Fig. 3.



191474.—Paving, roofing, etc., compositions.—Cresson, L., Low Hill, Tanjong Pagar, Singapore, Straits Settlements. — Mineral or fibrous materials, such as sand, clay, cement, asphalt, earth, stone, granite, slag, leather, wood, sawdust, or metal filings, are mixed with rubber latex or plastic coagulum, to which sulphur, zinc oxide, dyes, and/or petroleum residues may be added. The mixture is moulded under pressure into blocks, slabs, etc., which may be partly vulcanized at this stage, a facing layer of latex, coagulum, or rubber mixture is applied to the upper surface, and the whole is vulcanized together. Examples of compositions are (1) 1 litre of latex, 1,500 grms. sawdust, 300 grms. litharge, 150 grms. sulphur, 100 grms. tar, and 1 litre of water; (2) 1 litre of latex, 1,000 grms. baked clay, 1,000 grms. sand, 1,000 grms. granite, 500 grms. kaolin, 200 grms. asphalt, 200 grms. sulphur, and 100 grms. litharge. The products may be used for paving, flooring, roofing, and like purposes.

The above particulars are specially prepared by Messrs. Rayner & Co., registered patent agents, of 5 Chancery Lane, London, W.C.2, from whom readers of the Journal may obtain all information free relating to patents, trade marks, and designs. Messrs. Rayner & Co. will obtain printed copies of the published specifications and forward on post free for the price of 1/6 each.

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# Westminster Bank, Ltd.

The resolution passed at an extraordinary general meeting of the London County Westminster and Parr's Bank, Ltd., held on February 1, changing the name of the company to "Westminster Bank, Ltd.," was confirmed as a special resolution at an extraordinary general meeting held on February 16. The change took effect from March 1. In conformity with this action of its parent institution the London County Westminster and Parr's Foreign Bank Limited will change its name to Westminster Foreign Bank Limited as soon as the necessary formalities have been carried through.

# Trade and Craft

*Change of Address.*

Messrs. Johnson's Reinforced Concrete Engineering Co., Ltd., constructional engineers, have removed to larger premises at 23 Leadenhall Street, E.C.3. Telephone Nos.: Avenue 1680 and 1681. Telegraphic Address: Crossways Fenn, London.

*Messrs. A. & F. Manuelle, Ltd.*

Mr. John F. Parkes, who has been connected with Messrs. A. & F. Manuelle, Ltd., granite quarry owners, marble and stone merchants, of 4 and 6 Throgmorton Avenue, London, E.C.2, and the previous company, for the past thirty years, has been appointed managing director of the company (in place of the late Mr. J. Leigh).

*The Protection of Buildings from Fire.*

The services of Major Arthur Crook, O.B.E., until recently chief inspector of the fire services of the Army and Royal Air Force, are now placed at the disposal of architects requiring expert co-operation in fire protection matters by the Pyrene Company, Ltd. It is the object of this company through its fire engineers to co-operate with architects in devising schemes of fire protection capable of dealing with the specific risk of any building and its contents. Applications for this service should be addressed to the company's head office, 9 Grosvenor Gardens, London, S.W.1.

*The Duke of York's Interest in Building.*

The Duke of York, president of the Industrial Welfare Society, has paid a visit to the British Fibrocement Works, Ltd., at Erith, Kent, manufacturers of asbestos-cement slates and corrugated sheets, and other asbestos products. His Royal Highness, who was received by the directors, Messrs. Fred Beadle, J.P., and G. H. Buxton, made a detailed inspection of the various departments. In some of the shops he worked parts of the machinery used in the manufacture of "Fibrent" materials. Considerable interest was taken by the Duke in many uses to which "Fibrent" asbestos-cement can be put. He was shown the beginning of the process of manufacture from a rock of asbestos to the completed articles. The Duke talked to every worker with whom he came in contact, and before completing his tour of the works, he inspected the summer swimming baths, the tennis court, and other means of recreation provided for the staff. He expressed considerable satisfaction that so much appeared to be done for the welfare of the workpeople.

*The "Relay" Automatic Telephone Public Exchange.*

An interesting souvenir booklet has been issued by the "Relay" Automatic Telephone Company, Ltd. of Marconi House, Strand, W.C.2, in connection with the "Relay" automatic telephone exchange, which the company have manufactured and installed at Fleetwood, Lancs, for the Post Office. Designed to meet the specifications of the engineer-in-chief of the Post Office, it is the first completely automatic exchange of its size to be opened. During the manufacture each new requirement for automatic exchanges standardized by the Post Office and included in their latest automatic exchange specifications was added to the plant so that when the exchange was completed it embodied every improvement to date. The booklet is profusely illustrated, and contains much interesting and useful information. The opening of the Fleetwood Exchange marks an era in the development of automatic telephony in this country. The system is also in use on a large number of important banks and commercial and other buildings throughout the United Kingdom, on ships, and installations have been fitted, or are in course of erection, for public and other services in some of the colonies and in many foreign countries.

### *Carron Appliances at Birmingham.*

At the British Industries Fair, Birmingham, the Carron Company, of Carron, Stirlingshire, ironfounders, are exhibiting appliances mainly of a domestic nature. They include "The Carron Range" with its inner glass oven door—through which the progress of cooking can be seen—pedal door opener, hot closet, cast-iron flues, etc. "The Interoven"—two stoves in one—is also on view. A number of firegrates are on view, several of which are shown in the attractive new finish—rustless steel. Although fitted with the present-day form of fire, the designs of these grates embody reproductions of the wood carvings executed for the company by eminent craftsmen of the eighteenth century. Fireplace suites, complete with appropriate surrounds suitable for dining, drawing, or morning room, are shown together with a number of mantel registers including the "Glen" series. A prominent exhibit is the company's No. 309 electric cooker—capable of doing all the cooking for a family of five to six persons. The housewife's eye will readily catch the No. 312 table range, in which everything is at a convenient working height. Other cooking appliances include grillers, breakfast cookers, hotplates, etc., and boiling rings, both of the open and solid types. The selection of electric heating appliances on view is a varied one, and shows fires in various finishes and styles. Of special interest is the adoption of the old-world form of heating to modern methods in two electric dog grates. It is impossible within the limited space at their disposal to show examples of all Carron appliances, which include in addition to the types shown, cooking apparatus for coal, coke, steam, electricity or oil, and gas cooking and heating appliances.

### *The G.E.C. Research Laboratories.*

A large party of Press representatives was entertained by the General Electric Company last week, when they were given an opportunity of inspecting the new Research Laboratories at Wembley. Admirable organization enabled all the visitors to see everything in comfort, the party being divided into groups, each in charge of a member of the scientific staff.

A tour of the laboratories and workshops occupied the greater part of the morning and gave one an insight into the bewilderingly numerous activities of the G.E.C. Lamp manufacture and every variety of stringent testing, valve development and X-ray screening, electrical laboratory, sub-station, metal and wood workshops, Tungsten wire manufacture—all were seen in process under factory conditions, with the additional advantages of scientific supervision. The buildings themselves will be fully described and illustrated in a later issue of THE ARCHITECTS' JOURNAL.

The chair at luncheon was taken by Mr. C. C. Paterson, director of the laboratories, who, in proposing success to the Press, said that the laboratories had been built on a broad scheme, allowing for future extensions. The laboratory-factory was a new departure, designed to bridge the gulf betwee the two.

Mr. Christopher Wilson and Mr. Palme also spoke.

## Hayward's Staff Dinner

About a hundred members and guest attended the staff dinner, held in London of Messrs. Haywards, Ltd., of Unio Street, Southwark, the building specialit firm. The chairman of the company Mr. W. Extone, presided, and was supported by the directors. The toast o "The King" having been proposed b the chairman, Mr. G. Upton followed wit that of "The Chairman and Directors."

Mr. G. F. Pittar, the managing director, in reply, said that all rejoiced i the presence of the chairman, who ha done so much to create the solid foundations of business methods and the specialities for which the firm were now so wel known. It was also a particular pleasur to have the toast proposed by Mr. Upton as during this last year he had complete fifty years' service with the company.

Mr. Pittar said that no one would fee that business conditions in 1922 had bee all that could be wished, for there ha been many anxieties. Nevertheless, th commercial atmosphere seemed to b improving, consequently Haywards, Ltd. were able to look back upon good progres made during the year. Their Southwar works having become insufficient for th needs of the turnover, they had built th auxiliary works at Enfield, which wer opened in 1921. This year they ha added to them the new departments fo collapsible gates, roof glazing, and architectural metalwork; whilst improvement in organization and plant had also bee carried out. In another direction, a 56 Kingsway, they had established a commodious branch office. It might b taken for granted that no stone would b left unturned to make Haywards' servic the best possible in every way, and t increase the high reputation the compan held for their products.

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There is no more delightful combination than this, and it may be fully and freely enjoyed in the Architectural Reading Room at 29 TOTHILL STREET, WESTMINSTER.

The Room is intended for the leisurely consultation of books, portfolios and periodicals published by the Architectural Press, while numerous building papers and art magazines, both English and foreign, are provided for the use of visitors.

Architects, art-lovers, and all who are interested in constructional matters are cordially invited to make the fullest use of the Reading Room.

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# Parliamentary Notes

[BY OUR SPECIAL REPRESENTATIVE.]

### *Housing.*

Sir Wm. Joynson-Hicks, speaking on behalf of the Minister of Health, mentioned that the Corporation of Birmingham had already started a scheme of 1,000 new houses, which were being built in the faith and hope that the House would pass the new Housing Bill.

At question time Captain Elliot informed Mr. Buchanan that according to the estimates of local authorities submitted in terms of section 1 of the Housing, Town Planning, etc. (Scotland), Act, 1919, the number of houses required was 131,101. Of this number the local authorities themselves contemplated the building of 115,574 houses. Up to the present 15,302 houses had been completed, and 5,982 were in course of construction under schemes of local authorities and public utility societies. In addition, 2,223 houses had been provided under the Private Builders' Subsidy scheme, and plans had been approved for the erection under the Crofters' Subsidy schemes of 131 houses.

### *Business Premises.*

The Prime Minister informed Mr. Hinds that it was not proposed to introduce legislation to give effect to the recommendations of the Departmental Committee on Business Premises.

### *The Small Dwellings Acquisition Act.*

Replying to Mr. Wise, Sir W. Joynson-Hicks said that loans had been sanctioned to enable local authorities to make advances under the Small Dwellings Acquisition Act to the extent of £674,151.

### *Unemployed Building Operatives.*

Sir M. Barlow, the Minister of Labour, informed Mr. T. Thomson that the total number of persons unemployed in the various branches of the building trade on January 22, 1923, the latest date for which figures are available, was as follows:—

| | |
|---|---|
| Carpenters .. .. .. | 15,379 |
| Bricklayers .. .. | 7,640 |
| Masons .. .. .. | 2,186 |
| Slaters .. .. .. | 846 |
| Plasterers .. .. .. | 2,834 |
| Painters .. .. .. | 34,910 |
| Plumbers .. .. .. | 4,574 |
| Labourers .. .. .. | 63,937 |
| All other occupations .. | 19,882 |
| | 152,188 |

Assuming that these workpeople drew the same average per head as unemployed workpeople generally, the weekly amount drawn by them was about £108,500.

### *State-aided Housing.*

Sir W. Joynson-Hicks said that under the State-assisted Housing Schemes 145,771 houses were completed by local authorities and public utility societies up to November 1, 1922. Since that date a further 9,263 were completed by February 1 last, and 20,966 were either under construction or had not been begun. In addition, 39,161 houses had been erected by private builders with the aid of the subsidy; 4,545 houses had been authorized in connection with assisted housing schemes of public utility, and on February 1 last 4,115 had been completed. Approximately half of these houses contained a parlour, living-room, and three or four bedrooms; 362 were flats, and the remainder non-parlour houses with two, three, or four bedrooms.

On February 1, 1923, there were 18,470 men employed on State-assisted Housing Schemes of local authorities under the House and Town-Planning Act of 1919. The maximum number employed on such schemes was in July, 1921, when the total was 149,854.

Between 1910 and 1913 726 houses were built by twelve county boroughs. The average prices were: 1910, £177; 1911, £182; 1912, £166; 1913, £178. The average tender prices of houses under the assisted scheme from 1919 to 1922 were: 1919, £795; 1920, £904; 1921, £766; 1922, £420.

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# The British Empire Exhibition

Messrs. Baker and Mallett, quantity surveyors to the British Empire Exhibition, have prepared the following statement of the approximate amounts of materials used in the construction of the exhibition buildings and stadium:—

| | |
|---|---|
| Cement .. .. .. | 8,250 tons |
| Lime .. .. .. | 20 tons |
| Ballast .. .. .. | 41,775 tons |
| Bricks .. .. .. | 468,000 |
| Ashes .. .. .. | 21,900 tons |
| Coal .. .. .. | 2,600 tons |
| Sand .. .. .. | 6,900 tons |
| Roofing .. .. .. | 7,300 squares |
| Reinforcing steel .. | 1,475 tons |
| Constructional steel .. | 1,760 tons |
| Drain pipes .. .. | 39,000 feet |
| Number of men employed .. | over 2,000 |

This figure of the number of men employed at Wembley is, of course, no indication of the enormous amount of employment provided by the promotion of the exhibition. Orders for many thousands of pounds' worth of engineering and other skilled work have been given to employers in Manchester, Glasgow, Leeds, Birmingham, London, and other parts of the kingdom, while a great number of men who would otherwise have been unemployed have been given work on the great road improvement schemes and the various railway and railway station extensions.

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# Publications Received

"The House We ought to Live in." By John Gloag and Leslie Mansfield, F.R.I.B.A. Price 7s. 6d. net. Duckworth.

"The Daily Mail Bungalow Book." Price 5s. net. Associated Newspapers, Ltd., Carmelite House, London, E.C.4.

"Elements of Lettering." Frederic W. Goudy. Price 25s. net. John Lane, The Bodley Head, Ltd.

"Spon's Architects' and Builders' Pocket Price Book, 1923." Price 5s. net. E. & F. N. Spon, Ltd., 57 Haymarket, S.W.1.

"Bournville Housing: A Description of the Housing Schemes of Cadbury Brothers, Ltd." Price 6d. Publication Department, Bournville Works.

"The Antiques of Athens: Measured and Drawn by James Stuart and N. Revett." Reprinted 1922. Price 16s. John Tiranti & Co., Maple Street, Tottenham Court Road, London, W.1.

# Trade and Craft

### *The "Eco Combination."*

The "Eco Combination" is the subject of a new pamphlet which has just been issued by Messrs. Robert Jenkins & Co., Ltd., of Rotherham. This ingenious combination is made in six sizes, and besides providing facilities for all the cooking with a low consumption of fuel it will also give a constant day and night supply of hot water, and heat the radiators of the other rooms of the house. When desired the cooker can be used as an independent unit without, it is claimed, the loss of heat. The combination is complete, self-contained, and easily fixed, and is suitable for bungalow, flat, villa, or hotel.

### *The British Reinforced Concrete Engineering Co., Ltd.*

Mr. Ainslie Reynolds, M.I.Struct.E., has joined the Roads Department of the British Reinforced Concrete Engineering Co., Ltd., of 4 Iddesleigh House, Caxton Street, Westminster, London, S.W.1. The Leeds branch office of the company has been moved to 5 East Parade, Leeds; at this address Mr. McLean Gibson manages the constructional dept., and Mr. John W. Liversedge the roads dept.

Woodbridge Road, Ipswich, which forms portion of the main London–Yarmouth road, has been reconstructed in concrete reinforced with B.R.C. Fabric, Ref. No. 9, made by the British Reinforced Concrete Engineering Co., Ltd. The work has been carried out under the supervision of Mr. S. Little, engineer and surveyor for the Ipswich County Borough.

The London office of the Company, 4 Iddesleigh House, Caxton Street, S.W.1, has now the following telephone lines: Victoria 7866 for the constructional department, and Victoria 7833 for the roads department.

Mr. G. F. Crawford, late of H.M. Forestry Commission, has joined the roads department of the company, and is to be found at the company's offices at 47 Whiteladies Road, Bristol.

### *The "Durex" Wiring System.*

The new system of wiring for electric light and power installations, called the "Durex," which has just been introduced by Messrs. Simplex Conduits, Ltd., should appeal to all those engineers who have long been seeking a system that is low-priced and easily installed. Designed to incorporate sound mechanical principles it complies in full with the rules of the Institution of Electrical Engineers. The system for which basic patents have been granted has been introduced after a wide experience of all wiring systems in use to-day, and with a full knowledge of their merits and limitations. While the "Simplex" steel conduit system is recognized as an ideal system for almost every class of installation, lead or lead alloy sheathed cables, owing to their comparatively low cost and ease of erection, may be employed to advantage in certain situations, but where they are liable to accidental or wilful damage, such as in "down runs" to switches within easy access, additional protection is required. The "Durex" system of wiring permits the use of "Durex" durable metal-sheathed cables or "Durex" cab-tyre sheathed cables wherever either is the more desirable, and provides additional mechanical protection where they may be liable to injury. In the design of the component parts of the "Durex" system, practicability and technical merit have been considered of primary importance, yet the total erection and maintenance cost of a "Durex" installation is low.

### *A Useful Handbook.*

Messrs. R. A. Skelton & Co. Steel and Engineering, Ltd., have just issued Handbook No. 18, the first of a new series of their well-known structural steel handbooks. This book, which is published at 5s. net, deals primarily with broad flange beams, grey process. A less elaborate handbook (No. 17) is issued gratis to firms interested in steel construction. Since the war important improvements to the firm's grey mill have enabled the taper on the flanges to be eliminated, and other minor improvements have been made in the dimensions of the sections. There has been no alteration in the main dimensions—height and width—but the thicknesses and the weights per foot of their present standard sections are as given in this handbook, and, more briefly, in Handbook 17. The firm have increased their range of sizes, which now comprise thirty-six sections, ranging from 5½ × 5½ in. to 40 × 12 in. The first portion of the book comprises section drawings and drawings of standard connections for each of their thirty-six standard sections. These are followed by the usual tables of properties and safe loads, and other useful data. The mode of calculation is fully explained throughout. This book is confined to broad flange beams. Valuable notes of a general character are also given on girders and stanchions. For the benefit of London users, special tables and safe loads, etc., calculated in accordance with the London County Council (G.P.) Act, 1909, are given in a separate chapter. The whole of the calculations in this book have been made by the firm's own engineering staff and checked by them with extreme care, and the proofs received from the printers have been checked with the same care. It is therefore most unlikely that any material error can have escaped correction. The preparation of the book has taken over two years, and extreme care has been devoted to every detail, so as to ensure accuracy, lucidity of explanation, and every facility is provided for quick reference. Copies of the handbooks may be obtained from the company at Moorgate Station Chambers, Moorfields, London, E.C. 2.

### *Anderson's Stand at Manchester.*

Special features on the stand of Messrs. D. Anderson & Son at the Building Trades Exhibition at Manchester are the "Red Hand" brand roofings. The exhibits include "Rok" bitumen roofing, "Ferro-Rok" (reinforced), a combination of "Rok" and steel, which is claimed to be particularly suitable for roofing exposed to severe climatic conditions and chemical fumes, "Stoniflex," a light, permanent roofing made in three thicknesses, and "Hippo," a light roofing for temporary buildings. Sarking and lining felts and dampcourses are strongly represented, and pure bitumen dampcourse and "Anderite" dampcourse are particularly noticeable. Models of a "Belfast" roof, a flat roof demonstrating Anderson's system of construction, and two lengths of wood fencing, sections of which are treated with their nut-brown "Sidol" wood preservative, are also shown, together with samples of "Bondex" plastic compound, a remedy for leaky roofs, which attract considerable attention.

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## New Inventions

### *Latest Patent Applications.*

5739.—Abraham, A.—Roof coverings. February 27.

6211.—Bravin, G. A.—Heating apparatus for buildings. March 3.

6192.—Building Accessories and Flooring Co., Ltd.—Manufacture of coloured asphalt. March 3.

5476.—5477.—Cooke, H. V.—Scaffolding support brackets, etc. February 26.

5909.—Philcox, J.—Concrete building-blocks, etc. March 1.

5724.—Rose, W. L.—Building construction. February 27.

5830.—Strudwick, W. C.—Chimney and ventilating shaft tops. February 28.

### *Specifications Published.*

193257.—White, C.—Chimney tops.

193260.—Moore, J. C.—Construction of staircases.

193269.—Jeffery, A. W.—Metal reinforcement of concrete constructions.

193290.—Waithman, C. H.—Portable and adjustable screens for use in road-making and for like purposes.

193301.—Hepburn, L., Hepburn, A. I., Hepburn, J. L.—Moulding box or apparatus for sills, lintels, cornices, or like concrete blocks.

### *Abstract Published.*

191261.—Flooring tiles and the like.—Brampton, F. W., Cwmllecoediog, Aberangell, Montgomeryshire.—In the wood flooring tiles and the like described in the parent specification, the tiles, etc., are constructed originally with a flat undersurface, and grooves are machined therein. Two or more sets of grooves may be cut, preferably diagonally of the tile.

The above particulars are specially prepared by Messrs. Rayner & Co., registered patent agents, of 5 Chancery Lane, London, W.C. 2, from whom readers of the Journal may obtain all information free relating to patents, trade marks, and designs. Messrs. Rayner & Co. will obtain printed copies of the published specifications and forward on post free for the price of 1/6 each.

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Architects, art-lovers, and all who are interested in constructional matters are cordially invited to make the fullest use of the Reading Room.

# Trade and Craft

### *Change of Address.*

Messrs. Green & Abbott, Ltd., have moved to 23, Lower Seymour Street, Wigmore Street, W.1.

### *B.R.C. Fabric for Middlesbrough Roads.*

The British Reinforced Concrete Engineering Co., Ltd., of Manchester, have been favoured with orders from Mr. S. E. Burgess, M.Inst.C.E., borough engineer of Middlesbrough, for B.R.C. Fabric for reinforcing Washington Street and Brougham Street, Middlesbrough.

### *New Club for Johannesburg.*

It is reported that new premises for a club are to be erected in Johannesburg. Firms interested in obtaining the names of the club and the architects who are understood to be preparing the plans, should apply to the Department of Overseas Trade, 35 Old Queen Street, Westminster, S.W.1. (Ref.: DOT. 10496/ED/MC(2).)

### *A Colour Campaign.*

It is almost impossible to-day for any one to fail to note the advantages of "Japonette" and the uses to which it can be put. This is the result of an advertising campaign now being carried out by the manufacturers, Messrs. Blundell, Spence & Co., Ltd., of 9 Upper Thames Street, E.C.4. A traveller on the Underground encounters everywhere charming posters telling him to have it done with "Japonette." This advice is given him on the stations, in the corridors and lifts, on the escalators and in the carriages. Although this is an achievement in itself the firm have also attacked the reader and give the same advice in the daily newspaper and in the various trade and other journals. Messrs. Blundell, Spence & Co., Ltd., have been manufacturers of fine paints and colours since 1811. The campaign which has been well organized is assured of unqualified success.

### *Sanitary Fittings.*

Too much attention cannot be given to the plumbing and sanitary equipment of a building. Furniture and decoration may be changed at will without undue disturbance, but plumbing and sanitary equipment enter into the structure of the building. They are costly and difficult to replace, and if indifferently installed through the employment of bad methods or unsuitable material will be found to be false economy. These and other truths are given in a new illustrated booklet just issued by Messrs. Mellowes & Co., Ltd., of London and Sheffield, the specialists in sanitary equipment. Interesting information is also included with regard to the firm's sanitary equipment of the bathroom, bedroom, cloakroom, kitchen, etc., together with illustrations of typical fittings. Each fitting is of charming design, and has its own distinguishing features. Sanitary contracts in a large number of houses, commercial, and other important buildings have been executed by the company, among the latest being that for the Empire Stadium now being erected at Wembley from the designs of Messrs. John W. Simpson, PP.R.I.B.A., and Maxwell Ayrton, F.R.I.B.A., architects. The London Showrooms of the company are at 26 Victoria Street, Westminster, S.W.1.

### *The Ruston Cold Starting Vertical Oil Engine.*

The Ruston cold starting vertical oil engine, an illustrated description of which is given in a new catalogue just issued, is claimed by the makers, Messrs. Ruston and Hornsby, Ltd., engineers, of Lincoln, to give efficient and economical service in the hands of any man of average intelligence. It is designed to run on the lowest grade of fuel oils and as small consumption is guaranteed low running costs are assured. With average working conditions and fuel it is stated that the consumption does not exceed ·44 lb. in the smallest and ·42 lb. per b.h.p. per hour in the larger powered engines. The engine starts from cold without the use of a blow lamp or the application of any external heat. All bearings and working parts have been most carefully designed to give long life. High-grade materials are used throughout and skilled craftsmen are employed in the manufacture.

### *Marseilles Tiles.*

Some interesting facts with regard to Marseilles tiles are contained in a booklet issued by Messrs. Langley London, of 161 Borough High Street, S.E.1, the sole selling agents in this country. In all parts of the United Kingdom many thousands of houses and bungalows are covered with them, as well as many churches, schools, hotels, cinemas, and other buildings. The Ministry of Health have repeatedly expressed their approval of these tiles and have authorized their use on over one hundred and forty different housing schemes. The London County Council have used Marseilles tiles in large quantities on all four of their big housing schemes, and the Corporations of Manchester, Liverpool, Glasgow, and other big cities have used them on hundreds of houses, and for private work their use has become general in all parts of the country. Many advantages are claimed for the tiles, as well as a considerable saving in first cost, a saving in laying, and a saving in upkeep. Illustrations are given of houses, bungalows, etc., upon which the tiles have been used. One of the houses illustrated, at Dorking, Surrey, was roofed with Marseilles tiles in 1875, and it is stated that "during the forty-eight years which have elapsed, no repairs have been made to the roof. Not a single tile has had to be renewed."

### *The "Poilite" Bungalow.*

The "Poilite" standard bungalow, which attracted so much attention at The Daily Mail Ideal Home Exhibition, is the subject of a booklet issued by Messrs. Bell's Poilite and Everite Co., Ltd., of Southwark Street, London, S.E.1. The cost as erected at Olympia is £495, and the company undertake to deliver and erect the bungalow, exclusive of drainage, anywhere within fifty miles of London, for £515. The bungalow has been planned to secure the utmost cosiness, economy, simplicity in working, and permanent attraction. It is a thoroughly substantial structure, claimed to require a minimum of upkeep and attention—externally or internally. The plinth, quoins, and chimney stack are in red brick, and the external walls and internal partitions are constructed on the Universal Patent system, as approved by the Ministry of Health and over 300 county, urban, and rural council surveyors. The system consists of steel reinforced timber framing, cladded both sides with "Poilite" sheeting. The external joints between panels are finished with "Poilite" cover strip; the internal joints with wood cover mould, the ceilings are panelled out with "Poilite" sheets, and the roof is constructed with the Universal Patent reinforced timber trusses, and covered with the "Poilite" pantiles in russet-brown colour. All joinery and wrought woodwork is carried out in best deal, and the doors are constructed of Western pine. All door and window furniture is of best quality, and grates, sanitary fittings, etc., are of the most modern type. The rainwater gutters and down pipes are composed of "Everite" asbestos cement; and require no painting nor preservative treatment of any kind.

### *Simplex Lighting Fixtures.*

Messrs. Simplex Conduits, Ltd., of Garrison Lane, Birmingham, have sent us a copy of the latest edition of the Simplex lighting fixtures catalogue No. 970. The fittings shown form a typical selection from a comprehensive range which, besides the usual brackets, pendants, semi-indirect fittings, table lamps, etc., includes fixtures on the Simplex unit system, "triple-purpose" signs, and several weatherproof lanterns. The range of weatherproof lanterns for exterior use with gas-filled (half-watt) lamps for industrial and street lighting purposes, should make a strong appeal to all discriminating engineers. The standard lantern consists of three vitreous enamelled heavy gauge spinnings attached to an enamelled iron crown-piece which supports the lampholder. The body of the lantern may be readily removed from the crown-piece, leaving the lampholder in a most accessible position for wiring, inspection, etc. The inner and outer reflectors are designed for the distribution of light over a wide area, and to intensify the degree of reflection have their under surfaces coated with a pure white vitreous enamel. Their entire exterior surface is also vitreous enamelled, the white, however, being replaced by grey. In all types ample allowance has been made for ventilation. The illuminated window signs are primarily intended for use in shop windows, and are designed not only to illuminate the window, but, with the same light, draw attention to the name of the store, or the nature of the goods that may be displayed. The illustrations shown in the catalogue give some idea of the design of a few of the signs produced, but the firm are at all times pleased to give assistance in providing exactly the right sign at exactly the right price. The difficulty long experienced by electrical installation engineers of maintaining a comprehensive stock of fittings, which will meet the varied requirements of their clients, has now been well solved by the appearance of the unit system of electric light fittings. As its name implies, it consists of a small number of interchangeable parts, which may be so assembled as to form practically any of the fittings called for by a normal installation specification. The flexibility of the system allows a remarkable adaptability from very few parts, but, nevertheless, involves no additional cost. The system should appeal particularly to electrical engineers remotely situated from sources of supply of fixtures. Two separate impressions are being issued, the one for home purposes only, and the other for special distribution to overseas buyers, particularly those in the colonies. A complete and fully illustrated catalogue of industrial lanterns, shades, and reflectors, has been put in the hands of the printer.

## State Aid for Houses

The proposals for State assistance for housing, outlined by Sir Arthur Griffith-Boscawen, the late Minister of Health, are criticized in a statement issued by the National Federation of House Builders. The chief proposal, says the Federation, refers to houses of the smallest type and provides that a yearly grant shall be made to the local authorities for the next fifty years of an amount equal to half the estimated annual loss (which is stated by the local authorities to be £12 per annum). The Federation states that the scheme is extravagant. It entails cash payments amounting to £300 a house from the national purse and an equal amount from the local rates, a total loss of £600 on every house built. The scheme will perpetuate municipal ownership, for all working-class cottages will have to be built and owned by the local authority. The proposals of the Federation include a Government grant of £150 for every house of an approved working-class type during the next few years, which would enable the house builder to offer a paying investment, and a Government guarantee to mortgages where 90 per cent. of the value has been advanced to those who wish to purchase their own houses. The principle of every man his own landlord should have, they state, a prominent place in the housing policy of the Government.

## New Inventions

*Latest Patent Applications.*

6691.—Bennett, J. G.—Seating terracing for grand stands. March 8.

6995.—Hope, W. R., and Hope and Sons, Ltd.—Glazed roofs, &c. March 10.

6315.—Lefebure, V.—Concrete, plasters, &c. March 5.

*Specifications Published.*

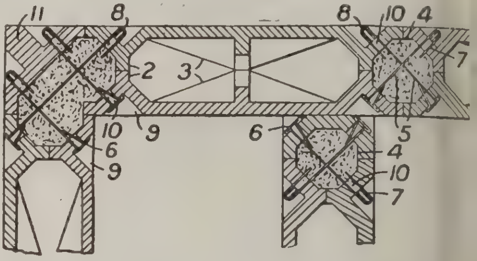
173738.—Tetlow, T.—Process of manufacturing objects of cement imitating stone, granite, marble, and similar substances.

193769.—Rios, R., and Sociedad Argonesa del Cemento Armado.—Casting concrete floors in situ.

193783.—Spanton, C. W.—Device for obtaining "horizontals" and "verticals" for the use of builders and the like.

*Abstract Published.*

191996.—Building slabs.—Thomas, A. O., 701 Owen Building, Detroit, Michigan, U.S.A. — Building tiles or slabs adapted for use in complementary pairs to form hollow blocks are provided with apertures 10 formed with exterior pockets 9 to receive the heads 6 and tensioning elements 8 of transverse tie members 5. The slabs are provided with abutting ribs 2, 3 and, when assembled, the column openings 4 are filled with cement. Special corner slabs 11 are provided, and the faces of the pockets 9 are substantially transverse to the ties. The pockets 9 are arranged at the upper and lower edges of the slabs and register with the pockets of adjacent courses.



The above particulars are specially prepared by Messrs. Rayner & Co., registered patent agents, of 5 Chancery Lane, London, W.C. 2, from whom readers of the Journal may obtain all information free relating to patents, trade marks, and designs. Messrs. Rayner & Co. will obtain printed copies of the published specifications and forward on post free for the price of 1/6 each.

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# Electrical Notes

## Co-operation between the Architect and the Electrical Engineer

TWO papers on "Co-operation between the Architect and the Electrical Engineer" have been read and discussed at a joint meeting of the Institution of Electrical Engineers and the R.I.B.A. One of the papers was by Mr. Francis Hooper, F.R.I.B.A., and the other by Mr. J. W. Beauchamp, M.I.E.E.

Mr. Hooper, in the course of his paper, said that one important factor, the danger of glare, seemed at the present to require very special and earnest attention, as it affected comfort and economy and, hence, the popularity and usefulness of electric lighting. The danger of glare was one which concerned both old and young, the man in the street and the child in the school, the worker at the desk, the bench, the surgery, the pulpit as well as the pew. In the last century candle-power was limited, and many present-day problems were unknown. Delightful was the small lamp or candle upon the writing-table, in the club reading-room, the choir-stall, the drawing-room, each fitting carefully suited to its purpose. To-day, too often, excessive candle-power dazzled, irritated, and injured the eye and the brain alike, diffused glare destroying the restfulness and value of studied shade. To-day some advertising agents, fiendishly regardless of self-respect and consideration for the public, had made vulgar some of their important streets and many open spaces. Upon this the public opinion needed education.

The object of Mr. Beauchamp's paper was to arouse discussion upon the relation between the architectural and electrical engineering professions, to explore the possibilities of closer joint working and means of keeping each profession advised of the needs and developments of the other in so far as they touch mutual and efficient working. Suggestions were made as to the work of the architect in providing for the use of electricity in buildings and in allowing for extension, greater variety in use, and the arrangement of cables and ducts.

The influence of electricity on the design and cost of buildings and probable developments in the near future were also discussed.

The paper concluded with a suggestion that it should be possible without interfering with the definite work of the architect, consulting engineer or contractor, to set up some joint body to act as *liaison* in regard to policy and the distribution of information between the two profesions.

Mr. F. A. Masters said that one of the greatest needs of the country was for houses where electricity could be used to the utmost possible extent. He lived in a neighbourhood where houses were being built for middle-class people, but the electric installation usually consisted of one or two lighting points in each room and one wall plug per house. In eac living and bedroom there should be tw plugs at least, one for power, the othe for lighting, with respective capacitie of fifteen and five amperes.

Mr. A. H. Dykes spoke of his experiences co-operating with architects fo twenty-five years past, taking the opportunity to testify to the invariable courtes and kindness which he had met with. H said that if the architect would avai himself of the experience of electrical an other engineers, he would be able t avoid a good many blemishes on hi building. Most of those present had see a fine building, with, perhaps, marbl walls, but with an ugly great fuseboard somewhere on the surface. This could easily have been avoided, but usually the architect completed his plans and, at the last moment, the electrical engineer was called in and asked to fit his work into those plans.

Mr. A. O. Collard (member of Council of the R.I.B.A.) said that electrical engineers had joined the happy band of sculptors, painters, and others who helped the architect. The suggestion made in one of the papers that architectural students should learn something of the use of electricity was a most excellent one; in the curriculum of every architectural school there should be one or two lectures each session by an expert in the subject.

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# The Week's News

### *Bath City Hall.*

A proposal to build a large city hall is efore the Bath Chamber of Commerce.

### *Clearing a Burslem Slum Area.*

The Stoke Council propose to spend 7,430 on an improvement scheme in e Massey Square area of Burslem.

### *Miners' £7,000 War Memorial.*

At a cost of £7,000 Choppington orthumberland) miners have built a rge hall and institute as a war memorial.

### *ew Secondary School for Walthamstow.*

It is proposed to build a new secondary hool for boys in Walthamstow at a cost f £39,000.

### *Southwark Town Hall.*

A scheme for the extension of Southark town hall is being considered by e Borough Council.

### *Hull Deaf and Dumb Institution.*

£2,000 has been given by the Rt. Hon. . R. Ferens towards the erection of a ew deaf and dumb institution at Hull.

### *Guildhall Improvements.*

After being in abeyance since the war, ork is about to be commenced on the construction of a considerable portion f the interior of the Guildhall, London.

### *University College Hospital.*

The King and Queen have consented lay the foundation-stone of the new uildings for medical research at University College Hospital, London.

### *New Hospital for Darlington.*

Plans have been prepared by Messrs. lark and Moscrop, of Darlington, for a ew hospital. The cost is estimated at 60,000.

### *The New Blackpool Pavilion.*

Good progress has been made with the ew pavilion on the north pier at Blackool. Messrs. Maxwell and Tuke, of anchester, are the architects.

### *Change of Address.*

Mr. Harold E. Todd, A.R.I.B.A., S.A., has moved to 29 Orchard Street, ristol.

### *New Bridge for Finchley Road.*

The Underground have placed a conract for £5,700 with the Teeside Bridge nd Engineering Works, Limited, for a ridge at Finchley Road, on the Edgware nd Hampstead line.

### *The Charing Cross Exhibition.*

The London County Council have greed to allow the Charing Cross exhibion, arranged by the London Society, remain open in the old County Hall ntil Friday, April 13.

### *roposed Maternity Home for Ilford.*

A Ministry of Health enquiry has been eld into the application of the Ilford rban District Council for a loan of 22,715 for the erection of a maternity ome.

### *Finchale Abbey.*

Finchale Abbey, near Durham, is reeiving attention from the Office of Works. he ruins were taken over from the Dean nd Chapter of Durham three years ago. is proposed to excavate the portions of the Priory which have long been overgrown with grass, and interesting discoveries are anticipated.

### *War Memorial of Textile Trades.*

The war memorial of the textile trades is being erected at Ballards Addington, on the Surrey Hills. It takes the form of a school, and is surrounded by a forest.

### *An Old Manor Passes.*

The old Manor House of Thames Ditton, Surrey, is being converted into flats. A long, low Georgian house, built in 1766, the Manor had been the home of the Speer family for about 100 years.

### *The Condition of Paisley Abbey.*

Restoration work is to be resumed on Paisley Abbey. Mr. Robert Allison, of Paisley, has given £6,000 towards the completion of the tower, in addition to the £8,000 given by him in 1912.

### *More Houses for Welwyn.*

Including land, lay-out, architects' fees, etc., ninety-three houses to be erected at Welwyn Garden City will cost £333 each. The tender for building which has been accepted amounted to £26,633.

### *The Cavalry War Memorial.*

The site for the cavalry memorial is to be just inside Hyde Park, at Stanhope Gate. The memorial will be a representation of St. George and the Dragon, and the statue is a fine piece of work by Captain Adrian Jones.

### *Flanders Stones for Ottawa.*

Stones from ruined churches in Flanders have been presented to Canada by President Poincaré, and are to be used in the construction of part of the interior of the Victory Tower of the new Parliament Buildings at Ottawa.

### *The Conversion of Stowe.*

In the article on "The Conversion of Stowe," published in our issue for March 28, it should have been stated that Mr. George Dixon, of Brotton, Yorkshire, was the consulting engineer for the power plant, etc.

### *An Elizabethan Town Hall.*

The Barking Town Council have decided, with regard to the proposed demolition of the Elizabethan town hall, to suspend any action in order to give archæological societies an opportunity to arrange for the removal of the hall to another part of the town.

### *£160,000 Concrete Road.*

An important new road between Hounslow and Harrow has been passed by the Middlesex County Council for immediate construction. The new road, to be made of concrete, with asphalt carpet, will be three-and-a-half miles long and 60 ft. wide.

### *Telephone Facilities in Buildings.*

The Postmaster-General wishes to draw the attention of architects and all engaged in the building industry to the importance of making adequate provision for telephone service in the construction of large buildings, in order to eliminate the necessity of costly alterations later on.

### *The Carlton Club.*

Sir Reginald Blomfield, R.A., is to reface the Carlton Club in Pall Mall. The stone facing of the building is wearing away, and the marble pillars are being undermined. The club was founded by the Duke of Wellington in 1831, but the present building was erected from designs by Sydney Smirke.

### *Chesterfield's Twisted Spire.*

Grave fears are entertained for the safety of the famous twisted spire at Chesterfield, Derbyshire. An examination by Mr. W. A. Forsyth, of Messrs. Forsyth and Maule, architects, has revealed that the spire has crept about 8 ft. away from its centre, has twisted, broken its back, and crushed one of its sides. It may rapidly assume a condition beyond repair.

### *Proposed New London Market.*

Several schemes are in contemplation with regard to the future of the partially burnt Hop Exchange in the Borough. These include proposals to acquire the building for boxing contests, for converting it into a huge dancing hall, and for rebuilding it as a first-class restaurant, with masonic halls, etc. At the same time, there is a likelihood of it becoming a central market for Kent fruit growers and market gardeners.

### *Professional Practice.*

Mr. F. Sutton Smith, P.A.S.I., has commenced practice as an architect and surveyor at 8 Ross Parade, Wallington, and would be pleased to receive trade catalogues and samples.

Mr. F. W. Rees, M.S.A., M.C.I., architect and surveyor, of Croydon, has taken into partnership Mr. A. Archer-Betham, A.R.I.B.A., of 59 Oakley Street, Chelsea. The firm will be known as Messrs. Rees and Archer-Betham, architects, surveyors and civil engineers, and will practise at 44 Park Lane, Croydon, as heretofore.

### *G.P.O. Extension.*

The big extension of the Post Office sorting office at Mount Pleasant, Finsbury, which has been in abeyance for eighteen months, is to be proceeded with this year if Parliament sanctions the expenditure provided for in the estimates. The site has been cleared already, and the foundations laid. The structure will cost about £120,000, and it is estimated that it will be two and a half years before it is finished.

### *Lincoln Cathedral.*

The Earl of Yarborough appeals for funds to carry on the extensive work of repairing Lincoln Cathedral. It is estimated that the approximate cost for the completion of the north-west and south-west towers and west front screen will be £14,000, central tower £11,250, and north clerestory of nave, £5,000; total £30,250. To this must be added money already spent, and a sum necessary to do external pointing and replacing of perished stone and internal work of ceiling. Altogether £50,000 is likely to prove a correct estimate of the whole sum required. Towards this amount £17,421 has already been raised.

## New Inventions

*Latest Patent Applications.*

7501.—Dickinson, A. W.—Floor and ceiling constructions. March 15.

7316.—Forssell, C. — Framework for buildings. March 14.

7461.—Jardine, Sir E.—Pipe connections for roofs, etc. March 15.

7229.—Krauter, K. F.—Building floors, walls, etc. March 13.

7251.—Master Builders Co.—Process and composition for colouring mortars, etc. March 13.

7268.—Pearson, K. N.—Constructional steel work. March 13.

7353.—Philie, F. L.—Changeable wall panelling. March 14.

8402.—Beckett, E.—Concrete structures. March 24.

7848.—Chambers, M. S.—Building constructions. March 10.

8101.—Hamilton, F. B.—Factory, etc., chimneys. March 21.

8336.—Lang, A. R.—Moulding concrete structures. March 23.

8457.—Rider, J. — Metal reinforcements for concrete. March 24.

*Specifications Published.*

193930.—Magelssem, N.—Wooden building sections.

193978.—Morin, L., and Grunder, F.—Process for the production of a stone-like devitrified mass.

193999.—Pease and Partners, Ltd., and Wilson, J.—Manufacture of silica bricks.

194025.—Sperni, J., and Nuroads, Ltd.—Plastic compositions suitable for flooring, constructional purposes, and the like.

194056.—Furniss, T.—Capping and jointing means for roofing-slabs.

194061.—Brown, A. E.—Construction of reinforced concrete walls.

194347.—Morton, B.—Roads.

177139.—Aston, T.—Wharf wall and the like.

194453.—Smither, W. H.—Hot-water circulating systems for domestic or other uses.

187197.—Zollinger, F. — Skeletons or frameworks for roofs, walls, and other structures.

194526.—Williams, R. C.—Manufacture of concrete artificial stone or mortar.

188340.—Cuypers, M. E. J. A.—Buildings formed of framed sections or elements.

*Abstracts Published.*

192294.—Walls; floors.—Rowley, A. J., 629 Bathurst Street, Toronto, Canada.—A wall or floor consists of two series of obliquely angled blocks or tiles which have slots for locking together opposing tiles. The tiles of adjacent courses are reversed so that the angular spaces extend in alignment vertically for the height of the wall, and concrete is poured therein. For floors, the tiles are made deeper so that an opening is left between the inclined ribs; a bar is supported by stirrups, and concrete is poured into the spaces.

192279.— Floors.—Gibbings, W. W., of 170 Gravelly Hill, Birmingham.—In a floor of the type formed by placing reinforced concrete beams or slabs side by side on walls or joists, channel-shaped members made of expanded or perforated metal are placed in the bottoms of the spaces between the beams, to hold the cement and form a key for the ceiling plaster. The members may be sprung into place, or be supported at intervals by slings and the bottoms only of the members may be reticulated.

The above particulars are specially prepared by Messrs. Rayner & Co., registered patent agents, of 5 Chancery Lane, London, W.C. 2, from whom readers of the JOURNAL may obtain all information free relating to patents, trade marks, and designs. Messrs. Rayner & Co. will obtain printed copies of the published specifications and forward post free at the price of 1/6 each.

## "Current Opinion"

With the April number, "Current Opinion" (3d. monthly), the official organ of the Industrial League and Council, starts on its second year of life. From the beginning it has aimed at being more than a mere record of the doings of the organization to which it belongs. It set out to be, and has succeeded in being, a popular review of the economics of industry as they affect the man in the street, be he employer or employee. Its contributors are numbered among all classes, and one of its regular features is the number of distinguished names which each month adorn its columns. High tribute is paid to its work this month by such people as Viscount Burnham, Lord Blyth, Lord Rathcreedan, and Sir Ernest Benn, Bart., on the one side, and by Mr. J. R. Clynes, M.P., Mr. Philip Snowden, M.P., Mr. Geo. H. Roberts, M.P., and Mr. G. N. Barnes on the other. "Current Opinion" is edited by Mr. G. C. Lawrence, and published at 82 Victoria Street, London, S.W.1.

## Coming Events

*Thursday, April 12.*

Sheffield, South Yorkshire and District Society of Architects and Surveyors.—Annual General Meeting.

Town-Planning and Garden Cities Association.—Ball at the R.I.B.A. in aid of the Library Fund.

Lecture by Miss Claire Gaudet at the British Museum on "Akhenaten and his City: the Horizon of Aten." 3.15 p.m.

*Saturday, April 14.*

Edinburgh A.A. — Joint Visit with Cockburn Association.

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# Trade and Craft

### *uilding Trade Exhibits at Wembley.*

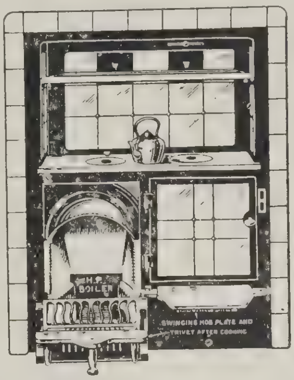
he special committee of the British pire Exhibition which is organizing building materials exhibits includes Harold Anderson (chairman), Mr. G. Dawson (deputy chairman), Mr. . Ashmore, Mr. C. S. Bell, Mr. V. W. ne, Mr. G. W. Butchard, Mr. H. J. C. nston, Mr. D. Palmer-Jones, and Mr. Pangbourne. Others who have been ited to join the committee include . Reginald Brown, M.B.E., Mr. D. G. nerville, M.P., and a representative Stuart's Granolithic Company.

### *Gas in Boot Factories.*

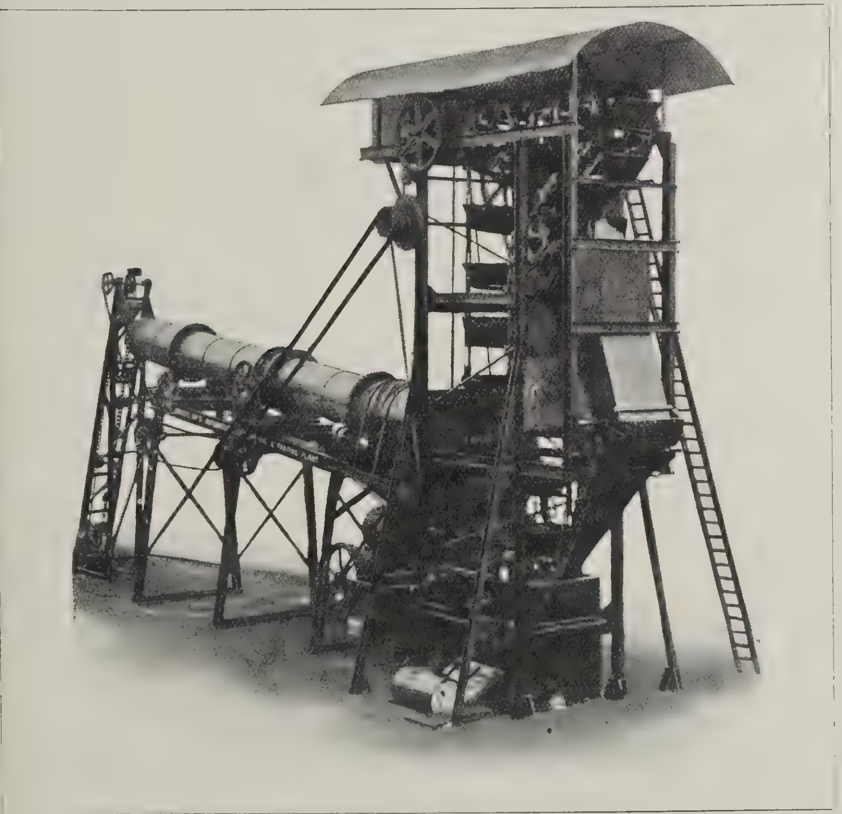
The current issue of "A Thousand and e Uses for Gas" (No. 109) contains r thirty photographs and descriptions appliances used in boot factories. ery reader should find this publication general interest. Certainly no boot nufacturer should fail to secure a copy; it are valuable illustrations of modern pliances in use in many of our st progressive boot factories. The t of this publication is 6d. post free, t a copy will be sent free of charge or ligation to those interested in the ther industry, on application to the cretary, the British Commercial Gas sociation, Grosvenor Gardens, S.W.1.

### *The "Foresight" Combination Range.*

One of the most interesting exhibits the Woman's Exhibition, now open, Olympia, is the patent "Foresight" mbination range on the stand No. 8, w A, of Messrs. Samuel Smith and n. Among the advantages claimed for e range are that "it cooks the food per-tly, ensures a plentiful supply of hot ter at all times, enables several boiling ensils to be in use at the same time, reduces the fuel bill by 50 per cent., is easily and quickly converted from an efficient cooking range into an open, cheery fire, it warms the room as it cooks, the coal consumption is regulated by an automatic movable canopy, the draught is easily regulated by sliding the ventilator in the fret, the working parts cannot burn away or get out of order as they are away from the fire, the flues are easily cleaned, the maximum heat in the room is radiated from the special, all fire-brick back, it is substantially made to stand long and hard wear, all parts are easily replaced, should breakage occur, as they are all standardized, and that extra hot plate and close fire are obtained by swinging trivet over fire." Architects and builders can obtain full particulars and price list A.T. from Messrs. Samuel Smith and Sons, Ltd., Beehive Foundry, Smethwick. Among the other exhibits are ranges, interiors, registers, mantel registers, cooking stoves, Keystone fires, and general builders' castings.


H.P. BOILER
SWINGING HOB PLATE AND TRIVET AFTER COOKING

THE "FORESIGHT" COMBINATION RANGE.



THE WINGET AUTOMATIC STONE-DRYING AND TARRING PLANT.

### *A New Stone-drying and Tarring Plant.*

Local authorities and leading contractors from all parts of the United Kingdom were represented at the Winget Works, Warwick, when the demonstration took place of the new "Winget" automatic stone-drying and tarring plant, in which the human element is practically eliminated. The stone is automatically elevated from the ground to the long heating tube—a special feature so constructed that the stone travels a distance of 100 ft. in order to ensure absolutely thorough drying—and is thence discharged into perforated containers which travel on to the tar bath below. Here the tar surges through the stone containers, coating and saturating every particle within. As the containers emerge from the bath, the surplus tar is released before reaching the automatic trip which tilts the material into the discharge hopper. This is of sufficient capacity to allow a truck or wagon to be changed without stopping the plant. It was demonstrated that the process eliminates any excess of tar over and above the exact amount required to make first-rate tarred road stone. The plant demonstrated at Warwick, which is operated by a 7 h.p. engine, has an approximate output of 100 tons per day. Other sizes are made with outputs ranging from 20 to 200-300 tons per day. They can all be driven by steam or other common power unit. Owing to the lightness of structural details, the "Winget" automatic stone-drying and tarring plant is easy to erect. Its simplicity of design is claimed not only to reduce initial outlay, but to ensure low running costs together with proportionately lower maintenance charges. In short, it is claimed for the new process that it solves the whole mechanical problem of making either tarred or bitumenized macadam.

### *Waygood Lifts.*

Suggestions of the greatest use to the architect are given in a new illustrated catalogue which has just been issued by Messrs. Waygood-Otis, Ltd., of 54 and 55 Fetter Lane, E.C.4. It is stated that in office buildings there is usually a special rush of passengers in the early morning, middle day, and again in the late afternoon when staffs are arriving and departing, and it is advisable for a sufficient number of lifts to be provided to deal with such rushes and carry the passengers promptly to their destination. It is found in practice that this can be better done by having several lifts of smaller capacity than having one or two of larger size which carry more people, but have a longer interval between the various trips in consequence. Experience proves that the best result is obtained when the lifts are grouped in a convenient position in the building so as to be easily accessible.

Illustrations are given of alternative arrangements of large installations in offices and stores which have been fitted by the firm. In some cases, in stores it is found to be an advantage to divide the lifts into groups in different parts of the building, so as to induce customers to circulate more freely. For large stores, where a number of people have to be handled, they recommend the employment of escalators which give a continuous service and so deal with crowds more rapidly. Where there are a number of floors to be served, it is advisable to set apart one or two lifts, according to the size of the building, for the purpose of serving the upper floors, which should run at a higher speed. The ideal position for lift machinery from an engineering point of view is directly overhead, with driving sheaves of sufficient diameter to span from the centre of car to centre of balance weight without diverting sheaves, which, while ensuring longer life for the lifting ropes, in most instances imposes less load on the structure of building. The best shape for a lift car is to have the width somewhat greater than the depth, as with a deep car it takes longer for passengers to enter and leave the car, and there is usually more time thus occupied than in the actual running of the lift. It is desirable to arrange for the car to be open at the same side on all floors. If a car has an opening at the back as well as front, time is lost by the attendant having to cross the car, and this also reduces the effective value of car space. Where a car has to be open at front and adjacent side, this necessitates guiding at the corners which is not so rigid and also reduces the floor space. The catalogue is full of valuable information, and should be in the possession of every architect.

*G.E.C. Electric Light Fixtures.*

We have received from The General Electric Co., Ltd., of Magnet House, Kingsway, W.C.2, a copy of a new edition (the 16th) of their catalogue of electric light fixtures (Section F of complete catalogue). This new list, which is being mailed to the company's trade customers, contains some 216 pages of designs, many of them entirely new, which combine the requirements of modern lighting with artistic effect. All list prices have been revised to include reductions in the cost of labour and material to date of issue, and it may be expected that these prices will now remain stabilized. The list is a new departure in that it is produced throughout by the photogravure process. Four colour designs of typical fittings are included, and the list is one of the most comprehensive and complete volumes of its kind. The arrangement of the sections of the catalogue is simple, logical, and easy for reference. The excellence of the illustrations will render the list of the greatest value to architects in aiding them and their clients to make a selection.

*Builders' Supplies for Canada.*

An important firm of building contractors in Canada are desirous of receiving from United Kingdom manufacturers periodical information as to current prices of the following: Coarse pink plaster, Portland cement, structural steel, steel plates, bar iron, corrugated iron sheets, and bricks. It is stated that during the present year the company will be in the market for 50,000 barrels of cement, 15,000 tons of bar iron, and 5,000 standard size corrugated iron sheets. United Kingdom manufacturers interested may obtain the name and address of the company from the Department of Overseas Trade, 35 Old Queen Street, S.W.1.

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## Coming Events

*Friday, April 20.*

Art Workers' Guild.—"Reparation of Ancient Painting and Sculpture." 8 p.m.

Town Planning Institute. — General Meeting. Mr. Thomas Adams, F.S.I., will give an account of the "Region of New York City," illustrated by lantern slides.

*Saturday, April 21.*

Architects' and Surveyors' Assistants' Professional Union.—Visit to Corner House Extension, Coventry Street, Piccadilly.

*Monday, April 23.*

R.I.B.A.—"The Literature of Architecture."

*Wednesday, April 25.*

Liverpool Society of Architects.—Annual General Meeting.

## New Inventions

*Latest Patent Applications.*

8896.—Bishop, A. W.—Artificial stone March 29.

8810.—Chevers, J. C.—Metallic shee for lining ceilings, walls, etc March 28.

8583.—Jewell, P. H.—Concrete building. March 26.

8906.—Leeming, E. L. — Dwelling-houses, etc. March 29.

8611.—Schindler, W.—Builders' hoisting devices. March 26.

*Specifications Published.*

194738.—Rigby, T.—Processes for the manufacture of cement.

194841.—Ryan, J.—Machines for the manufacture of slabs or blocks for building purposes.

194880.—Clare, G. E.—Fireproof floor constructions.

189745.—Jaques, C. A.—Manufacture of Portland cement mortars.

*Abstract Published.*

192654.—Buildings.—Lancashire, A. E., 3 Seedley View Road, Seedley, Salford, Lancashire.—In buildings comprising a metal skeleton filled in with inner and outer concrete blocks or slabs, channel beams carried by the stanchions are filled with concrete to form an eaves course, and the roof principals are fixed thereto by cleats. The wall slabs are bolted to horizontal concrete members which are secured by angle brackets to the stanchions. Concrete pillars are moulded in situ about the stanchions.

The above particulars are specially prepared by Messrs. Rayner & Co., registered patent agents, of 5 Chancery Lane, London, W.C.2., from whom readers of the JOURNAL may obtain all information free relating to patents, trade marks, and designs. Messrs. Rayner & Co. will obtain printed copies of the published specifications and forward on post free for the price of 1/6 each.

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# The Week's News

### *New Church for York.*

Plans are being prepared for the ew South Bank Memorial Church.

### *The King and Housing.*

The King and Queen hope to visit econtree, the new L.C.C. housing estate the borders of Ilford, at an early date.

### *More Houses for Swadlincote.*

The Swadlincote Urban District Council ve decided to erect a further fifty uses at Newhall.

### *Proposed Market for Consett.*

Estimates are being prepared of the st of a new public covered-in market Consett.

### *Richmond's Crematorium Scheme.*

Richmond Corporation are inquiring if e neighbouring local authorities will n in a scheme for establishing a crematrium.

### *e Condition of St. Margaret's, Lothbury.*

The fund for the restoration of the storic City church of St. Margaret's, thbury, now amounts to £5,200. out £2,000 are still required.

### *Housing at Stretford.*

The Stretford Urban District Council ve received sanction for the erection of y houses in Seymour Grove at a cost £20,258.

### *Whitby Parish Church.*

An appeal is being made for £2,000 vards the cost of repairing the fabric St. Mary's Parish Church, Whitby. oo has already been spent on recent pairs.

### *Bradford Cathedral.*

Sir Charles Nicholson, F.R.I.B.A., has epared an outline plan of the new hedral which is proposed for Bradford. e new building, to incorporate the old ucture, is estimated to cost £70,000.

### *Seaton Carew Development Scheme.*

A scheme for the development of aton Carew is before the West Hartleol Corporation. It is proposed to end £41,340 on the construction of a v promenade, a bathing pool with bicles, shelters, and conveniences, etc.

### *"The Cathedral of Bucks."*

An appeal is being made for £1,000 for restoration of the tower of the parish urch of High Wycombe, known as the athedral of Bucks." A report on the ndition of the church has been prepared Mr. W. A. Forsyth, F.R.I.B.A.

### *Worthing Improvement Schemes.*

Plans have been passed by the Town uncil for a new super cinema and for v shops. The Council are considering the estion of developing Beech House Park, extension of the bandstand, and the ovision of a pavilion.

### *The Duke of York and Industry.*

The Duke of York, President of the lustrial Welfare Society, has invited boy from each of the great industries the country to his wedding, which es place at the Abbey to-morrow. e building industry will be represented a boy from Messrs. Higgs & Hill, Ltd., l the varnish and paint industry, by from Messrs. Mander Brothers, of Wolverhampton. During their visit to London all the boys will be the guests of Lord Invernairn, the chairman of the Industrial Welfare Society.

### *Suggested Ford Factory for Newhaven.*

Mr. C. W. Neville, of the South Coast Land and Resort Co., Ltd., has offered to the Ford Motor Company the freehold, without cost, of fifty acres of land adjoining the harbour of Newhaven. The site has a frontage of half a mile on the River Ouse.

### *The Water-colours of Sir Ernest George.*

Mr. Charles H. Heathcote, vice-president of the R.I.B.A., has offered to purchase a collection of water-colour sketches by the late Sir Ernest George, R.A., and to present them to the Institute. The offer has been gratefully accepted, and it is hoped that the collection will be on view at No. 9 Conduit Street at an early date.

### *The Building Trade Arbitration.*

The Lord Chief Justice has appointed Sir Hugh Fraser as arbitrator in the building trade's dispute. One representative each from the employers, and operatives' organizations have been chosen as assessors. The employers' representative is Mr. J. Greenwood, a London master builder, and the operatives have selected Mr. A. G. Cameron, of the Woodworkers Society, on their behalf.

### *Stowe House.*

Stowe House (an illustrated description of which was published in our issue for March 28) was first sold in 1921 by Messrs. Jackson Stops, F.S.I., of Northampton, Towcester and London, and afterwards, in 1922, by the same firm in conjunction with Messrs. Farebrother, Ellis & Co. The literature in connection with the sales of the freehold and the eighteen-days' furniture sale was prepared by Messrs. Jackson Stops.

### *New Reservoir for Melton Mowbray.*

The Melton Mowbray Urban District Council have authorised the construction of a reservoir of 1,000,000 gallons capacity and an engine and pump capable of pumping 10,000 gallons per hour. It is also proposed to construct a small high-level reservoir and small pumping station to supply the higher portion of the district. The engineers of the scheme are Messrs. W. H. Radford & Son, of Nottingham, in conjunction with the Council's Surveyor.

### *New Housing Scheme for Prestwick.*

The Burgh of Prestwick Dean of Guild Court have passed plans for the erection of the first lot of bungalows for the City and Suburban Housing Association (Glasgow), Limited. These include the erection of thirty-two semi-detached houses at Berelands Road, and the formation of new roads. The Association will shortly have plans presented for the erection of 150 similar houses at St. Quivox Road, Prestwick, together with an electricity station to supply electrical energy to the houses. Similar schemes are in course of preparation for the suburbs of Glasgow, Manchester, and one or two Lanarkshire towns.

### *The Dances of Bali and Java.*

An exhibition of water-colours and drawings illustrative of the sacred and secular dances of Bali and of the Marionette theatre of Java is now on view in Room 71 of the Victoria and Albert Museum. The drawings are by Miss Tyra de Kleen, a Swedish artist, who for several years has been studying the costume and movements of these dances. Miss de Kleen is the first person who has been allowed to make drawings of the ritual and hand gestures of the priestly dances of Bali. This collection of her work, which has been lent for three weeks to the Victoria and Albert Museum, is of much value from the various aspects of ethnography, drama, dancing, and costume, apart from the interest of the drawings themselves.

### *New Partnerships.*

Mr. George Hornblower, F.R.I.B.A., has taken into partnership Mr. Ralph W. Thorp, A.R.I.B.A., of 5 Hammersmith Terrace, London, W.6. The practice will be carried on at 2 Devonshire Terrace, Portland Place, London, W.1, under the name of Messrs. Hornblower and Thorp, architects.

Mr. C. Gordon Huntley, A.M.I.E.E., M.I.H.V.E., and Mr. William W. Wood, have entered into partnership and commenced practice as consulting engineers under the style of Huntley & Wood, at P. & O. House, Cockspur Street, London, S.W.1. They are specialising in heating, ventilation, and illumination, and are prepared to receive trade catalogues.

Messrs. Cyril B. Tubbs and A. A. Messer, of Craig's Court House, Whitehall, S.W.1, have taken into partnership Mr. G. Val Myer, A.R.I.B.A., late of 58 Marylebone Lane, Wigmore Street, W.1. The style of the new firm will be "Messrs. Tubbs, Messer and Val Myer," and the business of the firm will be carried on at Craig's Court House and 4A Sea Road, Bexhill-on-Sea. Telephone Nos., Gerrard 4915, and Bexhill 480.

### *The Glasgow School of Art.*

At the second annual exhibition of students' work of the School of Architecture, Glasgow, the criticism was delivered by Mr. James Lochhead, F.R.I.B.A., President of the Glasgow Institute of Architects. The following designs were placed first: First year, "An Entrance Doorway," Mr. F. Wylie; second year, "A Billiard Room for a Country Mansion," Mr. P. M'Niel; third year, "A Lending Library," Mr. L. G. Farquhar; fourth year, "A Public Market," Mr. G. F. Shanks. At the conclusion of the criticism the School of Architecture Club held their seventh meeting of the session when a paper was read by Mr. Campbell Mackie on "The Human Element in Architecture."

### *Institution of Structural Engineers.*

Next month the examinations of the Institution of Structural Engineers will be held at London, Salford (Manchester), and possibly at other centres. The examination for Graduateship (Part I) will be held on Thursday, May 10th, and that for Associate Membership (Part II) on Friday, May 11th. Applications for permission to sit, which are to be made on the special form of the Institution, are to reach the Secretary, at Denison House, 296 Vauxhall Bridge Road, S.W.1, not later than May 1st. The fee for the Graduateship examination (Part I) and for the Associate Membership examination (Part II) is £1 11s. 6d. respectively, but if both parts are taken, the inclusive fee is £2 2s. od. The Superintending examiner is Professor Henry Adams, M.Inst. C.E.

### *The Story of Clay.*

Mr. H. J. C. Johnston, president of the Institute of Clay Workers, delivered a lecture under the chairmanship of Mr. H. D. Searles-Wood, VP.R.I.B.A., entitled "The Story of Clay," at the L.C.C. School of Building, Brixton, recently. The lecture was accompanied by two cinematograph films showing the process of manufacture of fireclay goods and of brick. Mr. Johnston drew attention to the vast improvement that had been effected by the use of fireclay in the production of not only ordinary glazed ware, such as drain pipes and bricks, but demonstrated how fireclay was now treated in such a manner that beautiful colour effects could be permanently fixed in the material. A strong argument in favour of an extended use of ceramic ware was made by the speaker owing to the amount of colour which, by its use, could be introduced into the façades of buildings.

## New Inventions

### *Latest Patent Applications.*

9563.—Davenport, J. A.—Reinforced concrete structures. April 7.

9594.—Hesselewitch, B.—Manufacture of building materials. April 7.

9541.—Watson, W. H.—Reinforced-concrete road construction. April 7.

9110.—Watson, W.—Concrete building blocks, etc. April 3.

9090.—Whitton, W. B. — Building blocks. April 3.

### *Specifications Published.*

195115.—Blaw-Knox Co.—Apparatus for moulding concrete structures.

195271.—Knapman, E. G.—Scaffolding.

195302.—Thornton, A. J., and Eagle, G. —Mining dials, theodolites, and such like.

183447.—Soc. Anon. des Hauts Fourneaux et Fonderies de Pont-a-Mousson.—Rain pipes for buildings.

195326.—Hilliard, J. B.—Building and paving blocks, slabs, and the like.

### *Abstract Published.*

193260.—Stairs and staircases.—Moore, J. C., 178 York Road, King's Cross, London.—In a staircase of the kind consisting of a series of sheet metal combined treads and risers, the upper edge of each riser extends above the level of the tread above and is secured to a downturned flange on the tread. Concrete or other plastic material is then applied to the tread and also, if desired, over the nosing and face of the riser, and is keyed by studs. The upper edge of each riser may be notched and inclined or may be vertical. A number of these units may be previously riveted together off the site and be subsequently secured to stringers by means of angle irons. Expanded metal may be secured by split pins to the underside and be plastered to form a soffit.

The above particulars are specially prepared by Messrs. Rayner & Co., registered patent agents, of 5 Chancery Lane, London, W.C. 2, from whom readers of the JOURNAL may obtain all information free relating to patents, trade marks, and designs. Messrs. Rayner & Co. will obtain printed copies of the published specifications and forward on post free at the price of 1/6 each.

## Coming Events

### *Thursday, April 26.*

British Museum. — "Mediterranean Civilization." By Miss Claire Gaudet, 3.15 p.m.

### *Saturday, April 28.*

Architects' and Surveyors' Assistants' Professional Union.—Visit to Messrs. Mather & Platt, Ltd., 14 Gt. Smith Street, S.W. Meet outside, 2.30 p.m.

### *Monday, April 30.*

A.A.—Meeting at 7 p.m.

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# Electrical Notes

## Lighting in the Theatre

SOME interesting observations with regard to the lighting of theatres were made by Mr. Roi L. Morin in a recent issue of "The American Architect." In the course of his article Mr. Morin says: It is a far cry from the current realistic drama and the commercial theatre to the revolutionary drama and stagecraft of to-morrow, towards which the artists and experimenters in the theatre are striving. These men are constantly seeking out new forms, new modes of expression, and slowly the conventional theatre follows in their wake.

In the realm of light the theatre of to-day and that of the future are more closely bonded, as light and colour are recognized by both parties as pre-eminent forces of beauty. Light is the study and plaything of the modern theatre, and its possibilities are enormous. Producers, artists and technicians work years, experimenting to get new results. The result is simply that stage lighting has progressed with an amazing rapidity. When one recalls the baldness and crudity of stage lighting scarcely fifteen years ago and compares it with the soft and subtle beauty that has recently been achieved, it is possible to realize what progress has been made.

The lighting of a theatre, both before and behind the proscenium opening, is one of the greatest problems which confront the architect.

For several years theatrical men have been experimenting to obtain light on the stage which would imitate daylight. At the Little Theatre in New York, panels which might be lowered were built into the ceiling. These panels, when lowered, frankly exposed spotlights which directed shafts of light on the stage, at an angle of 45 deg. This was an improvement, but a far better device was installed by Belasco in his own theatre in 1917. A group of "baby" spots was built into the balcony front, just below the rail, and remotely controlled. These spots illuminated the stage, throwing light only on a slight pitch. They were barely visible when in use, and were hidden completely by small shutters which closed automatically when the lamps were not in use.

The location of the stage switchboard is a question over which authorities differ. The average theatre has its switchboard located on the stage level, in the recess on one side or other of the proscenium opening, preferably on the right (facing the audience), with the dimmer bank above. If the board is a small one both the board and the dimmers are operated from the stage level; if it is large the dimmers are operated from a platform above. In any event the operator must take most of his cues from another man who is watching the performance from the tormentor opening. The most excellently designed theatres, however, have the switchboard under the stage, in the centre, directly behind the apron The master electrician watches the performance through the prompter's hole—masked from the audience. He operate the master dimmer wheel while hi assistants in the switchboard room belo take their cues from him. The switchboards at the Hippodrome, the Metropolitan Opera House, and the Centur Theatre in New York are of this latte type, as are the majority of the ne theatres in Germany.

All switches on the board should b well labelled, and the switch and dimme handles should be coloured to agree wit the lights they control. No circuit o the stage should be loaded above 1,32 watts.

The switchboard should be equippe with pilot lights, bell and telephon system with the orchestra pit, box office projection booth, fly-galleries, dressin rooms, and wings, so that the maste electrician may have all parts of th house under his absolute control at al times. The dressing rooms should hav a call system to give the various actor their cues.

There are three ways of illuminatin a theatre auditorium, each of which ma be used separately or in conjunctio with one or more of the others—direc lighting, semi-indirect or indirect. Th use to which the theatre is to be pu will in a large measure determine wha method will be employed.

*Memorial Screen, Barnard Castle.* *R. Wylie, Esq., F.R.I.B.A.. Architect.*

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# Trade and Craft

### *The Super "Interoven."*

The accompanying illustrations show he super "Interoven" convertible cookng and heating stove. It is a developnent of the well-known "Interoven" tove, and is capable of cooking for fourteen persons. The super "Interoven" is tted with a large oven, 15 in. wide by 4½ in. high by 16¼ in. deep, two hot losets for plate-warming and light cookng—one on either side of the oven—and wo lower hot closets for use when the stove s converted into an open fire. There is lso spacious hot-plate accommodation giving room for six saucepans and, if desired, , boiler to supply baths and radiators. )ne of the illustrations gives a general view of the stove, and the other shows he super "Interoven" unfitted, with the ven and hot-closet doors open. The ot plates are raised and the fall-bar down or open fire. The size of the lower hot losets is seen in the illustration. Flue leaning has been made extremely easy. Four cleaning doors are shown inside the ot closets, and an additional large cleanng door in the bottom of the oven. When hese doors are removed it is possible o actually see into the flues, thus allowng easy and thorough cleaning. The uper "Interoven" is manufactured by he Interoven Stove Co., Ltd., of 156 Charing Cross Road, London, W.C.2.

### *Organization of the Electrical Industry.*

The special committee appointed last year to formulate a trading policy to be ollowed by the National Electrical Contractors' Trading Association, Ltd., in order to realize the ideals of the Electrical Contractors' Association, find there is a general feeling expressed in the Press and at meetings of electrical men that the ndustry is not as well organized as it hould be, especially with regard to the method of distribution to the user, and that some improved relationship between the manufacturing, wholesaling, and retailing sections of the industry must be set up if the best results are to be achieved. The committee has, therefore, in outlining a trading policy to guide the Association, earnestly set itself the task of laying a basis upon which such an improved relationship may be built. The committee does not propose thati ts recommendations can be carried into effect immediately nor, as regards some of them, for a long time perhaps, but considers that the policy now formulated should be followed consistently and so far as is possible in the making of all trading agreements. The committee was composed of Messrs. H. Marryat, M.I.E.E., President; W. R. Rawlings, A.M.I.E.E., W. Cross, M.I.E.E., P. Collinson, H. J. Cash, M.I.E.E., J. Orringe, A.M.I.E.E., Past Presidents; W. Riggs, A.M.I.E.E., Chairman of the Trading Committee.

### *Messrs. Bell's United Asbestos Co., Ltd.*

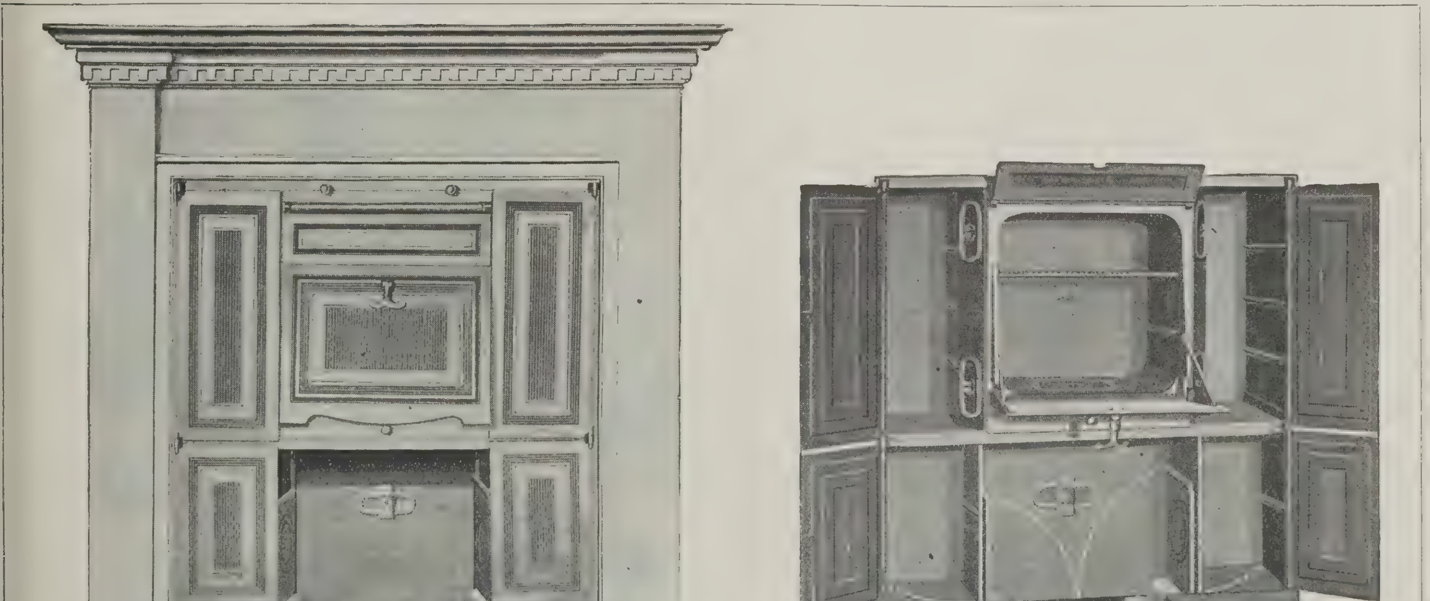
At the general meeting to be held on May 10, the directors of Messrs. Bell's United Asbestos Co., Ltd., of Southwark Street, London, S.E.1, have resolved to recommend to the shareholders the payment of a balance dividend of 1s. 6d. per share on the ordinary shares of the Company; this, with the interim dividend paid in October last, makes a total distribution of 10 per cent. for the year. After providing for income tax and corporation profits tax the amount to be carried forward is £37,910 16s. 0d., an increase of £3,897 6s. 11d.

### *The "Maymore" Window Balance Fittings.*

The "Maymore" improved window balance fittings are the subject of a booklet issued by Messrs. May and Padmore, Ltd., of Tyseley, Birmingham. Sashes fitted with these fittings are claimed to provide automatically full ventilation without direct draughts, the fresh air inlet being in an upward direction. In the construction of the complete sash all pulleys, cords, weights, and box frames are eliminated. The upper and lower sashes are both reversible for cleaning or glazing, the adjustments being made quickly and easily. All window cleaning therefore is possible from inside the room. The sashes being perfectly balanced, it is claimed that they operate with the greatest ease no matter how large the window, that they afford ample ventilation under all weather conditions, keeping the room free from both rain and direct draughts, and that when closed the window is absolutely secure, entirely free from rattle, and weatherproof. The fittings are especially invaluable for use in hospitals, infirmaries, schools, sanatoria, public buildings, offices, etc. Similar fittings are in use in some of the largest buildings in the world—the "Equitable," New York (the largest office building in the world), carries over 5,000 sets, while several London and provincial hospitals have adopted this system with complete satisfaction. A perusal of the booklet should at once convince every reader that the fittings provide an ideal means of ensuring perfect ventilation, while the added advantage of accessibility for cleaning the outside of the window from inside the room should commend itself to every architect.

### *Flavel's Leamington Fires.*

Messrs. Sidney Flavel & Co., Ltd., of Leamington, have issued a booklet dealing with their Leamington fires. The firm's productions, which have been supplied to the Royal Family and a large



THE "INTEROVEN" CONVERTIBLE COOKING AND HEATING STOVE.

number of the greatest homes in the land, cover every cooking and heating requirement. Flavels of Leamington is a business founded in the days of King George III, and slowly built up by adhering to the sound principles laid down in the Georgian days. The history of cooking by means of enclosed fires is inseparably linked up with the name of Flavel, for William Flavel pioneered the "Leamington" range which in a short time superseded the open fire as a method of cooking. During the test of one century Flavel's kitcheners have built a remarkable reputation for durability, and many instances have been recorded where these ranges have been in constant use for seventy years, the only parts replaced during that period being the fire-bars and fire-cheeks. The durability of Flavel's kitcheners is due to the special grade of range metal used in their manufacture, as well as to the care bestowed on fitting the various parts of the range. From the first exhibition of 1851 down to the last exhibition held in 1922—a period covering seventy-two years—Flavel's "Leamington" stoves have been awarded prize medals. The productions of the company include kitcheners, portable stoves, parlour-oven grates, hot plates, gas cookers, mantel registers, interior fires, rustless fires, dog grates, hob grates, and gas radiators.

### *New Electrical Contracts.*

The electric light installations at the new building for Lloyd's Bank, Swansea (Mr. John P. Briggs, F.R.I.B.A., architect), and that for Messrs. Monnoyer British Construction Co., Ltd., at 31-32 King Street, E.C. (Mr. J. Campbell Reid, F.R.I.B.A., architect), are being carried out by Messrs. Jackson and Boyce, Ltd., of 19 Berners Street, W.1.

### *A New Make of Light Fittings Bowl.*

Much use has been made in the last few years of alabaster bowls for electric light fittings, and, although these have proved very successful from an æsthetic point of view, there has always been present the danger of the bowl becoming discoloured and very often cracked should it be brought into actual contact with an illuminated lamp; moreover, it has been found difficult to obtain a method whereby the alabaster bowl could be satisfactorily tinted to accord with any particular colour-scheme and at the same time to maintain permanently that colour effect.

We are informed that a new bowl is now on the market which is not subject to the defects mentioned above. This bowl is attractive in appearance, and its makers claim that its colours are absolutely permanent, the colouring being done by hand and encased between two sheathings of glass.

Many beautiful effects and colourings can be obtained, ranging from the most subtle tints to fuller colours, which will harmonize with any decorative scheme, and, moreover, no deep patchy colour reflections are cast below the fitting. In cases where a decorative pattern is preferred to the plain tints the bowls can be had with floral decoration. The principle is not confined to bowls; shades or glasses of many patterns for downward lighting as well as some beautifully designed vases for ordinary home decoration are also made.

Messrs. Jackson and Boyce, electrical engineers, 19 Berners Street, London, W.1, have a number of these bowls displayed in their new showrooms.

### *Jointless Flooring.*

The British Magnesite Flooring Co., of City House, 158–160 City Road, London, E.C.1, have registered a new composition known as "Magbestic" super-hard jointless flooring. It is claimed that this flooring will withstand the hard wear and tear associated with factories, mills, workshops, garages and other buildings, that it is impervious to oil or grease, and that it is entirely fireproof. On completion it is left with a smooth, trowel-finished surface. The firm's ordinary "Magbestic" jointless flooring was introduced about twenty-seven years ago and the enormous demand for it at the present time is sufficient proof of its popularity. The flooring can be laid at low cost, and is particularly suitable for hospitals, offices and other buildings, owing to the fact that it is semi-noiseless. The firm's flooring can be laid on wood, concrete, stone or brick foundations, and on old and worn floors of any description. Among the many claims made by the firm for the flooring are that it is vermin and fire-proof. The firm, which employs British labour only, are contractors to H.M. Government. Among the other specialities of the firm are asphalt and paving and "Tennisite" hard courts, laid in green, red or grey, with permanent markings.

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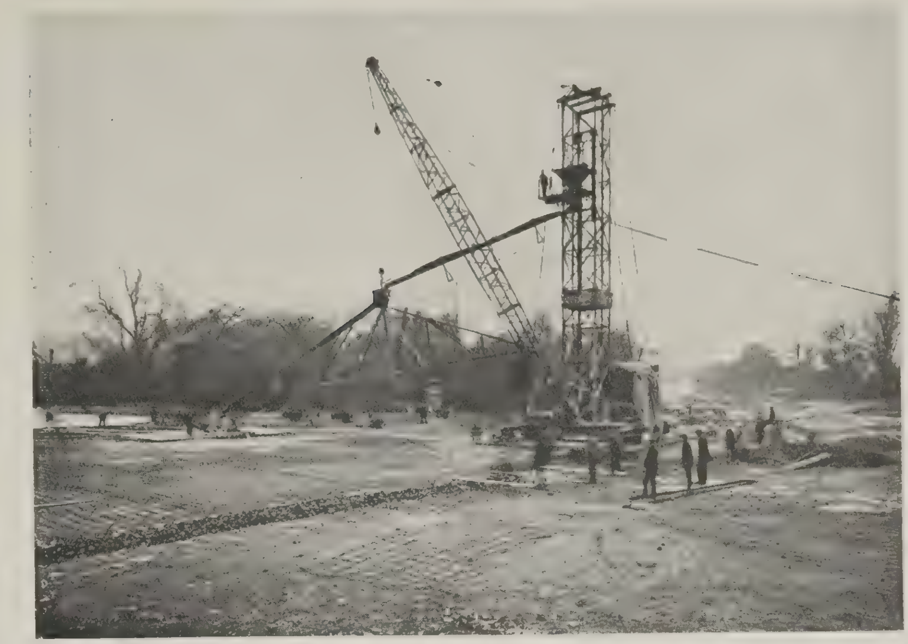
# New Concrete Bed for St. James's Park Lake



A CONCRETE DISTRIBUTING TOWER AT WORK IN ST. JAMES'S PARK.

Constructional work in the heart of a great city is always a matter of interest to the public, who are attracted alike by the progress of the operations and by the modern methods of construction adopted by the large contractors of to-day. The work now in hand at St. James's Park, Westminster, where the bed of the great lake is being re-laid with reinforced concrete, is a typical instance, for here can be seen in use two mammoth steel towers up which the concrete is hoisted and distributed by means of enormous chutes over a wide area with a consequent great saving in time and labour.

The area of the lake is 54,000 sq. yds. After the water was drained off the old bed was broken up by compressed air plant and consolidated by steam-rollers ready for laying the new bed on top. The thickness of the new bed is 4 in., and the amount of concrete required is about 6,000 cu. yds., and the amount of steel reinforcement about 200 tons. About 800–900 sq. yds. of concrete 4 in. thick, requiring about 130 tons of gravel, 90 tons of sand, and 50 tons of cement, are being laid per day, and it is anticipated that the bed of the lake and all the other work connected with the contract will be finished in July.

In the old days all this concrete would have been mixed by hand on boards and wheeled in and deposited by barrows, and quite an army of men would have been required; but in these days, when minimum cost and maximum speed of execution are just as essential as maximum efficiency, the up-to-date contractor has perforce to adopt the use of modern labour-saving and work-expediting equipment.

In this case the contractors are Messrs. Wilson Lovatt and Sons, Ltd., of Wolverhampton, an old firm of public works contractors, whose name is well known in connection with the carrying out of many large undertakings, including railways, docks, maritime, water and other works at home and abroad. During the war Messrs. Lovatt constructed several large explosive factories and army encampments and aerodromes for the Government.

The steel tower equipments now being used in St. James's Park are made by the Ransome Machinery Co. (1920), Ltd., 14–16 Grosvenor Gardens, London, S.W.1, who, we understand, have also supplied many other similar and even much larger equipments. That supplied to the Mersey Dock and Harbour Board—which includes five mixers and five steel towers 160 ft. high, with chuting 150 ft. long—is probably the largest equipment of its kind in the world.

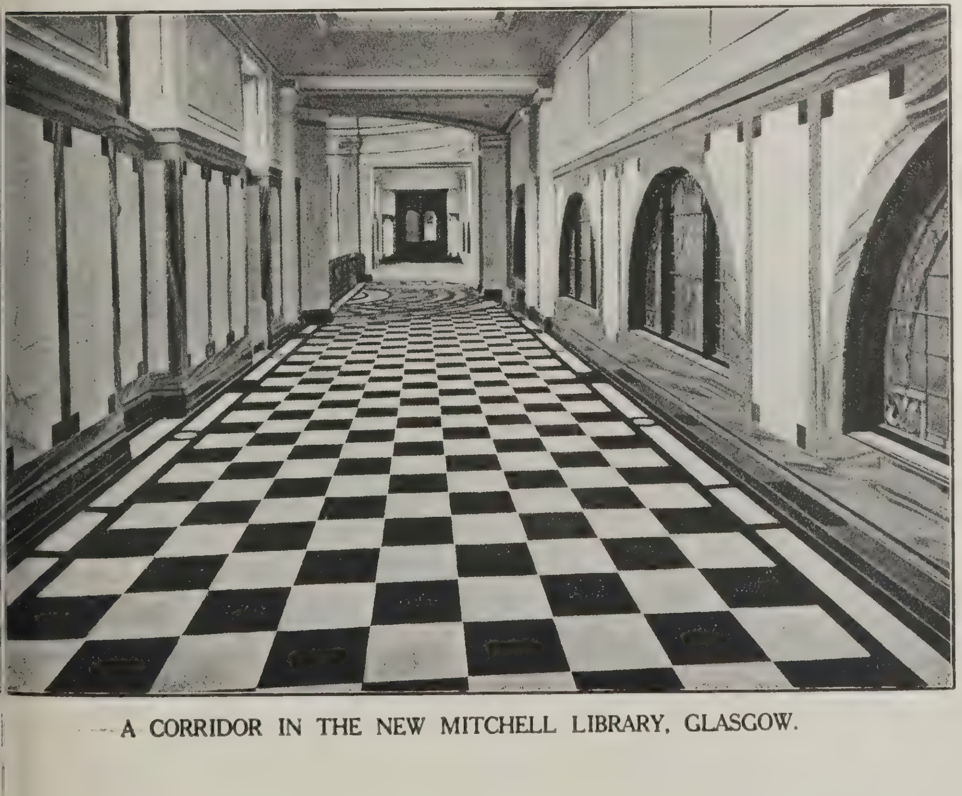
The Ransome towers in St. James's Park are at present only 60 ft. high, but they are capable of extension to 200 ft. high. The present working radius of the chutes is 100 ft., and if the height of the towers were increased, the length and radius of the chuting would also be increased. The object of this equipment is, of course, to save time and labour in distributing the mixed concrete over a wide area from one mixing point. Two tower equipments are in use, one at each end of the lake bed, and they are mounted on gauge wheels and track so that when the concrete is laid within the whole radius of the chuting the towers, without dismantling, are wheeled to the next part of the bed that requires laying.

# Trade and Craft

*Silent Rubber Tiling.*

The accompanying illustration shows one of the corridors of the new Mitchell Library, at Glasgow, in which the $\frac{3}{8}$ in. silent rubber tiling of Messrs. George MacLellan & Co., Ltd., of Glasgow, was laid. The architect was Mr. William B. Whitie, F.R.I.B.A. The specification required 25 per cent. pure rubber of the best grade, and at the time the floor was laid, owing to the high cost of raw rubber, it made the floor a costly one and of better quality than at that time was usual. Considerably over 4,000 sq. ft. of tiling was laid. Since that time, however, owing to the low price of crude rubber, floorings supplied to-day have as a rule a considerably higher rubber content. The percentage of rubber, however, is not the only matter of importance; the degree of vulcanization, the nature of the compounding ingredients, and other hardening or toughening chemicals affecting the rubber and so on, all require to be taken into account. In this way those firms who have made rubber floorings for any length of time have eliminated the mixings which have proved in wear and by tests of a special nature unsatisfactory.

The firm have laid silent rubber tiling during the past forty years on a very large number of steamships travelling all parts of the world, and it is claimed to have withstood tropical heat successfully. Probably the largest area of rubber flooring ever laid in any one building was in the Liverpool Cotton Exchange. This



A CORRIDOR IN THE NEW MITCHELL LIBRARY, GLASGOW.

was laid by the firm with 16 in. square black and white tiles. The total area was nearly 6,000 sq. ft. The s.s. "Cameronia" had an area of almost 9,000 sq. ft. laid by the firm with tiling. Since the war contracts have rapidly increased. Architects and owners alike of offices, cinemas, hotels, and private houses have realized that rubber tiling has much to commend it. Tiling in bathrooms, lavatories, and billiard rooms of private houses, and rubber carpeting are other specialities of the firm. The head offices of the company, which was established in 1870, are at the Glasgow Rubber Works, Maryhill, Glasgow. The company are contractors to the Admiralty, War Office, Post Office, Crown Agents to the Colonies, London County Council, and other public bodies.

### *The Relay Automatic Telephone.*

A new booklet entitled "Notes on Telephone Economy and Efficiency" has just been issued by the Relay Automatic Telephone Co., Ltd., of Marconi House, Strand, W.C.2. In the "Relay" system, relays alone are used for the purposes of all operations without any additional mechanical apparatus. It is claimed that it is due to this fact that simplicity, reliability, and economical maintenance are obtained, all of which are so essential to an automatic telephone plant which must be left unattended if it is to be suitable for the business or professional man.

The "Relay" system is supplied in the two types, the P.A.X. and the P.A.B.X. The P.A.X. type is a private automatic exchange dealing only with telephone service between various departments and works, including branches or outlying depots requiring inter-communication with head office and other departments. With this type automatic service can be obtained between the chief departments and any sub-departments in the same town or district, or between head office and branches in other adjacent towns. The installation operates quite independently of the public service. The P.A.B.X. type gives an automatic inter-departmental service between all departments and outlying branches, and the same automatic instrument can also be used for obtaining connection to the public exchange service. No operator is required in connection with the internal or branch calls, but it is necessary for an operator to deal with all calls in and out from the public exchange, because, as will be readily appreciated, incoming calls must be dealt with by an operator so that they reach the proper official, whilst the operator serves to prevent the public exchange service being used for unauthorized calls outwards, and can also check toll and trunk calls.

### *Anderson's Building Specialities.*

Every building in construction admits of one or other of the specialities of Messrs. D. Anderson and Son, Ltd. These specialities are the subject of a booklet, "For House and Factory Construction," just issued by the company. There are many kinds of roofings, dampcourses, sarking and lining felts, hair felts, all of which have their particular advantages, the well-known Belfast (lattice-girder) roof, wood preservatives, insulating paper, and anti-corrosive paint. Full particulars are given of the various materials, and the uses to which they can be put. Copies of the booklet may be obtained from the company at Park Road Works, Stretford, Manchester.

### *Sanitary Appliances.*

Messrs. O'Brien Thomas & Co. have issued a new edition of Catalogue No. 44, dealing with their sanitary section. It contains illustrations and the latest prices of high-grade sanitary goods for all classes of property. In addition to those shown in the catalogue the firm stock many goods of exclusive design, and these can be seen at the showrooms of the company, 17 and 18 Upper Thames Street, E.C.4. Here the goods are artistical arranged with their component parts, ar are carefully classified to facilitate sele tion. The model bathrooms are fitte up with every modern requirement an contain all the latest labour-savir devices. The saving of time secured t this arrangement should be appreciate by architects when introducing the clients.

### *English Oak and Walnut.*

English oak and walnut and their appl cation is the title of an interesting illu trated booklet which has just been issue by Messrs. John P. White and Sons, Ltd of the Pyghtle Works, Bedford. Bedfor lies in the midst of the best oak-growin district in the country. The oaks c Ampthill, only a few miles away, ar famous as one of the oldest pieces c woodland in England. The Pyghtl Works are conveniently situated fo getting together a fine collection c English oak, and the stock in the yard of all sizes and ages, represents man years of careful selection. Some of th oak in the yards at the works has bee cut into boards for over sixty years English walnut has been very muc neglected in the past, and it is only i recent times that architects have realize the beautiful grain and colouring of th wood when used in panelling, fittings, an furniture. Formerly, in the days o Queen Anne, a good deal of the furnitur of that period was made in walnut, fo the most part used from the butt end o the tree and in the form of veneers. Th firm have had an experience extendin over many years of both English oak an English walnut, and they have laid dow stocks which they are constantly re plenishing to meet all demands for thes woods for panelling, fittings, and furni ture. Many illustrations are given o work in the firm's English timbers carrie out to the designs of many well-know architects. The London showrooms o the firm are at 123 New Bond Street.

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# The Week's News

### *£1,140,000 on City Housing Schemes.*

The total amount expended by the City of London Corporation on their housing schemes is now £1,140,000.

### *Sir Henry Wilson Memorial.*

A memorial to the late Sir Henry Wilson has been erected in the chapel of the Royal Military College, Sandhurst.

### *New Baths for Paddington.*

Paddington Borough Council have accepted a tender of £84,999 for new baths and washhouses.

### *Gate of Memory for Epsom.*

A gate in memory of the Public Schools Battalion billeted in Epsom is to be built at the entrance to Epsom's war memorial.

### *Municipal Engineers' Conference.*

The Institution of Municipal and County Engineers are holding their fiftieth annual general meeting and conference in the Town Hall, Leeds, from June 27 to 30.

### *New Bank for Bradford.*

An Anglo-South American bank is being erected in Market Street, Bradford. Messrs. W. J. Morley and Son, FF.R.I.B.A., of 269 Swan Arcade, Bradford, are the architects.

### *Housing at Conisborough.*

The Conisborough Urban District Council have been encouraged by the new Housing Bill to revive their original scheme for 240 parlour houses. These they estimate can now be erected for £110,000.

### *Bournemouth's New Promenade.*

The Ministry of Health have granted the application of the Bournemouth Corporation for sanction to borrow £53,500 for constructing a marine promenade running half a mile eastward from Boscombe Pier.

### *New Manchester Offices.*

A number of leading Manchester architects are to be invited to submit plans for a new building to be erected on the site of the Edinburgh Life building in Cross Street. The new building will consist of office and shop property. Professor C. H. Reilly will act as assessor.

### *L.C.C. Plans for 16,000 Houses.*

The London County Council propose to provide 16,000 houses in the next two years. Six thousand will be erected by the L.C.C. itself on its own sites, and the remaining 10,000 by private builders, with the financial help of the Council, as provided for by the Housing Bill.

### *Degas Statuettes for the Nation.*

The two bronze statuettes by Degas, recently purchased by the National Art Collections Fund, have been deposited on loan at the Victoria and Albert Museum, and are now on view there in Room 64 at the entrance to the offices of the Department of Architecture and Sculpture.

### *Hull Baths Scheme.*

The Hull Corporation Baths Committee have decided to recommend the Council to adopt a scheme for the provision of hot air and vapour baths at the Beverley Road baths, slipper baths and washhouses in St. Paul's Street, and cottage baths in Albert Avenue, at an estimated cost of £33,000.

### *Canford School.*

Canford, the new public school housed in Canford Manor, formerly the Dorset residence of Lord Wimborne, has been opened. The building was erected about 100 years ago. The interior decorations, including splendid panelling, have been left nearly intact. About 130 acres of the beautiful park have been secured for school purposes.

### *The late Mr. E. Keynes Purchase.*

We regret to record the death, on May 4, of Mr. E. Keynes Purchase, F.R.I.B.A., senior partner in the firm of E. Keynes Purchase and Roland Welch, of 20 and 22 Maddox Street, London, W.1, architects. He became a Fellow of the Royal Institute in 1906. In future the business will be carried on by Mr. Roland Welch, A.R.I.B.A., under the title of E. Keynes Purchase and Roland Welch.

### *Scarborough Aquarium.*

The Scarborough Town Council have decided, subject to Ministerial sanction, to purchase the Aquarium premises for use mainly as medicinal and other baths. The building, which has been described as "three acres of superb Indian architecture," has been closed for eight years. It was erected in the 'seventies at an initial cost of £110,000, apart from the site, which remained the property of the town.

### *The late Mr. F. T. Callcott.*

We regret to announce the death of Mr. Frederick Thomas Callcott, the sculptor, in a nursing home at Hastings. He was born at Newcastle Street, Strand, in 1854. Educated at St. Clement Danes Grammar School, he started life in a solicitor's office, at the same time studying at St. Martin School of Art. Later on he went to the Royal Academy School, gaining their gold medal for sculpture in 1879. He was a frequent exhibitor at the Royal Academy.

### *Housing at York.*

The survey of houses made by the York Corporation at the end of 1919 showed the need of 300 houses to relieve the overcrowding, 400 to replace unfit and unsatisfactory houses, and 550 for persons displaced by the clearance of unhealthy areas. The scheme submitted to the Ministry of Health was for 950 houses. The City Council had been authorized to build 228 houses under the State-assisted scheme, of which 201 had so far been completed.

### *Housing Progress in Scotland.*

The following figures show the progress that has been made in State-aided housing schemes in Scotland to April 30, 1923; Permanent houses completed, 16,522; temporary houses completed, 665; reconstructed houses completed, 101; houses completed under the private subsidy scheme, 2 245; total 19,533. There are 4,503 houses at present under construction in connection with housing schemes carried out by local authorities and public utility societies. The total amount paid by the Scottish Board of Health in respect of the 2,245 houses completed under the private subsidy schemes is £541,540.

### *Big Stores Demand Higher Buildings.*

The need for higher buildings and a more beautiful London was expressed by Mr. John Lawrie, of William Whiteley, Ltd., at the annual meeting of the Incorporated Association of Retail Distributors, which embraces all the big British departmental stores. It was not, he said, the fault of the great stores in London that their buildings were not higher and more beautiful, but the fault of the municipal authorities, who combined together to restrict the size of the buildings.

### *University of London School of Architecture.*

Two entrance exhibitions to the University School of Architecture of the value of £40 each may be awarded. One is open to graduates of a British university or some other university approved by the selecting committee; the other to candidates who pass the matriculation examination of the University of London, or some other examination accepted in its stead. Applications must reach the secretary of University College before May 30.

### *Municipal Contracts.*

The Government have decided that, as regards all works in respect of which grants are given to municipal authorities expressly because of unemployment by the Unemployment Grants Committee or by any Government Department it shall be a condition of the grant that all contracts for or incidental to the works are to be placed in this country. This follows a similar condition with regard to schemes in respect of which guarantees are given under the Trade Facilities Act. The Government also urge that in view of present conditions the same principle should be adopted in the absence of special circumstances in the case of all contracts in respect of works carried out by local authorities whether or not the expenditure on the works is assisted by grants from the National Exchequer or from the Road Fund. A circular on this subject has just been issued by the Ministry of Health.

### *The Liverpool Architectural Society.*

The annual report for the past year of the council of the Liverpool Architectural Society (Incorporated)—the premier provincial architectural society—is a record of much useful work. During the year the council have been in constant communication with the R.I.B.A. and the Liverpool Master Builders' Association on many matters affecting the profession, and the sessional meetings have been notable for the interesting papers on a large variety of subjects read by well-known architects. There were also the usual annual general meeting, special meetings and visits. On March 6 a dinner was held to commemorate the seventy-fifth anniversary of the formation of the society. The present membership of the society consists of fifty-nine Fellows and fifty-nine Associates, a total of 118, and in addition there are four hon. Fellows, thirteen hon. Associates, and thirty-one students. Efforts are being made by the council to organize the district more fully to increase the membership and influence of the society.

## Competition News

*Kingston-upon-Hull Art Gallery.*

In the new art gallery for Kingston-upon-Hull—in connection with which a competition has been promoted by the City Council—it is desired to provide sufficient wall space to exhibit the present collection of the city and such temporary collections as may be arranged for from time to time. Both collections comprise paintings in art and water-colour, and engravings. Competitors are also invited to suggest arrangements for exhibiting works of sculpture in a separate gallery or in conjunction with the paintings.

The art gallery will not be used for ceremonial receptions or entertainments. The other accommodation required includes lavatory accommodation for men and women, office for the curator, with private w.c. and lavatory, porter's box at entrance, good space for receiving, unpacking, and repacking works of art, and a small workshop. The galleries may be disposed on two floors, and special consideration must be given to both daylight and artificial lighting. The primary consideration is the exhibition of works of art rather than the architectural proportion or embellishment of the galleries.

Mr. John W. Simpson, PP.R.I.B.A., is the assessor, and premiums of £1,000 and £500 will be awarded to the authors of the designs placed respectively first and second.

Each design submitted must comprise the following drawings and information:—

A. A plan of each floor to a scale of $\frac{1}{8}$ in. = 1 ft.

B. An elevation of the north, south, and east fronts to a scale of $\frac{1}{8}$ in. = 1 ft.

C. A longitudinal and a transverse section, to a scale of $\frac{1}{8}$ in. = 1 ft. Additional sections may be submitted if required to fully illustrate the design.

(*Note.*—Sizes and heights in clear of rooms must be figured on the plans and sections respectively.)

D. At the option of competitors, a sheet not exceeding double-elephant size of any details the competitor may wish to specially illustrate.

E. A concise descriptive report on the design, with a schedule of the accommodation given, showing (*a*) the floor areas, and (*b*) the number of feet lineal provided for hanging pictures. A short specification of the materials to be used must accompany the report.

F. An estimate of the cost of executing the design; complete and ready for occupation, excluding professional fees, clerk of works' salary, and any furniture or fittings. Drainage, electric wiring, heating, ventilation, gas tubing, sanitary fittings and all permanent decoration must be included in the estimate.

(*Note.*—The sum at the disposal of the City Corporation for the purposes of the work above specified is £52,000, which sum cannot be exceeded.

It is therefore of the first importance that the estimate should be prepared and shown in such a way that the assessor may satisfy himself as to its accuracy. An estimate based on the cubic contents only will not be accepted as satisfactory.)

G. With the foregoing drawings and documents must be enclosed the printed envelope supplied to competitors.

H. The omission of sheet D will not influence the judgment of the assessor. No models or perspective views will be received; but competitors may, if they wish, show geometrically projected shadows on the elevations and sections. Drawings A to D may be prepared in any way the competitors may prefer, but elaborate draughtsmanship is not desired. All plans must be drawn with the north side uppermost. It is requested (but not required) that all drawings be mounted on plain strainers without frames or borders. For convenience of examination, wide margins to strainers should be avoided.

Applications for the conditions should be made, with a deposit of £2 2s., to Town Clerk, Guildhall, Hull, Yorks. The closing date is November 5.

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## Competition Award

*Ossett War Memorial.*

Mr. H. S. Chorley, the assessor, has made the following awards in the competition promoted by the Ossett Corporation for designs for a war memorial:—

First: Mr. F. W. D. Jones, 2 Wentworth Studios, Manresa Road, Chelsea.

Second: Mr. N. A. Trent, 1 Beaufort Street, Chelsea.

The winning design will be illustrated in our next issue.

(*For List of Competitions Open see last issue.*)

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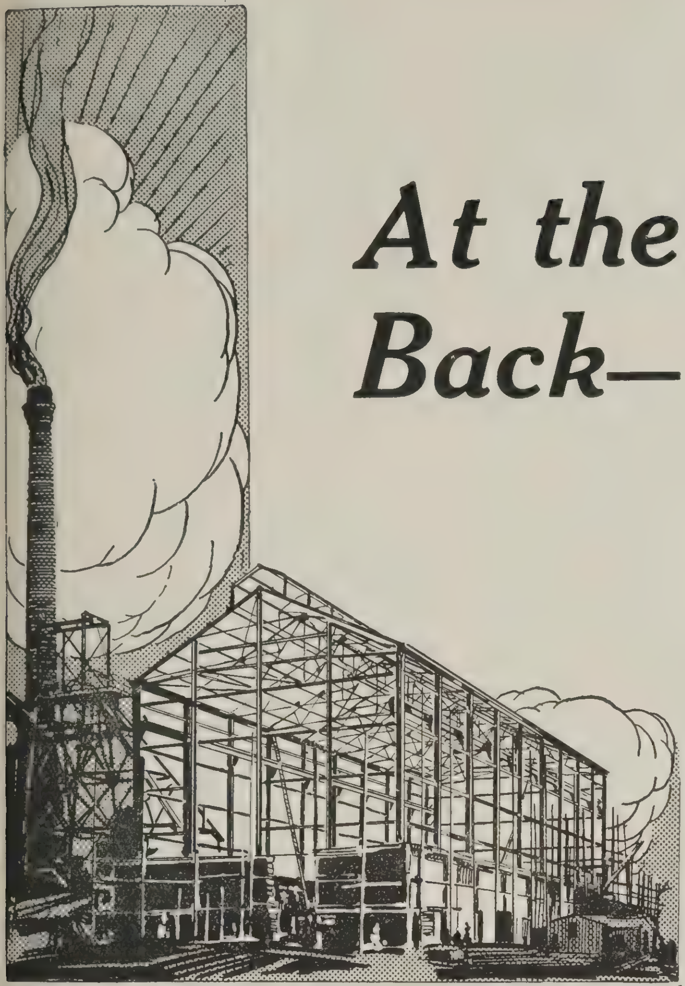

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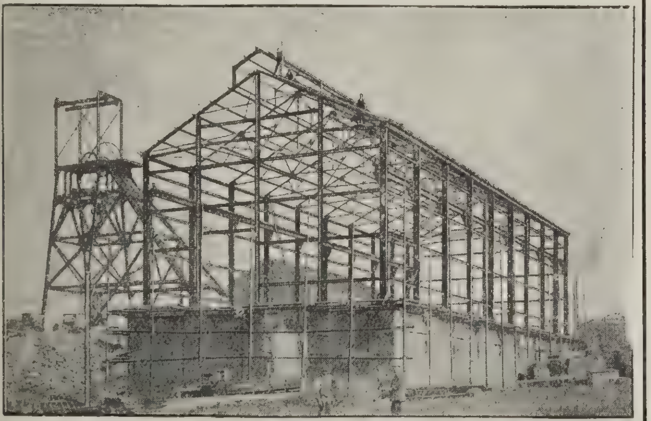

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# Trade and Craft

### *B.R.C. Roads.*

The British Reinforced Concrete Engineering Co., Ltd., of Manchester, have just received a contract for B.R.C. Fabric Reference No. 9, in connection with the reconstruction of Amhurst Road tramways, for the London County Council. The contractors are Messrs. W. Griffiths & Co., Ltd., of London.

### *Galvanizing and Electro-Plating.*

The current issue of "A Thousand and One Uses for Gas" (No. 110) deals with galvanizing and electro-plating and contains particulars and photographs of some modern installations which should be of interest to all engaged in the metal industry. We understand that copies of this publication can be obtained free of charge by manufacturers and others interested in these processes on application to the Secretary, The British Commercial Gas Association, 30 Grosvenor Gardens, S.W.1.

### *The Automatic Telephone Exchange for Britannic House.*

Britannic House, the new head offices of the Anglo-Persian Oil Company, now being erected in Finsbury Circus, London, from the designs of Sir Edwin Lutyens, R.A., will have an inter-departmental telephone system of the most modern type. It will, we understand, be the largest private automatic telephone exchange in London. The apparatus is being manufactured and will be installed by the Relay Automatic Telephone Co., Ltd., of Marconi House, London. It will consist of an exchange of 240 lines, capable of extension to 500 lines at any time without disturbing the existing service. The "Relay" system requires the running of only two wires in lead-covered cables. The essential value of the system lies in the speed with which it effects its connections, in its reliability, and in its secret service. Its automatic principle eliminates the human operator and it is claimed to ensure prompt and correct connections, recommending it for this form of inter-departmental communication.

### *Industrial Lanterns.*

Messrs. Simplex Conduits, Ltd., of Garrison Lane, Birmingham, have issued a new catalogue dealing with their industrial lanterns, steel reflectors, &c. The company's lanterns and reflectors are made in a number of designs, each adapted for its own particular purpose, and whilst strictly conforming with the high standards necessary for the economical and efficient lighting of streets, mills, factories, yards, etc., are also strictly competitive in price. The entire ranges of these watertight or weatherproof fittings are made throughout at the Birmingham works of the company, and are scientifically designed and constructed to ensure correct and even illumination over any desired area.

### *New Electrical Contracts.*

The following contracts have been secured by Messrs. Jackson and Boyce, Ltd., of 19 Berners Street, W.1: complete electric lighting and power plant for "Fraryhurst," Prinsted, near Emsworth, Havant; wiring of Messrs. Ciro Pearls, Ltd., new premises, 178 Regent Street, W.; lighting of "Broadheath," Wimbledon Common for the General Purposes Committee of the United Services Fund; and of the new premises in Duke Street, Oxford Street, W., for Messrs. Louise & Co., Ltd. (architect, Mr. Henry Tanner, F.R.I.B.A.).

### *British Cement in Hayti.*

An opening is reported by the Department of Overseas Trade, 35 Old Queen Street, London, S.W.1, for the sale of cement in Hayti, West Indies. Reference D.O.T. 7476/FL/MC should be quoted in correspondence with the Board.

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# Coming Events

### *Wednesday, May 23.*

Edinburgh A.A.—Visit to Falkland Palace. Leader, Mrs. Reginald Fairley.

Royal Sanitary Institute.—"How the Organization of Danish Agriculture has affected the Hygiene of the Nation." 6 p.m.

### *Thursday, May 24.*

Inst. Structural Engineers.—Special General Meeting, 7.30 p.m.; Annual General Meeting, 7.45 p.m.; Ordinary Meeting, 8.15 p.m.

### *Saturday, May 26.*

A.A. Visit to Long Crendon Manor.

### *Monday, May 28.*

R.I.B.A.—"Building Heights and Ancient Lights." By Mr. Delissa Joseph, F.R.I.B.A. 8 p.m.

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*Report of Departmental Committee on Industrial Paints, of which the Chairman was Sir Henry Norman, Bart., M.P., and which included Alan Munby, Esq., F.R.I.B.A., and H. O. Weller, Esq., M.Inst. C.E., Hon. A.R.I.B.A.*

White Lead Paints

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# Trade and Craft

### *A New Reinforced Plywood.*

Samples of "Plymax," a new reinforced ywood, have been sent us by Messrs. enesta, Ltd. It is a combination of ood and metal in the form of flat sheets. he wood core or centre is a very lighteight plywood, acting as a spacer or stance piece, to which the metal faces light gauge steel sheet are firmly emented by a special process. The acing of the metal faces on either side the plywood gives the material great iffness, in fact it is probably the stiffest nown form in which flat sheets can be roduced for a given weight. The aterial offers to the passage of heat or ld a resistance similar to that of wood, nd it is claimed to be fire and decay esisting, free from noise due to vibration, nd not appreciably affected by temperaure changes up to 212° Fahr. It is made standard sizes, and is particularly uitable for many purposes in buildings nd on board ship, in vehicle construction, engineering, and for containers, such cinema film boxes, etc. The address the manufacturers is No. 1 Great ower Street, London, E.C.3.

### *The Trades Training Schools.*

The judging of exhibits of students' ork for the past session took place ecently at the Trades Training Schools f the Worshipful Company of Carpenters nd Associated City Companies, 153 reat Titchfield Street, W.1. Mr. Charles enny, the Master of the Worshipful ompany of Carpenters presided over e meeting, and the chairman of the chools Committee, Mr. Frederick Sutton, P., attended, as did also the gentlemen ppointed to judge the work, including ir George Frampton, R.A., Sir Goscombe ohn, R.A., and Messrs. E. Guy Dawber, R.I.B.A., Arthur Keen, F.R.I.B.A., nd H. D. Searles-Wood, F.R.I.B.A. he judges formed the opinion that there as a distinct improvement in the xhibits in number and quality over the ork of the previous session. The arpenters', joiners', electricians', masons', nd stone carvers' classes, the life class, nd wood carvers' class, all under the ontrol of the Carpenters' Company, have urned out excellent work. The plumers' class, in particular (now under the uspices of the Worshipful Company of ewterers) had a large number of exibits, while the classes under the control f the Worshipful Companies of Armourers nd Braziers, Glaziers, Tylers and Bricklayers, Plaisterers, Painter-stainers, and Vheelwrights each produced work which alled forth high commendations from he judges. The prizes awarded by the udges will be distributed at Carpenters' Iall in the early part of next session, fter the schools re-open on September 24.

### *A Leaky Swimming Bath.*

With regard to the enquiry published nder the above heading on page 905 of ur last issue, Messrs. Kerner-Greenwood Co., Ltd., of King's Lynn, write: The ase is similar to one upon which we had ccasion to advise some seven years ago. Ve refer to the Public Swimming Baths, ara Street, Dublin, where two of the wimming baths leaked at the rate of pproximately 9,000 gallons in twentyur hours. The tiling was removed, and after the old concrete was hacked and prepared, a rendering to a thickness of $1\frac{1}{4}$ in. was applied in four coats. The mortar was mixed three and one with 5 lb. of "Pudlo" brand waterproofer added to every 100 lb. of cement, and the tiles were refixed when the rendering had set. The baths were thus made perfectly watertight, and they remain so.

In the case of the bath mentioned in your columns, the leakage seems to be principally in the bottom, and a careful examination should show whether it is the result of cracks due to subsidence. Settlement would be shown either by cracking of the tiles or opening of the joints. If the cracks are large the trouble might be remedied by enlarging the cracks and then making good with waterproofed cement. As a final resource, the treatment which answered so well at Dublin could be adopted, and there would, in that case, be no great necessity to treat the surface of the waterproofed cement either by painting or by the application of tiles. Owing to the fact that waterproofed cement cannot be saturated, it retains its bright colour when wet.

### *Electrically Illuminated Signs.*

Messrs. Simplex Conduits, Limited, of Garrison Lane, Birmingham, have sent us a copy of their booklet No. 980, which conveys a very fair impression of the company's ability to produce any description of electrically illuminated signs—inside or outside—for either window or show-room purposes. The manufacture of signs has extended over practically a quarter of a century and has always occupied an important position in Simplex activities. During the last few years, however, the increased demand has been such as to necessitate large extension of the departments concerned. Leading manufacturers of branded and proprietary articles of almost every sort have readily recognized the economical advertising value these signs offer, and to-day very large quantities appear on the premises of their agencies and branches.

### *B.R.C. Fabric.*

B.R.C. Fabric has been greatly in evidence in the streets of London. During a recent fortnight it had been used in the Strand, High Holborn, Westbourne Grove, Paddington, Kennington Road, Lewisham, Oxford Street, Montague Street, and Houndsditch. B.R.C. Fabric is made by the British Reinforced Concrete Engineering Co., Ltd., of Manchester.

### *Electrical Contracts.*

The following contracts for electric lighting have been secured by Messrs. Jackson & Boyce, electrical engineers, of 19 Berners Street, W.1: The Nurses' Quarters, The Hospital for Women, Soho Square, W.; Architect, Arthur T. G. Harbour. Two houses in Church Street, Chelsea, S.W.; Architects, Williams and Cox.

### *The Super Interoven.*

A particularly interesting exhibit at the Ideal Home Exhibition was the new super Interoven—an old friend in an enlarged and improved form. Capable of cooking for fourteen people, the super Interoven is fitted with a large oven, two hot closets for plate warming and light cooking, one on either side of the oven, and two lower hot closets for use when the stove is converted into an open fire. The boiler will work a fifty-gallon cylinder, and the makers state that three or four radiators can be run off it. If the stove is required without a boiler a firebrick back is provided. The super Interoven is manufactured by the Interoven Stove Co., Ltd., 156 Charing Cross Road, W.C.2.

### *A New Concrete Mixer.*

A new concrete mixer of an ingenious type which does away with much waste time and energy has just been placed on the market by Winget Ltd. With other wet mixers, as is well known, a special apparatus is necessary to take up the unmixed material every time a fresh batch is needed, lowering it again as soon as it is mixed—like the Duke of York who marched his men up the hill only to march them down again. All this is unnecessary with the "Winget" 4 cub. ft. "Semi-Spiral" wet concrete mixer, which takes the material at an extremely low charging point, mixes it scientifically and thoroughly as it travels up the inclined drum, and discharges straight on to the job or directly into a barrow. Compact and portable the "Semi-Spiral" takes every size of aggregate, and is claimed to produce a good wet mix in a short time. The mixing drum, which is of steel throughout, is constructed in halves, and fitted with internal blades and discharge buckets. One half is hinged for periodical cleaning purposes. The mixer is operated by a 2 h.p. petrol engine, is 6 ft. 7 in. in length, 6 ft. 10 in. in breadth, and 5 ft. 4 in. in depth, and has a capacity of from 8 to 10 cubic yards per hour.

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# New Inventions

### *Latest Patent Applications.*

12054.—Clare, G. E.—Building-blocks. May 4.
11694.—Dale, D.—Concrete structures. May 1.
11875.—Elgood, E. J.—Walls, etc. May 2.
12101.—Hay, W. G.—Assembly of partitions, frameworks, etc. April 30.
11629.—Herrara, M.—Staircases. April 30.
11660.—Lumb, E.—Building-blocks. May 1.
11801.—Pickstone, C.—Manufacture of mortar, artificial stone, etc. May 2.
11960.—Stedman, A. G.—Walls. May 3.
12697.—Dott, A. S.—Roofing tiles. May 11.
12509.—Ferneyhough, J.—Reinforcement for concrete slabs, etc. May 10.
12212.—Heyl, G. E.—Road material. May 7.
12577.—Mannell, C. J.—Machinery for manufacture of concrete posts, channelling, etc. May 10.
12348.—Russell, G.—Means for ornamenting glazed panels of doors, windows, etc. May 8.

### *Specifications Published.*

196687.—Logan, E. J.—Concrete casings for structural steel and other members.

196693.—British Metal Spray Co., Ltd., and Gillespie, W. M.—Method of providing objects with a sprayed protective coating.

196769.—Anderson, W.—Means for preserving stone, brick, and like work.

196823.—Attwater, A. H. — Concrete building-block.

196847.—Dodd, W. M.—Building-blocks.

196863.—Thee, A.—Building-blocks or slabs.

*Abstracts Published.*

194469.—Walls.—Lowry, H., Huntley, Greenisland, Belfast. — Each course in a wall is built with channelled blocks forming internal flues, which communicate with the fireplaces and with each other throughout the wall. The blocks are formed with a channel on the underside and with vertical apertures. A key at one end of the top face and a recess at the other end lock the blocks together. Quoins and half blocks are similarly formed, and sills and lintels have the channels only. The blocks around door and window openings are revealed to take the frames.

195115.—Blaw-Knox Co., 5th Avenue, Pittsburg, U.S.A.—In shuttering comprising a plurality of mould panels secured together by liners, the horizontal liners are secured to the panels by removable hooked clips each of which engages the panel flanges by a hook and have a recess to receive the liner. The liner is retained in the recess by a wedge entering a slot in the clip, and by a lip on the clip. The vertical liners are secured to the horizontal liners by removable clips having recesses to receive the liners which are secured therein by wedges. The liners may be arranged in overlapping relationship on the panels. The tie rods for the two sides comprise slotted taper flat bars secured by wedges which may also serve as yokes.

The above particulars are specially prepared by Messrs. Rayner & Co., registered patent agents, of 5 Chancery Lane, London, W.C.2, from whom readers of the JOURNAL may obtain all information free relating to patents, trade marks, and designs. Messrs. Rayner & Co. will obtain printed copies of the published specifications and forward on post free at the price of 1/6 each.

## Popularizing Architecture in New Zealand

According to the January issue of the "Journal of the New Zealand Institute of Architects," there are undoubted signs in the actions of public bodies and private individuals that a greater measure of general recognition is being afforded to the profession. This is noticeable as regards both the architects individually and the Institute as a representative body. Action is now to be taken to further increase that recognition. It is thought that probably the most valuable of the means of publicity is that of suggesting reforms and giving advice on general matters in the public interest. As in this country the architects of New Zealand have as a body been too prone to leave public affairs which intimately concern the profession in the hands of men who do not understand the principles at stake. Other suggested means of aiding the public to arrive at a keener appreciation of the true functions of an architect are by public lectures on architecture, exhibitions of drawings and models, and conferences with committees of local bodies, other kindred institutions, representatives of the building trade, and manufacturers. It is truly stated: "when it is observed by the general public that an architect is not a mere canvasser for big commissions, so soon will the public render him that respect and attention which are his due."

## Institution of Structural Engineers

At a special general meeting of the Institution of Structural Engineers, the result of the election of the new Council, which comes into office on the 1st September, 1923, was declared as follows:—President: Major James Petrie, O.B.E., M.Inst.T. Vice-Presidents: Mr. H. J. Deare, M.Inst.C.E.; Dr. J. S. Owens, B.A., F.R.G.S., A.M.I.C.E.; Dr. Oscar Faber, O.B.E., A.M.Inst.C.E.; Sir Charles T. Ruthen, O.B.E., F.R.I.B.A. Hon. Secretary: Mr. M. E. Yeatman, M.Inst. C.E. Hon. Editor: Mr. H. Kempton Dyson. Hon. Curator: Mr. W. A. Green, M.A., B.Sc., A.M.Inst.C.E. Hon. Librarian: Mr. Ewart S. Andrews, B.Sc., A.M.Inst.C.E. London Members of Council—Elected for three years: Prof. Henry Adams, M.Inst.C.E., etc.; Sir Henry Tanner, C.B., I.S.O., F.R.I.B.A.; Mr. B. L. Hurst, M.Inst.C.E. Elected for two years: Mr. D. B. Butler, A.M.Inst.C.E.; Mr. J. Mitchell Moncrieff, C.B.E., M.I.C.E.; Mr. R. W. Vaudrey, B.A., A.M.I.C.E.; Elected for one year; Mr. P. L. Black; Mr. W. J. H. Leverton, F.S.Arc.; Mr. S. Bylander. Country Members of Council—Elected for three years: Mr. F. E. Wentworth-Shields, O.B.E., M.I.C.E. Elected for two years: Prof. F. C. Lea, O.B.E., D.Sc., M.I.C.E. Elected for one year: Prof. T. Hudson Beare, B.A., B.Sc., D.L., M.I.C.E. London Associate on Council—Elected for three years: Mr. J. T. Saunders, F.R.I.B.A. Country Associate on Council—Elected for three years: F. C. Webber. London Associate-Member on Council—Elected for three years: Mr. J. N. Peirce, A.M.I.C.E. Country Associate-Member on Council—Elected for three years: Mr. H. J. Collins, M.C., M.Sc., A.M.I.C.E.

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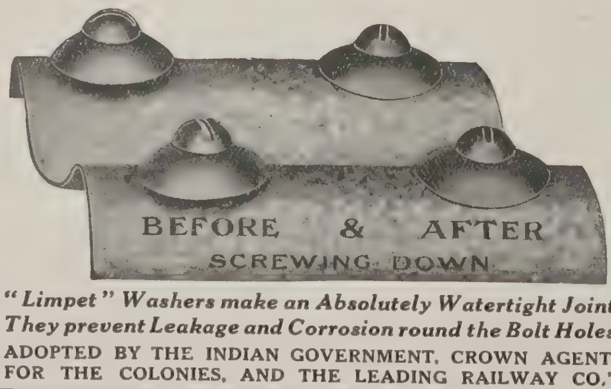

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Agent for Scotland: FRANK G. PRICE & Co., 115 Bothwell St., Glasgow.

# The First Atelier of Architecture

In 1913 a group of architects, impressed ith the lack of system prevailing in rchitectural education in England as ompared with the much more thorough ethods of the French Ecole des Beaux rts and the allied ateliers, founded the irst Atelier of Architecture in London.

The principles for which this atelier ands are as follows :—

Architectural design must be based on e purpose of the building, and the form expression depends on this, qualified national and social aspects. Only ch traditions may be accepted as are opropriate to the national character d local conditions.

The necessity for first analysing the omponents of a building and making the lative importance of these the basis composition is insisted on, and the rangement of the parts having regard site, harmony, orientation, hygiene, rability, proportion, and economy is udied on a logical basis. These studies oke the imaginative faculties and at e same time subject all solutions to the ntrol of a reasoned synthesis.

It was felt that architecture would be ost effectively influenced by inviting ung architects and advanced students join the atelier and take part in the ork, as it is essential to have sufficient embers of tried ability to allow each e to profit by the knowledge of the st, the atelier being a common centre free discussion on principles, methods, nditions, and ways of seeing and ting.

The utmost freedom is allowed as gards modes and times of work with e sole exception that the preliminary udies for each design must be prepared *loge* on a given day. Such designs are rried to completion in the atelier during e following month.

Except during the period of his service the war, the patron was Monsieur P. Chaures (Logiste et Diplomé), whose illiant abilities were a source of in- iration to all the members. On his cision to return to France his place has en filled by Monsieur Hector Corfiato edaillé et Diplomé), and his influence s already been of marked value in the rrying on of the work.

With him are associated Mr. A. J. vis, F.R.I.B.A., Mr. H. V. Lanchester, R.I.B.A., and Mr. L. S. Sullivan, R.I.B.A., F.S.Arc., as a jury to set programme for designs and to adjudi- te on the work submitted.

In its early days the work of the atelier t with marked success, and many of professors now teaching at home and the colonies were active members. ring the war, as might be expected, became almost impossible to carry the normal course, but the organiza- n was kept going, and now, owing to generosity of the Society of Archi- ts, which has always been sympathetic vards the atelier, it has premises pro- led free of cost.

The present chairman is Mr. J. W. npson, Past-President R.I.B.A.

The following are some of the men who ve been associated with the First elier of Architecture :—

Prof. Berrington, L. H. Bucknell, J. P. aures, H. Corfiato, H. Bartle Cox, E. Bourdon, Arthur J. Davis, Alph. Defrasse, L. Faure Dujarric, J. S. Gibson, Chas. H. Gage, J. Godefroy, Stanley Hamp, A. R. Jemmett, Ralph Knott, V. Laloux, H. V. Lanchester, R. Goulburn Lovell, R. Lowry, Sir Edwin L. Lutyens, C. E. Mallows, Lord Methuen, Charles Mewes, E. C. P. Monson, W. G. Newton, J. L. Pascal, C. H. B. Quennell, Lord Riddell, E. A. Rickards, Lord Saye and Sele, L. Sylvester Sullivan, Sir Henry Tanner, A. Templier, Percy B. Tubbs, Sir A. Brumwell Thomas, Bryan Watson, Leslie Wilkinson, and F. Derwent-Wood.

# Manchester and the Private Builder

The nature of the assistance to be offered to private builders under the Housing Bill now before Parliament was discussed by the Housing Committee of the Manchester City Council, and a recommendation was adopted for submission to the Finance Committee. Exactly what the recommendation was did not appear in the official statement made at the close of the meeting. The only indication given was that it followed the lines of a recommendation made by a technical sub-committee of the local authorities represented on what has become known as the Manchester Conference, which has met from time to time under the chairmanship of the Lord Mayor of Manchester. It is understood that the assistance recommended is not less than that which the Leeds authorities have in view—namely, £100 for each house built upon municipal land acquired for house-building. The Leeds offer has already been accepted by one firm, which has undertaken to build up to a thousand houses on those terms if the Leeds City Council should think that desirable; and it is said that two other firms of builders are prepared to give similar undertakings. The subsidy will only be given in respect of houses of the size contemplated by the Government—with a maximum of 950 sq. ft. of floor space; and in no case will it be given where the private builder fails to show that without it there would be a loss on the sale of a house.

# The Accuracy of Artificial Daylight

Mr. P. R. Ord, in reading a paper on the above subject before the annual meeting of the Illuminating Engineering Society, showed how, by the use of the Hilger-Nutting Spectrophotometer, it was possible to compare the spectra of artificial and natural daylight, colour by colour; and how, by a simple attachment, numerical variations in the intensity of daylight during the test could be guarded against. One of the most interesting features of the paper was a series of curves showing how the colour of daylight varied throughout the day. These variations were much greater than was commonly supposed, and indicated that extreme accuracy could scarcely be expected. But, after making allowance for such variations, one could form a fair idea how close to average daylight it was possible to get by artificial means. Mr. Ord exhibited curves for several artificial daylight lamps, in which the departure from daylight in the extreme ends of the spectrum was very marked indeed. But it appeared that there were now some types of units which came very close to the limits of possible accuracy.

# London's New Roads

The new arterial roads in course of construction round London were described in an illustrated lecture at the House of Commons by Major C. H. Brassey, chief engineer to the Ministry of Transport. The total length of road in the schemes in hand was, he stated, 141 miles, and after the completion of these roads there would remain thirty-six miles to be undertaken before the end of the programme was reached. The work under the direct control of the Ministry of Transport was estimated to cost £5,126,735, while sections undertaken by local authorities brought the total up to £9,166,843, of which about half had been spent by March 31 last. On some of the projects work is in sight for another two years. Employment has been provided for about 30,000 men, without counting those engaged in trades stimulated by these enterprises.

In thanking the lecturer, Colonel Ashley (Parliamentary Secretary) described the problem of road transport in and around London as both intricate and pressing. His own feeling was that the new roads were not only urgently necessary, but that much more would have to be done. He looked forward in the near future to an enormous increase in the number of vehicles using the roads, and in twenty years' time the present road facilities for getting in and out of London would probably be so insufficient as to be useless. The problem would have to be faced by the Ministry, with the support of members of the House.

# Trade and Craft

*Some Useful Samples.*

Obviously it is much easier for an architect to recommend the use of any particular building material when he has a sample to show his client. Many clients know little or nothing of building, and it is very difficult for them to visualize what the material will look like when completed. If instead of entering into a long discussion on the advantages of the material a sample can be seen and handled by a client, then he will at once comprehend its æsthetic and constructional effect on the building. These points are fully realized by Messrs. D. Anderson and Son, Ltd., of London, Manchester, and Belfast, who have just issued a box of useful samples—accompanied by brief particulars—of their various specialities. There are Anderson's Stoniflex roofing, sarking and lining felts, "Rok," Anderson's Nos. 1 and 2, and "Anderite" damp-courses, "Sanodor" felt, and a piece of wood treated with "Sidol." The handy colour-palette included in the box should prove a constant reminder to the architect that he has the samples at hand.

*Simplex Industrial Lighting Fittings.*

Messrs. Simplex Conduits Limited, of Garrison Lane, Birmingham, have sent us copies of booklet No. 961 listing a representative range of the company's industrial and street lighting equipment.

The fittings listed are the latest products of the company's twenty-five years' manufacturing experience in this class of work, and consequently are offered with every confidence as to their particular suitability for the respective street-lighting and industrial purposes indicated. The selection shown comprises weather-proof and watertight lanterns of every description, cargo cluster lights, steel reflectors, semi-indirect and bulkhead fittings and a very comprehensive range of lantern accessories and components. All patterns have been designed with a view to obtaining full benefit from the economy in lighting effected by the use of modern gas-filled lamps, whilst at the same time allowing ample provision for ventilation.

### *New Electrical Contracts.*

The following contracts have been secured by Messrs. Jackson and Boyce, Ltd., of 19 Berners Street, W.1 : electric lighting, complete with generating plant for Elm Lodge, Winkfield, near Ascot; wiring for the electric lighting of Wilbraham House, D'Oyley Street, Chelsea (Mr. Oliver Hill, A.R.I.B.A., architect); wiring of 1a Devonshire Place, private house, for Mr. A. C. Tresidder (Messrs. Nicholls and Hughes, architects). The elevations and plans of this building have been accepted by the Royal Academy.

## Miners' Welfare Schemes at Chesterfield

The Hasland and Birdholme Miners' Welfare Committee are to contribute £3,159 towards the proposed baths. The scheme provides for a swimming bath, 75 ft. by 30 ft., and six slipper baths, including a platform to cover the swimming bath during the winter months, and the estimated cost is £6,000. The Town Council is recommended to approve the scheme for the erection of public baths at Storforth Lane on condition that the Welfare Committee pays one-half of the cost, and that the sole management is vested in the Corporation. Work of erection is to be begun as soon as £3,000 is paid to the Corporation.

## New Inventions

### *Latest Patent Applications.*

13905.—Ewart, T. — Concrete block walls, etc. May 26.

13553.—Grenville, P. M. B.—Fire-protection systems for buildings, etc. May 22.

13470.—Lee, A. D.—Protective linings for reinforced concrete chimneys. May 22.

13745.—Palanti, M.—Building-blocks, etc. May 24.

13416.—Scudamore, Q. W.—Sectional house, etc. May 22.

13461.—Springall, W.—Glass roofing. May 22.

### *Specifications Published.*

197423.—Core, A. M.—Means of escape from burning buildings.

197430.—Hiley, A., and Le Bas, E. – Construction of concrete piles or columns.

197584.—Bailey, T.—Method of fastening slates and tiles to roofs.

### *Abstract Published.*

195909.—Building-slabs.—Ryan Manufacturing and Construction Co., Ltd., and Ryan, J., Orion Works, North Strand, Dublin.—Ceiling and partition slabs or building-blocks are formed in a mould comprising a bottom board having fixed borders and a removable border. Slots for receiving a saw or the like are provided and access is given to these by removing the board after the slab has set. These slots enable the slab to be cut to convenient sizes. The slab is formed by placing a sheet of cardboard or paper in the bottom of the mould and placing thereon a layer of semi-liquid plaster, a layer of open mesh jute, canvas, or strong fibrous material, and subsequently a second layer of plaster, the top being strickled by a board.

The above particulars are specially prepared by Messrs. Rayner & Co., registered patent agents, of 5 Chancery Lane, London, W.C.2, from whom readers of the JOURNAL may obtain all information free relating to patents, trade marks, and designs.

## TENDERS.

**Lambeth Police Garage.**—The following tenders have been received for the erection of a new police garage at Lambeth (Mr. G. Mackenzie Trench, A.R.I.B.A., F.S.I., police architect and surveyor. Quantities by Messrs. Thurgood Son & Chidgey, 18 Adam Street, W.C.)

| | £ |
|---|---|
| Arding & Hobbs, Ltd. | 12,642 |
| T. H. Adamson & Son | 12,465 |
| Higgs & Hill, Ltd. | 12,345 |
| J. Mowlem & Co., Ltd. | 12,080 |
| Rice & Son | 12,058 |
| Holliday & Greenwood | 11,995 |
| F. & H. F. Higgs | 11,738 |
| Patman & Fotheringham, Ltd. | 11,673 |
| Holland & Hannen & Cubitts | 11,552 |
| Prestige & Co., Ltd. | 11,452 |
| A. E. Symes | 10,997 |

**Cornholme Works, Garston.**—The following tenders have been received for the erection of the Proposed Offices for Messrs. Wilson Brothers Bobbin Co. Mr. Hy. Liversage Goldsmith is the architect:—

| | £ |
|---|---|
| R. H. Green, Garston | 19,800 |
| Coulthard & Woods, Liverpool | 18,959 |
| Morrison & Sons, Ltd., Wavertree, Liverpool | 17,796 |
| John Hall & Co., Liverpool | 17,769 |
| Rimmer Bros., Liverpool | 17,760 |
| C. & G. L. Desoer, Ltd., Liverpool | 17,753 |
| John Rimmer, Liverpool | 17,700 |
| J. W. Jones, Liverpool | 17,675 |
| Johnston, Jones & Co., Liverpool | 17,505 |
| Haugh & Pilling, Liverpool | 17,500 |
| Wm. Moss & Sons, Ltd., Liverpool | 17,499 |
| Wm. Townson & Sons, Ltd , Bolton | 17,396 |
| W. Thornton & Sons, Ltd., Liverpool | 17,395 |
| T. G. Huxley & Co., Liverpool | 17,390 |
| Wm. Hall & Sons, Ltd., Liverpool | 16,995 |
| Rd. Costain & Sons, Ltd., Blundellsands, Liverpool | 16,990 |
| Roberts & Sloss, Liverpool | 16,775 |
| Wm. Griffiths, Sons & Cromwell, Liverpool | 16,689 |
| J. Henshaw & Sons, Liverpool | 16,477 |
| Hughes & Stirling, Liverpool | 16,361 |
| J. Duthie & Sons, Liverpool | 16,342 |
| J. Gerrard & Sons (1920), Ltd., Swinton, Manchester | 16,263 |
| Tysons (Contractors), Ltd., Liverpool | 16,110 |
| R. Wearing & Sons, Liverpool | 16,080 |
| J. & G. Chappell, Walton | 16,020 |
| *Jos. Rawlinson & Sons, Window Lane, Garston | 15.979 |

The Architect's estimate was £16,500.

* Accepted.

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# Law Report

## Erection of a House

*Death* v. *Williams.*

**June 1. King's Bench Division.**
**Before Mr. Justice Branson.**

In this case, Mr. E. Death, a builder, of Stowmarket, sued Mr. Walter Williams, a farmer, of Cockfield, Suffolk, to recover the sum of £734, balance alleged to be due in respect of the erection of a house. Defendant denied that he was indebted to the plaintiff for that amount. He said hat all that was due was £150, and that amount he paid into court.

Plaintiff's case was that originally he agreed to erect the house for £1,900, but hat agreement was varied, the defendant nstructing him to erect the house according to certain plans and saying he would pay for the house when the price had been ascertained in the usual way. This had been done, and it worked out at £2,484. Giving defendant credit for £1,750, the plaintiff now sued for the balance.

Defendant said his agreement was that he house should be erected for £1,900, and that the agreement was not varied as alleged by plaintiff, and he brought he balance into court.

Expert evidence was given on behalf of he plaintiff by Mr. F. G. Grierson, architect, of St. John's Street, Bedford Row, Mr. C. Dunand, a quantity surveyor, of Twickenham, Mr. H. Carr, of Ipswich, and Mr. C. Bright, of the Cosford R.D.C. On behalf of the defendant, Mr. D. Marsh, architect and surveyor, of Chancery Lane, gave evidence.

His lordship said the case was a difficult one, but he felt bound to accept the evidence given on behalf of the plaintiff. There would be judgment for plaintiff for £734 and costs.

# Building Trade "Rings"

A Bill to deal with rings and trusts, with special reference to the building ndustry, has been introduced into the House of Commons. It places upon the Board of Trade the duty of obtaining nformation concerning the operations of trusts or combinations in the regulaion of prices, output, transport rates or ervices, in so far as they tend to create monopolies or restraint of trade. Followng preliminary enquiry into complaints, he Board of Trade may apply to a specially constituted tribunal for an order to the firms concerned to furnish specified nformation, and the Board may refer he whole matter for the tribunal's nvestigation and report.

This tribunal would have power to call for books and papers, and to take evidence on oath. Facts relevant to a particular offence, after proof that acts injurious to he public interest had been committed, "shall be published immediately." A urther duty is placed by the Bill upon the Board of Trade to recommend State action for the remedying of any grievances which the tribunal might find to be established, or for imposing any penalties on ffenders. The Board, on the recommendation of the tribunal, must require he Overseas Trade Department to furnish information as to alternative sources f foreign supply, and the president of he Board may propose a resolution suspending any control or duty for the time being in force. If such a resolution is passed by both Houses of Parliament it shall for the period therein specified have the force of law.

It is proposed that the tribunal above referred to shall consist of a person of legal qualifications as permanent chairman, and not less than two and not more than seven, other members selected by him from time to time from a panel appointed for the purpose by the president of the Board of Trade, after considering nominations made by representative trade organizations, including the co-operative movement and trade unions.

# Road-making on the Film

An address on town planning was given at Colwyn Bay, North Wales, at the district meeting of municipal and county engineers. A feature of the meeting was a film on reinforced concrete roads. This film was shown at the invitation of Mr. W. J. Dunning, surveyor of Colwyn Bay Urban District Council, and chairman of the local branch of municipal and county engineers. The film was shown in the Princess Theatre, Colwyn Bay, and an address was given by Mr. J. F. Butler, managing director of the British Reinforced Concrete Engineering Co., Ltd., Manchester. The film was most comprehensive, and the various phases of reinforced concrete road-making were described and clearly shown.

An interesting discussion on reinforced concrete roadways followed the conclusion of the film, and Mr. Butler and Mr. Walters gave interesting information to the various members of the audience. It was announced during the afternoon that B.R.C. Fabric was to be used for the completion of the reinforced concrete coastal road started by Mr. Whitley, county surveyor of Flintshire. B.R.C. Fabric has now all been delivered on to the site, and it is expected the work will be commencing in about two weeks' time.

The Surrey County Council, under the direction of Mr. W. P. Robinson, Assoc. M.Inst.C.E., county surveyor, are laying a B.R.C. section of roadway. Two layers of B.R.C. fabric are being employed, viz.: Reference No. 9 and Reference No. 14.

# Charing Cross Bridge

With regard to the Charing Cross Bridge and Railway Station scheme, the Improvements Committee of the London County Council are of opinion that in view of the very large expenditure involved, and the existing financial stringency, and of the difficulties of rehousing, the Council would not be justified in taking any action in the matter, and accordingly the committee will make no recommendation on the subject. Consideration of the question of the reconstruction of Lambeth Bridge has been adjourned until certain statistics have been obtained. The suggested building and extending of the Embankment from Putney Bridge to the county boundary at Chiswick has been considered by the committee, who, in view of certain difficulties and the very high cost which would be incurred, do not submit a recommendation to the Council.

# Homes for Aged Miners

The foundation-stones have been laid at a group of ten new homes, which are being erected at Westerhope by the Northumberland Aged Mineworkers' Homes Association. The site has been presented by the North Walbottle Coal Co., Ltd. The architects are Messrs. Wm. Dixon and Son, Collingwood Street, Newcastle, and the contractors are the Co-operative Wholesale Society, Newcastle section. The Homes Association has, since its inception in 1900, built twenty-one groups of homes, of ten cottages each, at the following places: Longhirst, Ashington, Newbiggin, Woodhorn, Chevington Drift, Bedlington Station, Cramlington, Newsham, New Hartley, East Holywell, Walker Gate, West Allotment (Backworth), Denton Burn, Dinnington, Prudhoe, Throckley, Annitsford, Gosforth, Cambois, Haltwhistle (8), and Choppington (8). Another group of eight homes is in process of erection at Longhirst, while plans have been prepared for groups at Burradon and at Preston.

# List of Competitions Open

| Date of Delivery. | Competition. |
|---|---|
| June 30 | National War Memorial at Melbourne to cost £250,000. Competition, in two stages. Apply Agent-General in London, Victoria House, Melbourne Place, Strand. Deposit £2 2s. |
| June 30 | Pavilion to serve as Public Hall at Largs. Premium £25. Apply Mr. Peter Morris, Town Clerk, Largs. |
| June 30 | The National Painters' and Decorators' oint Education Committee and the Incorporated Institute of British Decorators are offering a prize, value £10 10s., for the best design for the decoration of a room in which at least one panel is of a pictorial character. Candidates must be over 18 and under 25 on May 1, 1923, and must be engaged in or preparing to follow the craft of painting and decorating. Designers to the trade and instructors are eligible. Apply Mr. W. A. D. Englefield, Secretary, Incorporated Institute of British Decorators, Painters' Hall, Little Trinity Lane, London, E.C.4, or Mr. Will Mellor, Secretary, National Painters' and Decorators' Joint Education Committee, 9 Albert Square, Manchester. |
| July 3 | Pavilion in Calverley Gardens, Tunbridge Wells. Assessor Mr. E. Guy Dawber, F.S.A., F.R.I.B.A. Premiums £150, £100, and £50. Apply Town Clerk. |
| Aug. 25 | Public Swimming Baths and Washhouses, East Greenwich. Assessor, Mr. Henry V. Ashley, F.R.I.B.A. Premiums: £300, £200, £100. Apply Mr. Frederick J. Simpson, Town Clerk, Town Hall, Greenwich. |
| Sept. 30 | Designs for a series of plaquettes in bronze illustrative of London as the capital city of the Empire, or of one or more of her main architectural features. Designs should be submitted in the form of models in plaster. The following prizes are offered:—One prize of 100 guineas, two prizes of 50 guineas, three prizes of 25 guineas. Apply Deputy Master of the Royal Mint, London, E.C.1. |
| Nov. 5 | Art Gallery for Hull. Assessor, Mr. John W. Simpson, PP.R.I.B.A. Apply (with cheque for £2 2s.) to Mr. H. A. Learoyd, Town Clerk, Guildhall, Hull. |
| No date | Designs for lay-out of about three acres o land as burial ground at Yeovil. Premium £20. Apply Mr. H. C. Batten, Clerk to the Burial Committee, Yeovil. |
| No date | The Student Welfare Committee, University of Glasgow, invite Competitive Designs (limited to Architects having an office in and practising within the Municipal Boundaries of the City of Glasgow) for a Pavilion to be erected on the University Athletic Ground at Westerlands, Anniesland, at a cost of £10,000. Assessor Mr. Alexander N. Paterson, A.R.S.A. Apply Honorary Secretary, Student Welfare Committee, The University, Glasgow. |

## Home-grown Timber Supplies

The strength and durability of home-grown timber and its title to more extensive use by Government departments, municipalities, builders, and industrial undertakings generally in the national interest, were urged at a forestry conference held at the Surveyors' Institution, Westminster, under the chairmanship of Lord Clinton. The conference was convened by the Surveyors' Institution and the Land Agents' Society, and representatives of the Central Landowners' Association, the Royal English Arboricultural Society, and the English Forestry Association also attended.

Mr. M. C. Duchesne said it must be obvious that a proper demand for native timber was the very foundation of forestry in our woodlands. It was important first to appreciate the fact that with our enormous consumption of wood in every form to-day the native supplies could meet the demand of probably not much more than 10 per cent. of the total. Unfortunately, probably at least 75 per cent. of the total consumption was represented by soft-woods, and it was common knowledge that the supply of soft-woods in our native woodlands was exhausted to a large extent during the war. The remaining stands of timber in England and Wales (apart from Scotland, where the problem was of quite a different character) were very largely hard-woods. An argument invariably advanced—and which had greatly handicapped steps being taken to encourage the demand for native hard-woods—was that the native timber was of an inferior quality compared with the imported supplies. That was undoubtedly true if some of our Scots pine or other native conifers were used for building purposes, but when really good quality native timber was placed on the market the demand was often unsatisfactory and the price realized poor. Any suggestions for increased utilization were based strictly on the following condition: that the native timber should be used where it was suitable and available for the specific purpose, and compared favourably in quality and price with the imported supplies. The strongest case could be made out in regard to the three most common hardwoods of oak, elm, and beech, and which were the most important to our English woodlands.

Mr. B. W. Adkin said that of late years builders had largely used foreign oak for doors and window-sills, and it compared very unfavourably with British oak. The difference was marvellous when one had to deal with premises over a course of years.

Mr. Leslie S. Wood instanced a recent case which came under his notice where a specification was sent out, and builders were asked to give alternative estimates for the use of English and foreign timber. The part relating to the use of English timber was left blank.

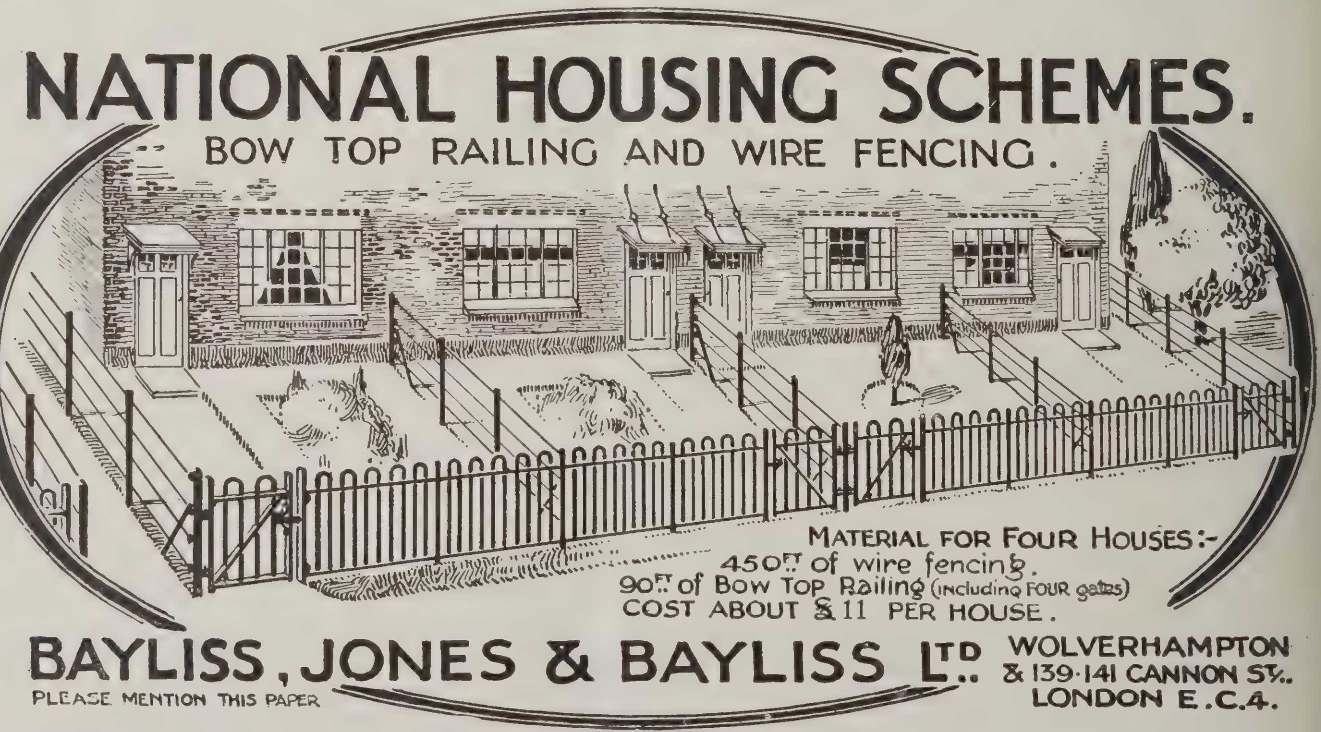
Professor H. A. Pritchard said he thought in regard to the specification of home-grown timber for building purposes they ought really to move with the R.I.B.A. to a certain extent. Not long ago there seemed every prospect of the R.I.B.A. including British oak in their standard or model specification for use in door-frames, window-sills, and so on. He agreed with Mr. Duchesne that there was no need for the costly telegraph poles now specified in rural districts. Suitable poles could be supplied from the nearest plantation at a quarter the present cost.

Colonel G. L. Courthope, M.P., said the Office of Works had now definitely come round to the opinion that for heavy constructional work English oak did not require seasoning. During the last ten years he had supplied the whole of the oak for the roof of Westminster Hall.

Mr. J. S. Corbett moved: "That the Forestry Commission be requested at the earliest possible date to take such steps as shall lead to English commercial timbers, particularly elm, oak, and beech, being submitted to such scientific tests as may be considered necessary to prove their stability for constructional purposes, including use for street paving block purposes."

Colonel Courthope, M.P., seconded the resolution, which was adopted.

The following resolution was also passed: "That this conference is of opinion that home-grown timbers are not specified by Government departments, municipalities, and public bodies to the extent which the qualities and properties of home-grown timber deserves and that all public authorities concerned are requested to give this subject their immediate and sympathetic consideration, particularly on account of the depressed state of the English timber market and the consequent unemployment, and that a copy of this resolution be sent to the departments and bodies concerned."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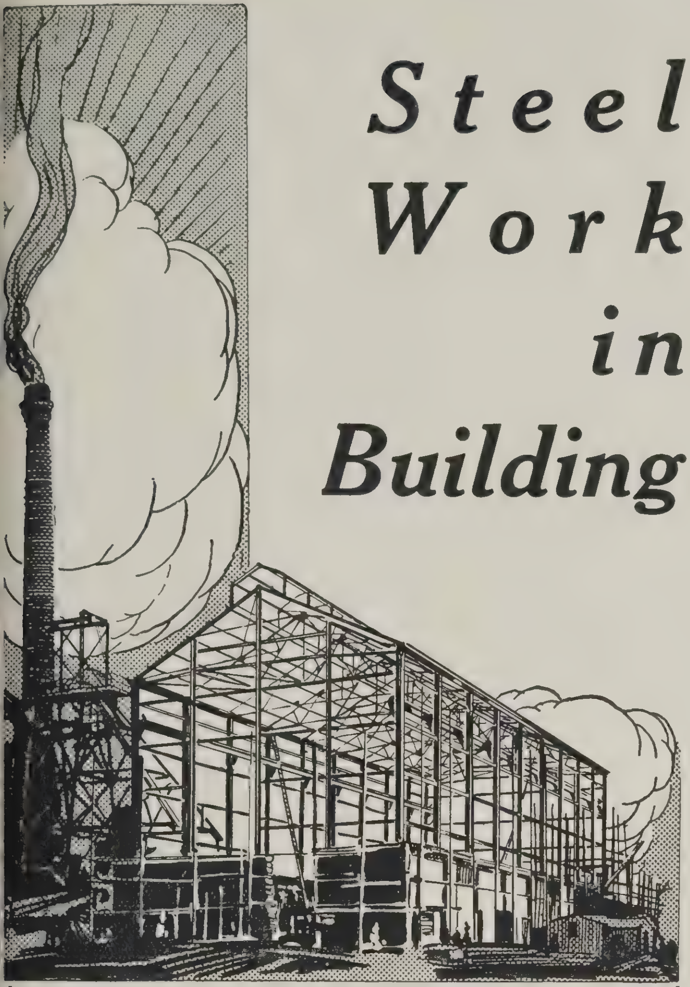

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## New Inventions

*Latest Patent Applications.*

14078.—Berner, C.—Staircases. May 28.

14519.—Cottier, R. G.—Machine for laying bricks. June 1.

14063.—Lichtenfeld, L.—Parquetry for flooring, ceilings, etc. May 28.

14365.—Monolithic and General Constructions, Ltd.—Factory, etc., chimneys. May 31.

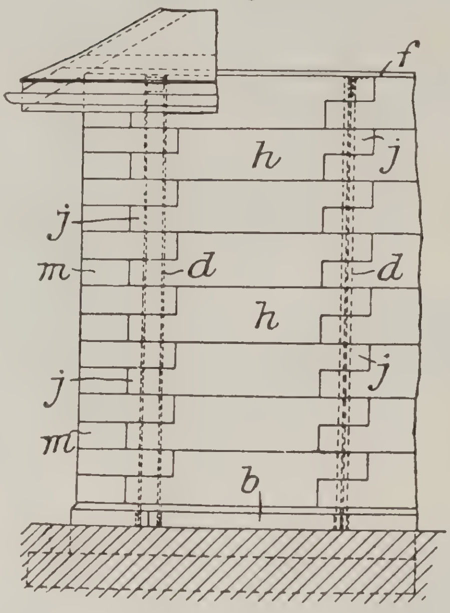
*Specifications Published.*

197735.—Lynde, F. G., and Lynde, E. L. —Apparatus for producing and imparting vibrations, particularly applicable for vibrating or tapping concrete while in a plastic state.

197768.—Heath and Low Moor, Ltd., R., and Harvey, W. E.—Bars for reinforcing concrete and the like.

*Abstract Published.*

196033.—Walls.—Kirk, R. H., and Martinez, H., 4 Stephendale Terrace, St. Peters, Newcastle-on-Tyne.—An outer cavity wall for a bungalow or other building consists of blocks or slabs built against a skeleton of wooden or metal uprights *d*, which are set in sockets in the base blocks *b* and are tied at the top by wall plates *f*. The outer blocks *h* have extensions *j* of about half the height of the blocks so that adjacent blocks overlap at the uprights. The quoin blocks *m* are thicker than the wall blocks but only half as deep; filling pieces may be used between the end uprights and the wall slabs; or the uprights may be notched to take the quoin blocks. The inner blocks or slabs are tied to the outer blocks by ordinary galvanized ties and are of the same shape as the outer blocks but made of breeze concrete.



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## New Cunard Liner Built for Pleasure Cruises

The "Franconia," the latest addition to the fleet of the Cunard Line, recently ran a trial trip along the west coast of Scotland. The "Franconia" is one of the largest vessels of the Cunard post-war programme of building. She is specially designed to carry out long pleasure cruises to all quarters of the world. The smoking-room, which is a reproduction of an old English inn, is half-timbered and oak panelled, with a real wood fire burning in a brick ingle-nook. The third-class public rooms, with their oak-panelled walls adorned with prints, reach a remarkably high standard of comfort and spaciousness. The first-class cabins have bedsteads and hot and cold running water, and many of them have their own private bathrooms—a luxury which is to be found also in some of the second-class rooms.

## Coming Events

*Wednesday, June 20.*

London Society.—Visit to Morden College, Blackheath, and Greenwich Park. Meet at main gate of College. 2.30 p.m.

*Thursday, June 21.*

Architecture Club.—4th Quarterly Dinner. 7.30 p.m.

Inst. Structural Engineers.—Ordinary General Meeting. 7.30 p.m.

British Museum.—"The Roman Period" Miss Claire Gaudet. 3.15 p.m.

*Monday, June 25.*

R.I.B.A.—Presentation of Royal Gold Medal. 8.30 p.m.

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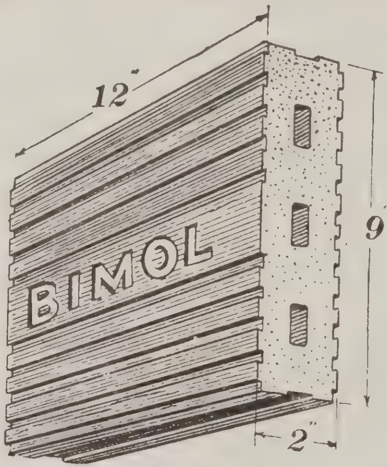

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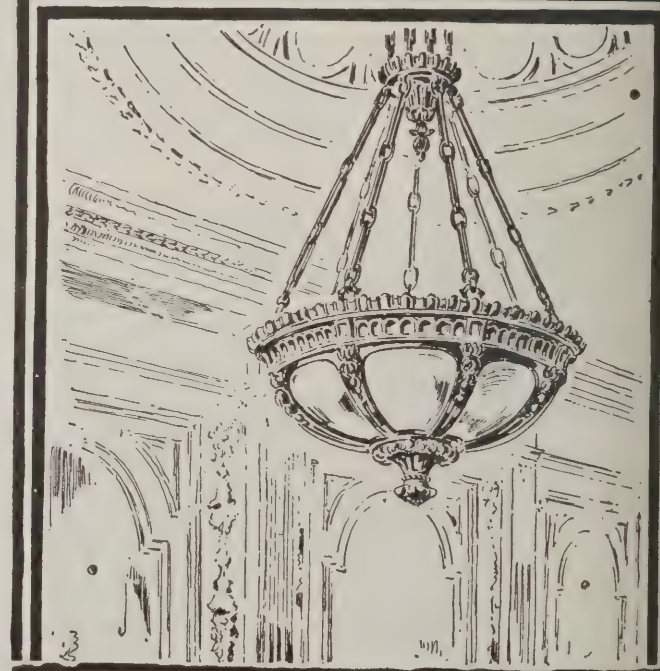

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## The Cenotaph

Six Members of Parliament have made an teresting suggestion which they consider ould add to the symbolic beauty of the enotaph. In the course of a letter to "The imes" they state : Our proposal is that n its upper surface there should be a xed light, which would shine upward ay and night. No change should be ade in the appearance of the Cenotaph, othing to mar its simple dignity ; all that needed is that within the wreath on e upper surface there be fixed a rcle of electric light. The light should urn always, and, though invisible by ay, it would through dusk and darkness ear its message of enduring memory wards the skies. We understand that is purposed shortly to cover the road-ay surrounding the Cenotaph with bber, so that traffic itself, in passing, ay be hushed ; and the occasion seems vourable to carry out what we have ntured to suggest. There are several rms of burner suitable, of which, per-ps, one of those recently invented, led with some kind of gas, would be ost satisfactory. The letter is signed y K. Vaughan-Morgan, John Ganzoni, rthur Churchman, Gershom Stewart, . Clifton Brown, and J. Norton Griffiths.

## Island Statues

Mr. and Mrs. Scoresby Routledge have cently returned from Easter Island, the nely island in the Pacific, 2,000 miles om the coast of Chile, with remarkable atues of a vanished race. The most teresting explorations of Mr. and Mrs. outledge related to the Austral Islands, ich are French possessions some 300 iles south of Tahiti. Here they found any megalithic remains, and in one and two most interesting statues. They e of a male and a female figure and and some 6 ft. high, on pedestals, which d another 2 ft. to their height. The ures are carved in some detail, and Mr. outledge described them as unique. ese statues, together with others found the undergrowth, seemed to have had religious purpose, and even now the tives will not interfere with them. On the four islands megalithic remains re found, and these take the form of ctangular palisades very carefully paved th square stones. One of these en-sures measured 125 ft. by 26 ft., and e upright stones at the side were in me cases 14 ft. high.

## Fuel Research

The Lord President of the Council has cepted with much regret the resignation Sir George Beilby, LL.D., F.R.S., after arly seven years' voluntary service as rector of Fuel Research and chairman the Fuel Research Board under the partment of Scientific and Industrial search. The Board was established 1917 to investigate the nature, pre-ration, and utilization of fuel of all ds. The Lord President has appointed . C. H. Lander, D.Sc., M.I.Mech.E., M.Inst.C.E., to be Director of Fuel search, and Sir Richard Threlfall, B.E., F.R.S., a present member of the ard, to be chairman. The Hon. Sir arles Parsons, K.C.B., F.R.S., will tinue his membership of the Board a further period. Sir George Beilby retains his membership of the Advisory Council of the Department, and has consented to act as honorary adviser to the Board.

The following gentlemen have accepted appointment as additional members of the Board : Mr. R. A. Burrows, Sir John Cadman, K.C.M.G., D.Sc., Dr. Charles Carpenter, O.B.E., D.Sc., Mr. Samuel Tagg, Prof. Sir James Walker, D.Sc., LL.D., F.R.S., and Prof. R. V. Wheeler, D.Sc.

## Their Majesties' Visit to Dockland

Their Majesties recently visited the Dockland Settlement and Malvern Boys' Club in Canning Town. This is a settlement consisting of twenty-five clubs for recreation purposes. There are twelve clubs for boys and twelve clubs for girls between the ages of nine and eighteen, and one club for mothers. Included in the programme for the Royal tour of inspection was a visit to the chapel to inspect the new east window, which was designed and executed by Mr. Reginald Bell, of Messrs. Clayton and Bell, 9 Clifford Street, Bond Street, W. This window has three lights with two transverse divisions, with the little shining figure of Our Lord in His youth at its centre. Grouped around the central figure are the homely types of Dockland, the workers, the nurse, the soldier, the mother, the young men and young girls and the little children. The Dockland Settlement and Malvern Boys' Club is appealing for funds to the amount of £20,000 to carry out a building scheme for the re-housing of its twenty-five recreational clubs for the youth of Dockland on its present site and for a proposed branch settlement in the Isle of Dogs.

## New Inventions

*Latest Patent Applications.*

15139.—Coath, R. C.—Roofing, &c., tiles. June 9.
15083.—Haramishi, M.—Ferro-concrete structures. June 8.
14721.—Hastings, J.—Decorated metal wall coverings. June 5.
14947.—Hursch, E.—Reinforced - concrete constructions. June 7.
14802.—Munro, A. C., and Singelton, P. —Walls. June 6.
15143.—Rogers, R. H.—Concrete structures. June 9.

*Specifications Published.*

198176.—Hall, E. E.—Suspended ceiling.
198284.—Hardoncourt, A. — Building blocks or bricks.

*Abstract Published.*

196466.—Sheet metal roofing. — J. McLaughlin, 12 Turner Street, St. Rollox, Glasgow.—Corrugated iron roofing sheets have the upper edge bent to conduct condensation from the underside of the sheet to the outside of the sheet. An extra half corrugation is also formed on the edge usually terminating downwardly.

The above particulars are specially prepared by Messrs. Rayner & Co., registered patent agents, of 5 Chancery Lane, London, W.C.2, from whom readers of the Journal may obtain all information free relating to patents, trade marks, and designs. Messrs. Rayner & Co. will obtain printed copies of the published specifications and abstract only, and forward on post free for the price of 1/6 each.

## Law Report

### A Builder's Claim

Sitting in London, recently, Sir Edward Pollock, Official Referee, delivered judgment in an action by Mr. C. D. Woodward, builder, of Biggleswade, against Mr. Percy Bygraves, market gardener, to recover the sum of £1,307, balance claimed to be due under a contract in respect of the erection of a house and store, etc., at Upper Caldecote.

Mr. Marriott was counsel for the plaintiff, while Mr. Eales was counsel for the defendant.

The Official Referee, in his judgment, said the question now had nothing to do with the amount of the claim. One question was as to the position of the parties under the contract, and the other question as to what was the result of it standing over, if necessary, for decision. The defence was that the money claimed was not due. According to the defence, the plaintiff agreed to erect the house for a sum not exceeding £1,000, and the store and other buildings at a cost of £250, and defendant had paid sufficient to satisfy plaintiff's claim in that respect. Defendant made a claim for certain sums which he said were paid on behalf of the plaintiff. Defendant's case originally was that the contract was to build a house for a sum not exceeding £1,000, but when the matter came for trial the defendant and his wife said most distinctly and positively that Mr. Woodward agreed to build the house for £950, and the buildings for £250. Upon that there was a conflict of testimony. It was very odd if that was the contract made that it did not appear until the defendant came into the witness box. There was also a conflict of evidence between the parties as to whether there was a contract that plaintiff would build a house that would enable the defendant to take a subsidy. Upon that point the Referee accepted the evidence of Mr. Woodward in preference to that of Mr. Bygraves. One of the payments was made on February 1, 1921, and the Referee thought Mr. Bygraves swore—certainly Mrs. Bygraves swore positively—that that payment was made at their house at Caldecote. Mr. Bondfield, secretary of a building society, said that on February 1, 1921, Mr. Bygraves became a member of the building society, that upon that date defendant was at the "Crown," Biggleswade, and paid his subscription, and he (Mr. Bondfield) distinctly remembered Mr. Bygraves making the payment to Mr. Woodward there. Mr. Woodward also swore that Mr. Bygraves was there upon that day, and wrote out the cheque in the Crown Hotel. Mr. Bygraves's evidence, upon which he was cross-examined, was : "I have never been to a meeting of this building society. I don't belong to this society." Then next he said, "I was a member for three months in February, 1921. I don't think I was a member in December, 1921. I sold my shares. I had been a member for six or seven months. I was not in the 'Crown' in Biggleswade on February 1, 1921." The Referee thought Mr. Bygraves's evidence on that matter was very unsatisfactory, and he absolutely believed the evidence of Mr. Bondfield and Mr. Woodward. That was a matter as to which there could be no making a mistake; to the Referee's mind it was a deliberate falsehood. Then came another incident. There was a cheque for £100 dated March 7, 1921, and the account given by Mrs. Bygraves was that that cheque was given in respect of some work to be done to a ditch at the back of the premises which they wanted filled up and pipes laid into it, and that Mr. Woodward agreed to do that, and that for the payment of that work this cheque was drawn. The Referee believed Mr. Woodward, and it was quite clear this £100, up to a certain time, was considered by Mr. Bygraves as money paid on account of the house, because when he wrote a letter on June 24, 1921, he said: "Enclosed are accounts which have nothing to do with me. Don't think you will frighten me. You agreed to build the house for £1,000, and the buildings for £250, and to settle the carting between us. My carting is £400, Fisher's bill is £120. You have overdrawn £100." That was the £100 paid by cheque dated March 7. There was another matter about carting in respect of which Mr. Bygraves now claimed £121. That amount was comparatively trifling, but it turned out the account was incorrect. The curious thing was that in an earlier letter of June 21, the Referee thought, the account was sent in as £200, and in the letter of June 24 it was put at £400. It looked as if Mr. Bygraves was rather trying to frighten Mr. Woodward. Mr. Woodward's statement was that he was not to pay for the carting, and that it was to be paid by Mr. Bygraves. With regard to that the Referee found in favour of Mr. Woodward. Having regard to all these extraordinary false statements made by Mr. and Mrs. Bygraves, he (the Referee) entirely disbelieved Mr. Bygraves's case and entirely believed Mr. Woodward's case. There was one other little point which showed again the little reliance that was to be placed on Mr. Bygraves in reference to this question about the ditch on March 7. Mr. Bygraves swore that he and his wife were there looking at the ditch. The wife swore she was not there. The Referee had no doubt the wife was right. She was not there; she was indoors looking after the cheque, so that whenever it was possible to compare the two statements Mr. Woodward's evidence was to be believed rather than Mr. Bygraves's evidence. Therefore, on the question as to what was the contract between the parties the Referee found in favour of Mr. Woodward. The other question as to the amount would, he thought, have to stand over. The Referee had not prepared to go into that because, he thought, something was to be done by way of arriving at a sum, or in the alternative, if necessary, for the matter to come before him.

Mr. Marriott said he communicated with Mr. Eales to see, in the event of the judgment being in favour of the plaintiff, if they could come to some arrangement as to the sum for which judgment should be given. But Mr. Eales informed him that he had no instructions from his clients about that.

Mr. Eales said it would be remembered that Mr. Stonebridge had prepared an alternative account, but the Referee did not go into the details of that account because it was thought more convenient to deal with the other matters first. Mr. Stonebridge had not given evidence, and he (counsel) did not think there was material upon which the Referee could decide the question of materials and value.

The Official Referee: There is material apart from that account.

Mr. Eales: It seems to me that unless some agreement can be come to between the parties we shall have to go into the account in detail.

Mr. Marriott: I was under the impression the evidence was concluded.

The Official Referee: All I suggested was that instead of giving you the trouble of going through these matters you should see if you can make some agreement about it.

Mr. Marriott: I am quite willing to do that. I shall have no objection to referring to any items in the account, but I should object to Mr. Stonebridge being recalled to go item by item through the account.

Mr. Eales said he did not see any other way of dealing with it. Mr. Stonebridge had prepared an account from his examination of the work itself. He had measured the work, and there were little discrepancies with regard to nearly every item as regarded quantity, quality or price when compared with the bill of quantities from which plaintiff's surveyor prepared his account.

The Official Referee: I have got that in evidence. I have got item after item.

Mr. Eales said he should have to address the Referee on the accounts.

Mr. Marriott: Mr. Woodward has been kept out of this money for two years, and I should like to bring it to an end as soon as possible.

It was eventually agreed that the particular matter of the amount should be discussed at a date in the near future convenient to the Official Referee.

## Trade and Craft

### *Lyons' Corner House.*

The water-softening plant at the Lyons Corner House, Coventry Street, Piccadilly, is of the "Permutit" type, and was supplied by Messrs. United Water Softeners, Ltd., Imperial House, Kingsway London, W.C.2.

### *B.R.C. Roads for Dublin.*

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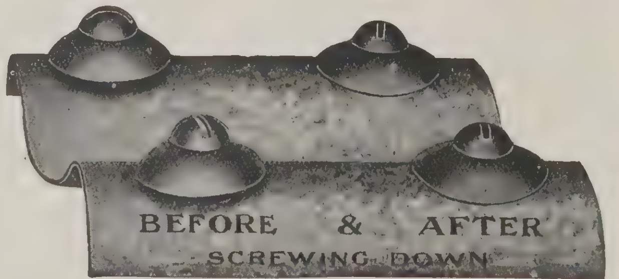

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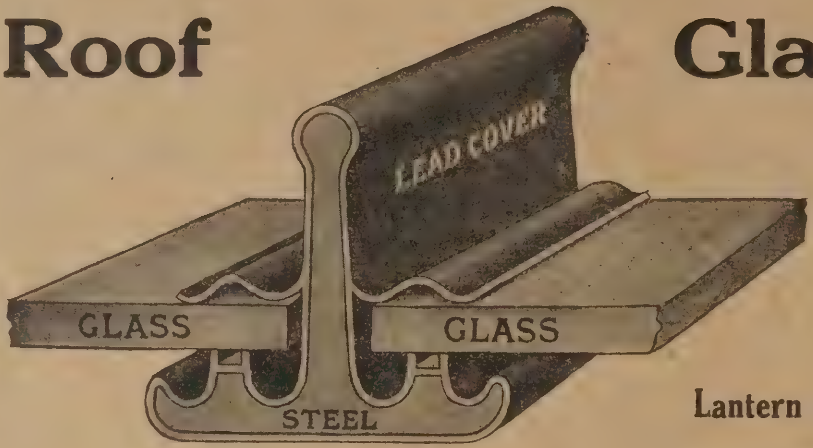

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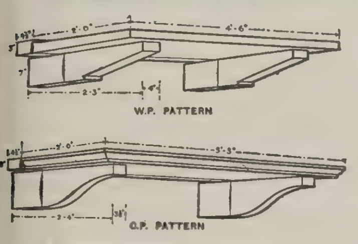

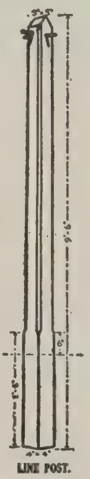

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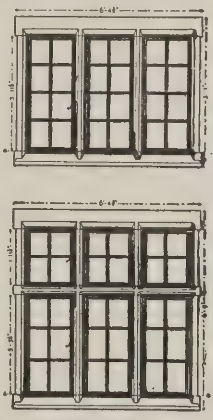

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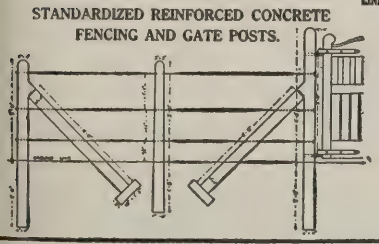

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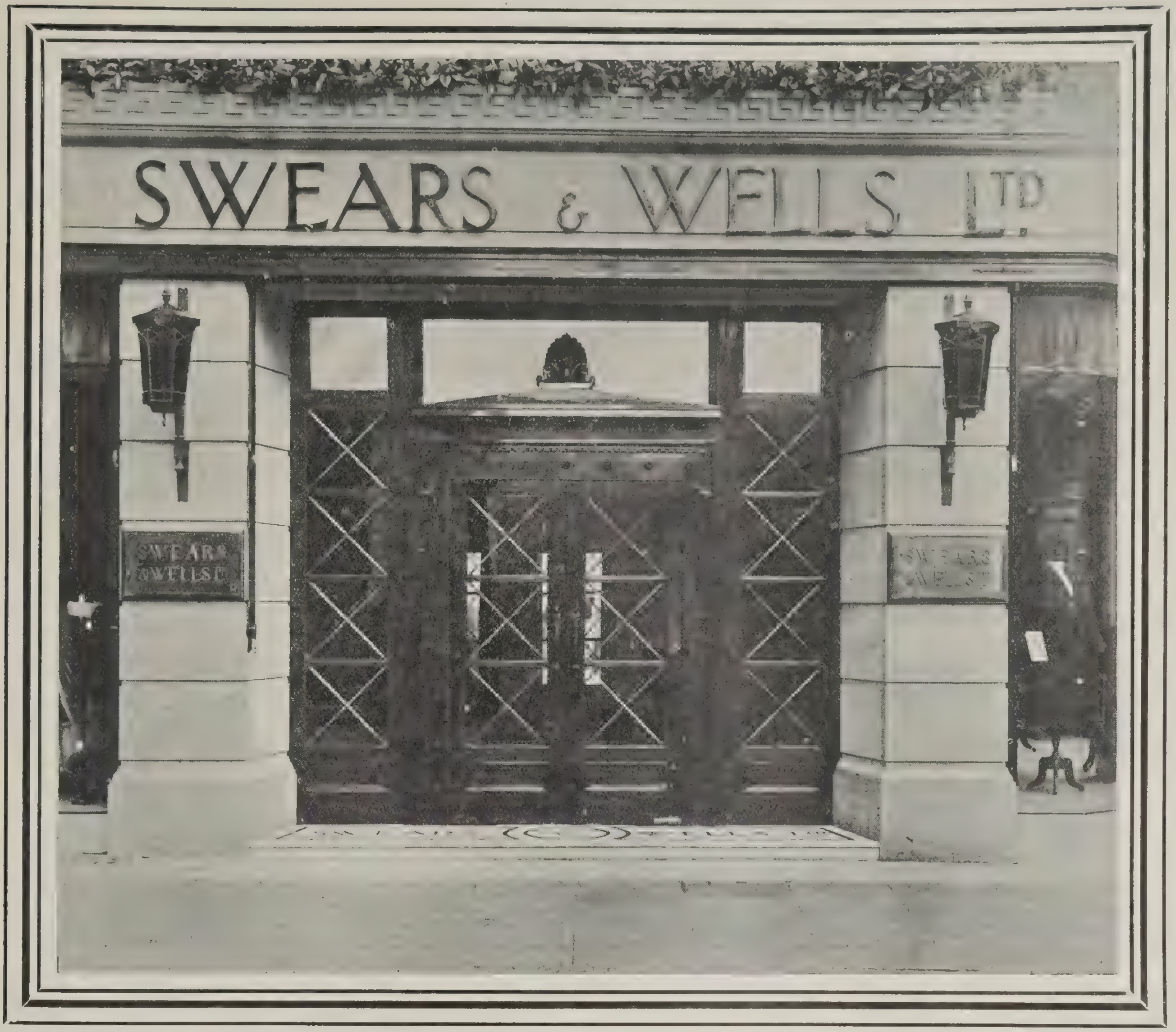

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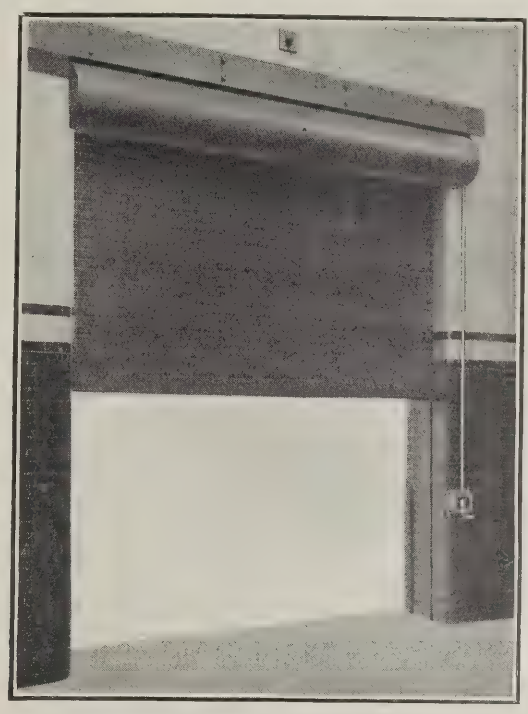

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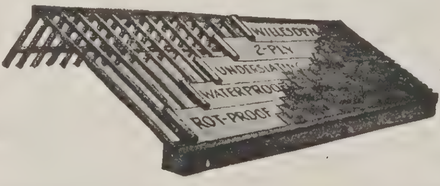

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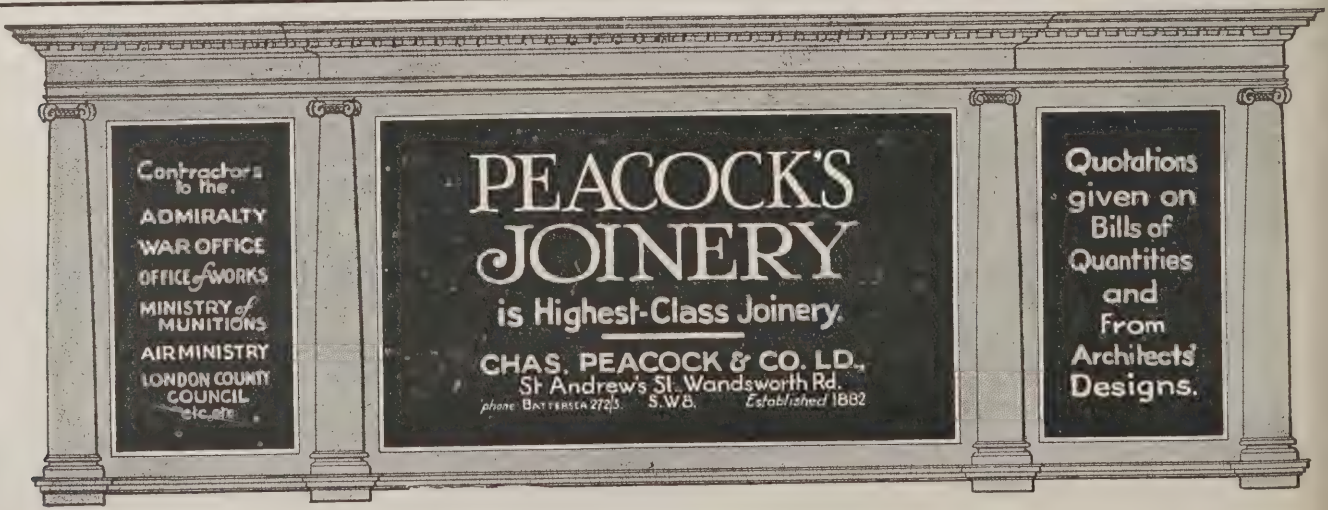

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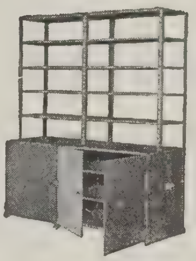

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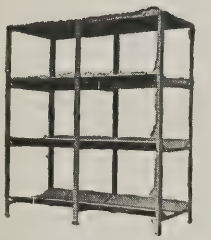

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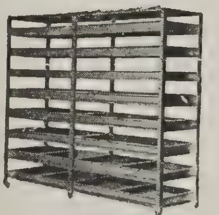

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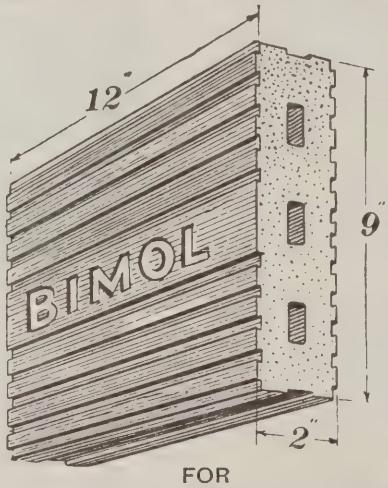

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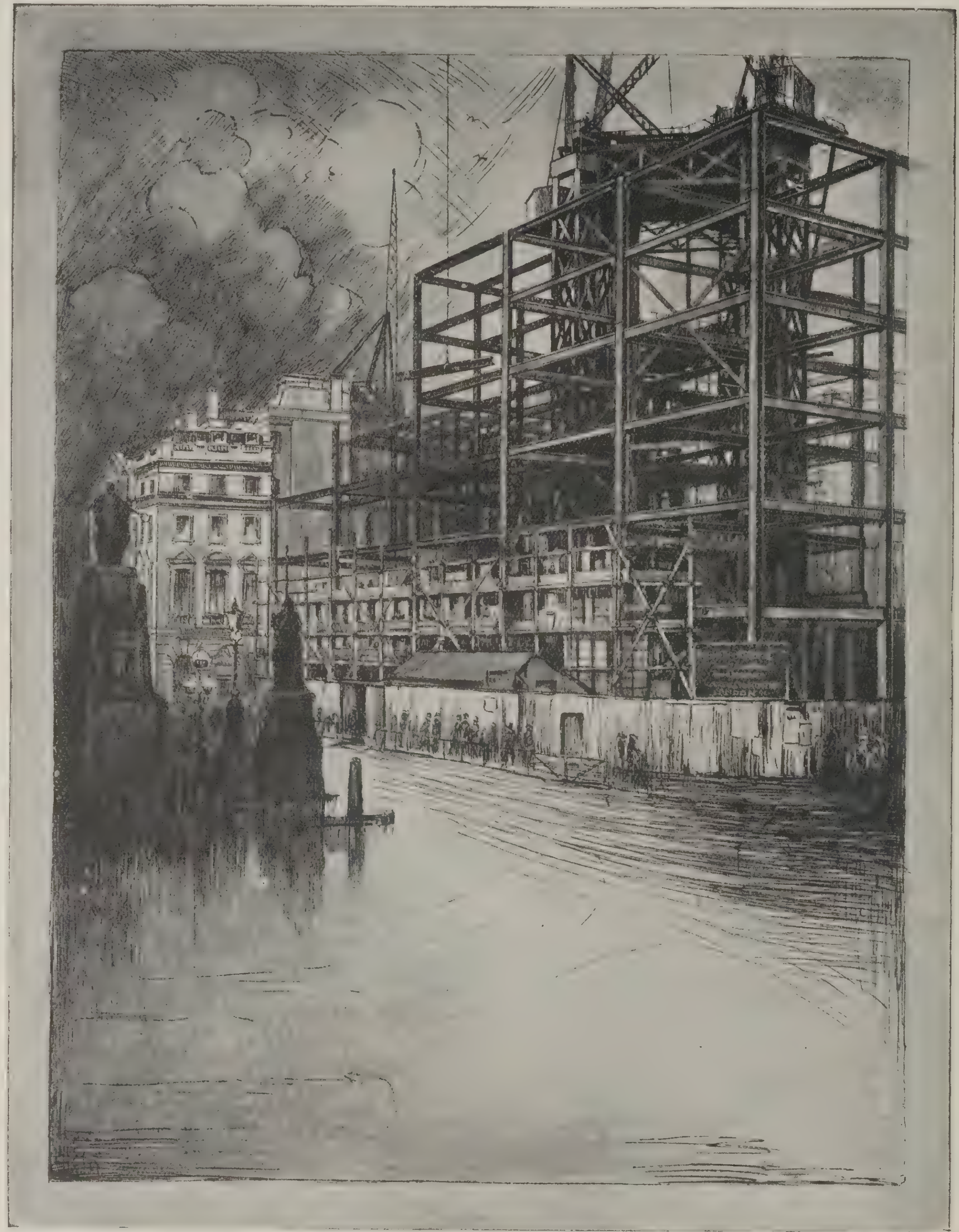

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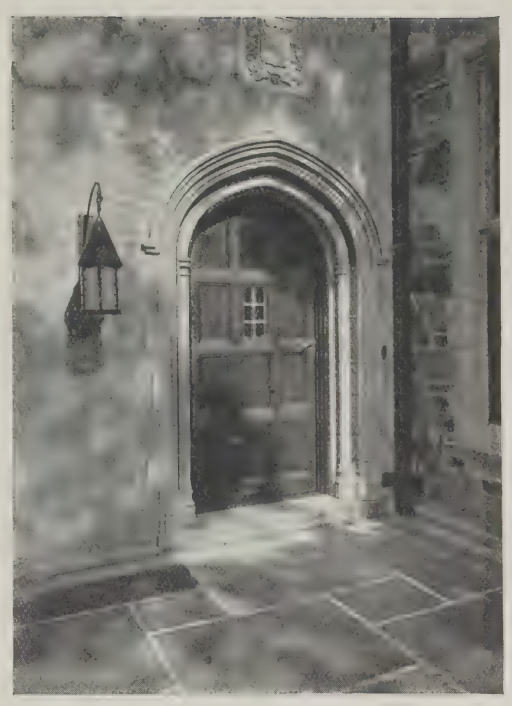

Fig. 2.

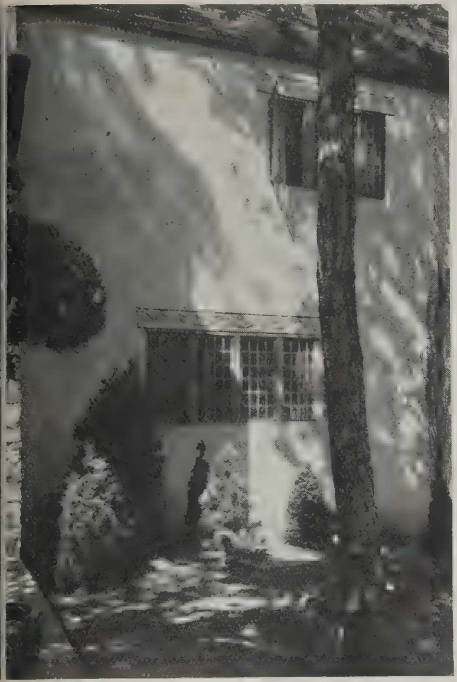

Fig. 1.

FOR country residences—mansion or cottage—the rougher the texture of a stucco the more attractive the appearance. A very smooth stucco is apt to give the effect of a coat of paint at a short distance. A house finished in a rough textured stucco, viewed from a distance, has a "live" wall surface that gives it distinction. The roughness of the texture of a finished wall surface should be dependent upon the distance from which the stucco is usually seen. For a house on a city street a fine texture is preferable; for one set back from a country road or highway a rougher texture. The three illustrations on this page show new textural finishes in "Atlas White" stucco. Fig. 1 shows an example of an orthodox sand-floated finish. In this instance a light-coloured silica sand of quite coarse grain was used as an aggregate. The two base coats were in the best grey Portland cement and the outer coating, between one-quarter of an inch to three-eights of an inch in thickness, was composed of one part "Atlas White" and two-and-one-half parts sand. The finishing coat, after being brought to a smooth, even surface, was rubbed with a circular motion of a wood float, with the addition of a little sand to slightly roughen the surface. This floating was done when the mortar had partly hardened. Fig. 2 shows a finish produced by the manipulation of a trowel. The workman was careful not to overwork, or "iron," the stucco. Merely by leaving in evidence a series of marks made with his tools, a light and shade effect of rare beauty was obtained. Fig. 3 illustrates a finishing coat trowelled smooth with a metal trowel with as little rubbing as possible, subsequently patted lightly with a brush of broom straw. I call this a "stippled" surface. Write to me at Regent House, Regent Street, London, W. 1, for specifications for many varieties of textural stucco finishes. I am the official representative in this country of the makers of "Atlas White." The possible textures with "Atlas White" Portland cement are of countless quantity. They provide opportunity for the expression of individuality and skill. Are you alive to the continual progress of stucco work? It's a subject worth cultivation.

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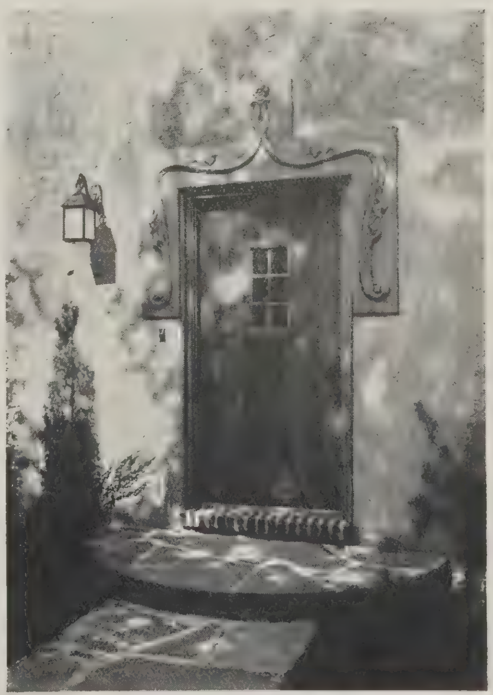

Fig. 3.

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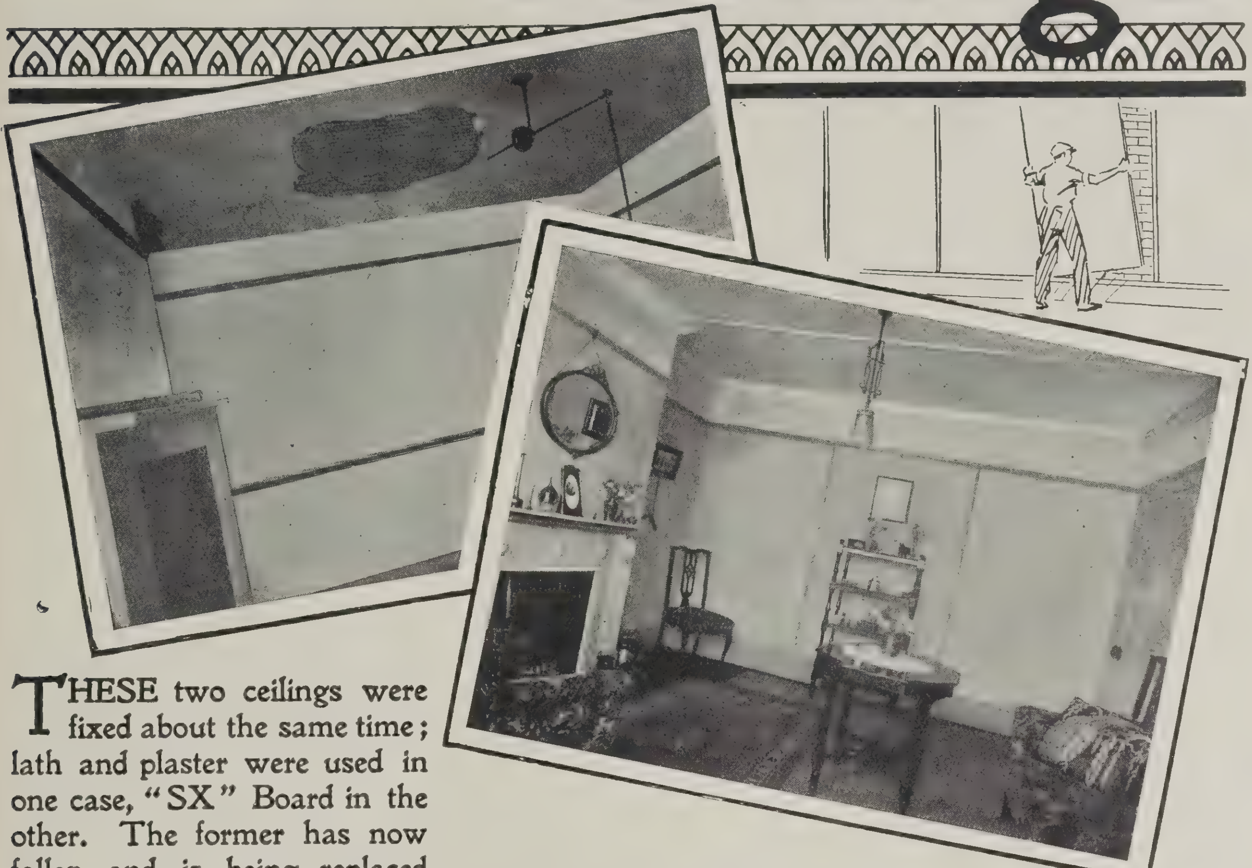

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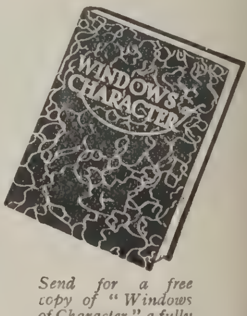

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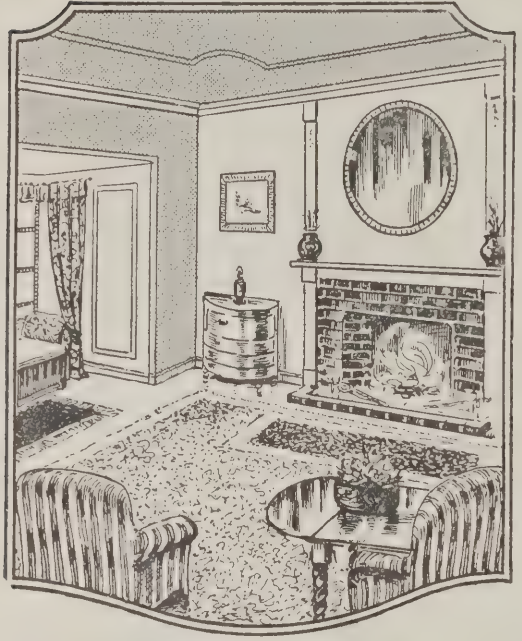

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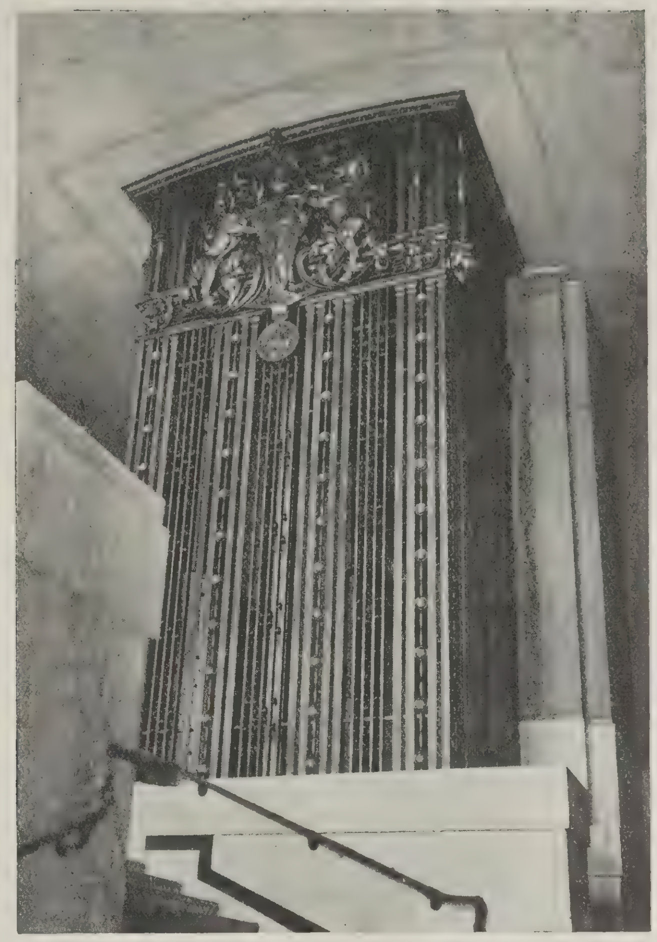

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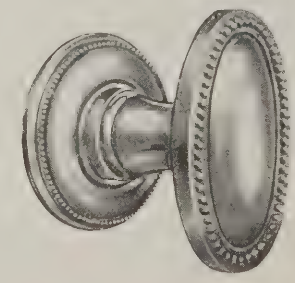

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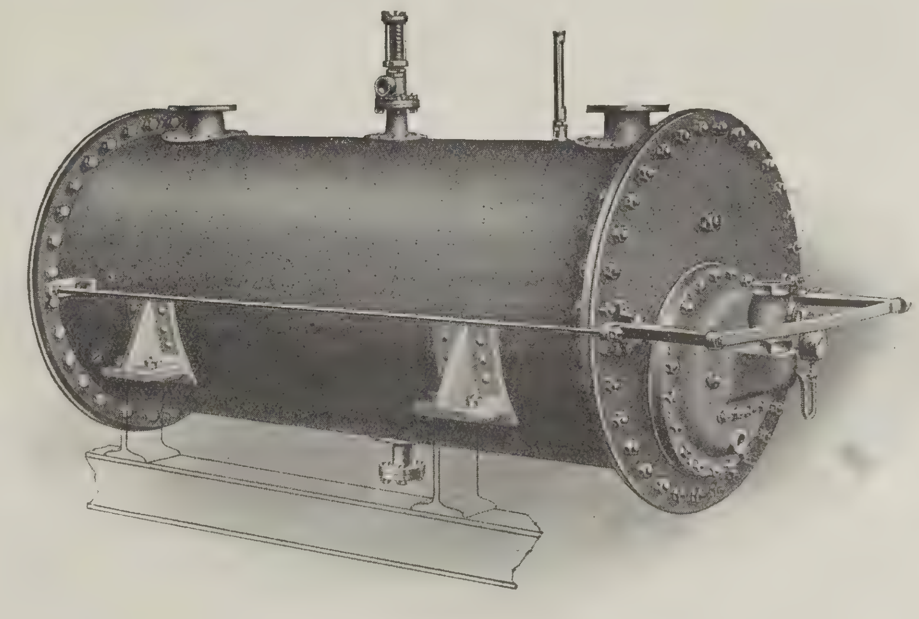

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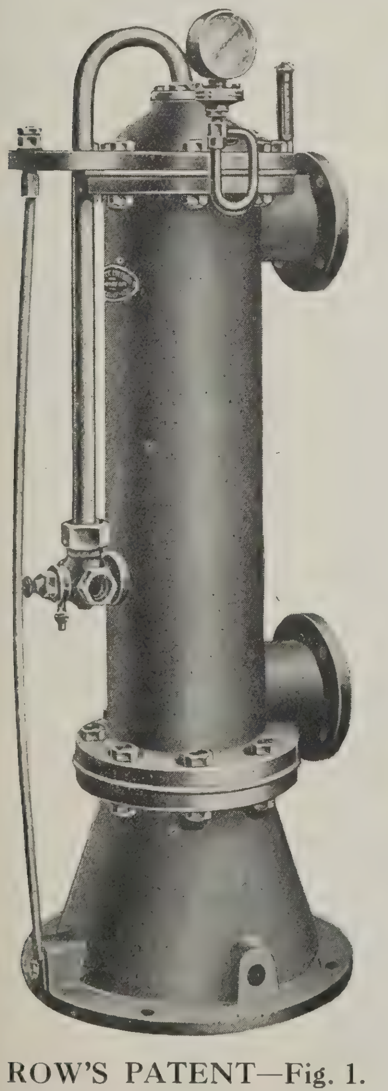

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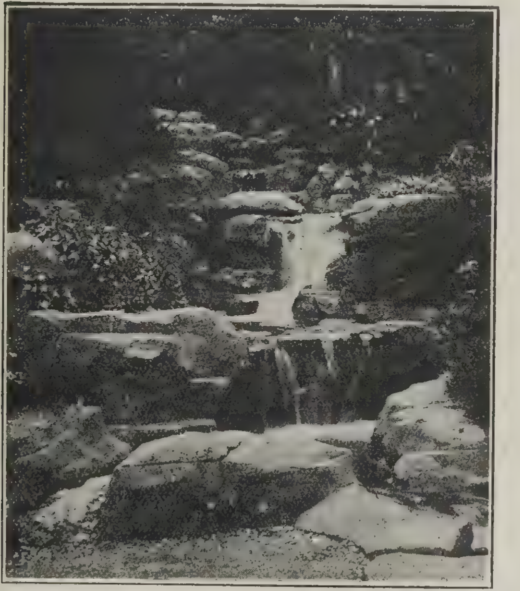

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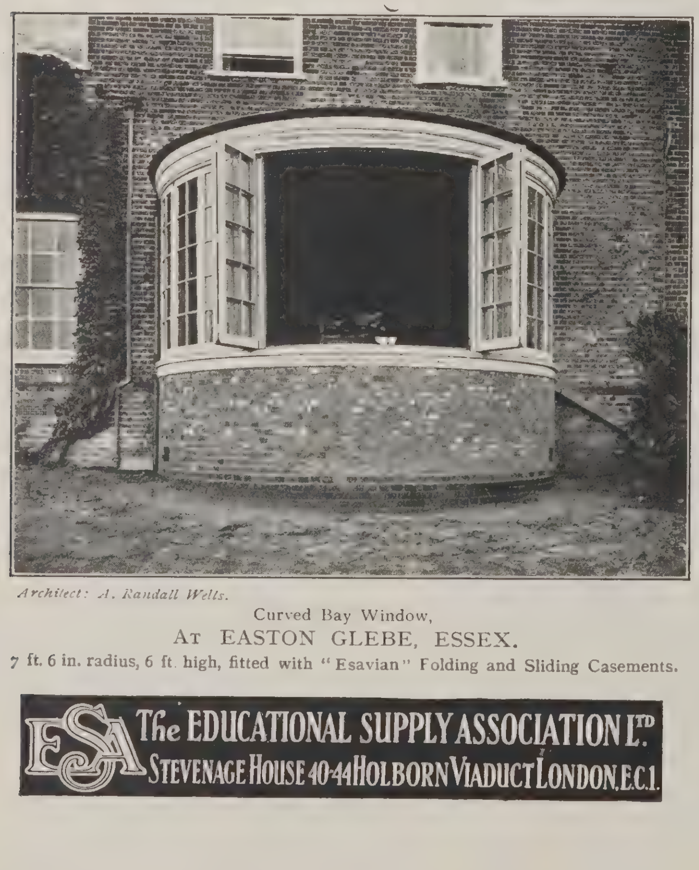

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June 28.—**ENGINE-HOUSE. Widnes.**—Erection of engine, pump, and boiler-house at Belle Vale, Gateacre (about half a mile from Gateacre Station), for the Town Council. Apply Gas and Water Engineer's Office, Ann Street, Widnes. Deposit £2 2s.

June 28.—**HALL. Aberayron.**—Erection of a hall and institute at Aberayron, Cardiganshire. Apply Mr. W. J. Jones, B.Sc., Maglona, Aberayron, or to Mr. Ll. Bankes Price, Architect, Bryn, Lampeter.

June 28.—**HOUSES. Greenock.**—Following works required in erection of 36 houses at Upper Cornhaddock, being the second development of the State-aided housing scheme in that district, for the Corporation, viz.: (1) Digger and brick work; (2) carpenter, joiner, and ironmongery works; (3) glazier work; (4) slater work and roughcasting; (5) plumber work; and (6) plaster work. Apply Office of Public Works, Municipal Buildings, Greenock. Deposit £1 1s.

June 28.—**CLUBHOUSE. Lytham, St. Annes.**—Erection of clubhouse on their new course in Lytham Park, Lytham St. Annes, for the Fairhaven Golf Club, Ltd. Apply Mr. W. Thornley, M.S.A., 46 Wallgate, Wigan. Deposit £2 2s.

June 28.—**PULVERIZER BUILDING. Oswestry.**—Erection of the refuse pulverizer building at the sewage disposal works, Shrewsbury Road. Apply Mr. G. W. Lacey, Borough Engineer and Surveyor, Guildhall, Oswestry.

June 29.—**HOUSES. Swansea.**—Erection of 21 houses on the "Fforest Fach" estate, for the Corporation. Apply Mr. E. E. Morgan, A.R.I.B.A., Borough Architect, 3 Prospect Place, Swansea. Deposit £3 3s.

June 29.—**ALTERATIONS. Griffithstown.**—Alterations to the Electric Cinema, Griffithstown, for the Griffithstown Palace Co., Ltd., also for the painting and decorating of same. Apply Manager of the Cinema or to Mr. O. P. Bevan, Architect, Station Road, Bargoed.

June 30.—**HOUSES. Accrington.**—Erection and completion of part of the dwelling-houses comprised in blocks A and B of the proposed housing scheme on the Laneside estate, for the Housing Committee. Apply Mr. W. J. Newton, F.S.A., &c., Architect, Town Hall, Accrington. Deposit £3 3s.

June 30.—**HOUSES. Dewsbury.**—Excavators', bricklayers' and masons', carpenters' and joiners', plumbers' and glaziers', plasterers', slaters' and painters' works required in the erection and completion of 50 houses on the Beckett Lane site, for the Corporation. Apply Borough Engineer. Deposit £1 1s.

June 30.—**HOUSES. Inverness.**—Erection of seven blocks of houses at Bellfield Park, Inverness, including mason and brick, carpenter and joiner, slater, plumber and drainage, and lath and plasterer works, for the Town Council. Apply Mr. G. S. Laing, Town Clerk, Town House, Inverness.

June 30.—**REPAIR, &c. St. Stephens-by-Saltash, Cornwall.**—Repair of the leads and the exterior of the Parish Church, for the St. Stephens-by-Saltash Church Council. Apply Mr. H. Bowden, 1 Molesworth Villas.

June 30.—**ENTRANCE. Talgarth.**—Work in connection with proposed new entrance to Town Hall, Talgarth, for the Parish Council. Apply Clerk's Office.

June 30.—**WORKS. Thrupp.**—Following work at All Saints' Church, Thrupp, viz.: (1) For rethatching of the roof; (2) for reroofing the church with asbestos tiles. Apply Rev. S. Morgan, The Thrupp.

June 30.—**CHIMNEY. Chapel-en-le-Frith.**—Erection of a buff brick chimney 60 ft. high, also for construction of the necessary flues, for the Guardians. Apply Mr. J. B. Boycott, Clerk, Union Offices, Chapel-le-Frith.

June 30.—**BRIDGE REPAIRS. Hereford.**—Repair of bridges and fencing, for the Herefordshire County Council. Apply Mr. G. H. Jack, M.I.C.E., &c., County Surveyor, High Town, Hereford.

June 30.—**HOUSES. Inverness.**—Erection of seven blocks of houses at Bellfield Park, Inverness, including mason and brick, carpenter and joiner, slater, plumber and drainage, and lath and plasterer works, for the Town Council. Apply Mr. G. S. Laing, Town Clerk, Town House, Inverness.

June 30.—**REPAIRS, &c. Madeley Wood.**—Repairs, decoration, &c., at Madeley Wood Lloyd's Church of England School. Apply Preb. Machen, Pitchford Rectory, Shrewsbury.

June 30.—**REPAIRING, &c. Newark.**—Repairing and painting fences and guide-posts in the parishes of Broadholme, Thorney, Harby, Wigsley, North and South Clifton and Spalford, for the Newark Rural District Council. Apply Mr. R. Oakden, 27 Winchelsea Avenue, Newark.

June 30.—**RENOVATION, &c. Penistone.**—Internal renovations and external painting of the Denby Dale District County School, for the West Riding of Yorkshire County Council. Apply Mr. W. Wood, Divisional Clerk, Education Offices, Penistone.

July 2.—**REPAIRING. Ruanlanihorne, Cornwall.**—Repairing and reroofing a cottage at Ruan Churchtown, Ruanlanihorne. Apply Mr. S. J. Carbis, Barn Farm, Ruanhighlanes.

July 2.—**COTTAGES. King's Langley.**—Erection of 12 cottages on the housing site at King's Langley, for the Hemel Hempstead Rural District Council. Apply Mr. T. H. Lighbody, M.S.A., Architect, 16 Alexandra Road, Hemel Hempstead, Herts. Deposit £1 1s.

July 2.—**TRANSIT SHED. Newcastle-upon-Tyne.**—Construction, erection, and maintenance of a single storey transit shed about 4,950 square yards in area, for the City Council. The contract will include steelwork, corrugated-iron roof covering, sliding doors, glazing, &c. Apply City Engineer, Town Hall, Newcastle-upon-Tyne. Deposit £3 3s.

July 2.—**HOMES. Penshaw, Durham.**—Erection of 12 aged miners' homes at Shiney Row, Penshaw. Apply Mr. Palliser's Office, Philadelphia.

July 2.—**HOUSES. Plymouth.**—Erection of 52 houses at North Prospect (Section No. 2), for the Town Council. Apply Mr. T. P. Frank, M.I.C.E., F.S.I., Borough Surveyor, Municipal Offices, Plymouth. Deposit £2 2s.

July 2.—**LAVATORIES, &c. Bromley.**—Erection of new lavatories at the offices, Park House, Beckenham Lane, Bromley, Kent, for the Guardians. Apply Union Offices.

July 2.—**SITTING-ROOM. Carlisle.**—Erection of a sitting-room for the female officers employed in the main building of the Fusehill Institution, Carlisle, for the Guardians. Apply Mr. G. Armstrong, 24 Bank Street, Carlisle.

July 2.—**RECONSTRUCTING, &c. Enniskillen.**—Reconstruction and alteration of The Diamond, Enniskillen. Apply Mr. Galligan or Mr. J. Donnelly, M.R.I.A.I., Architect, Enniskillen.

July 2.—**ALTERATIONS. Halifax.**—Alterations to premises, Town Hall Street East (all trades), to provide electricity showrooms, for the Electricity Committee. Apply Office of the Borough Engineer, Crossley Street, Halifax. Deposit £2 2s.

July 2.—**HOUSES. Penarth.**—Building 12 houses on sites in Andrew Road, Cogan, Penarth, for the Urban District Council. Apply Council Offices, Penarth. Deposit £2 2s.

July 3.—**ENCLOSURES. Wandsworth.**—Providing and fixing wood and glass enclosures to three sunning balconies at St. James' Hospital, Ouseley Road, Balham, S.W.12, for the Guardians of Wandsworth Union. Apply Mr. F. J. Curtis, Clerk, Union Offices, St. John's Hill, Wandsworth, S.W.18.

July 3.—**ALTERATIONS. Darlington.**—Alterations and repairs to the High Beaumont Hill Farm, near Darlington, for the Durham County Agricultural Committee. Apply Mr. W. Carter, A.R.I.B.A., Shire Hall, Durham.

July 3.—**HOUSES. Galashiels.**—Excavator, concretor, and brick works, carpenter and joiner works, glazier works, slater work, plumber and gasfitter works, and plaster work of five blocks, each containing two houses, for the Town Council. Apply Town Clerk, Mr. E. Grieve, Architect, Selkirk, or at the office of Messrs. Peter Lawrence & Co., Surveyors, 50a Frederick Street, Edinburgh.

July 3.—**BRIDGE. Maesglas.**—Erection of a bridge over the Ebbw River and other works at Maesglas, near Newport, for the Great Western Railway Co. Apply Chief Engineer at Paddington Station.

July 3.—**CONVERTING. Newport.**—Converting and fitting premises at Newport High Street Station as a workshop, for the Great Western Railway Co. Apply Chief Engineer at Paddington Station.

July 5.—**COTTAGES. Fleet, &c., Lincs.**—Erection of the following cottages, for the East Elloe Rural District Council: Fleet (near Workhouse), two pairs; Lutton Bank (late Sunderland's), six pairs; Tydd St. Mary (Drawdike, late Glebe), three pairs; Gedney Fen (Bells Bridge), four pairs; Sutton St. James (Birds Drove), two pairs; and Sutton St. Edmund (late Lees), four pairs. Apply S. S. Mossop, Junr., Clerk, West End, Holbeach.

July 5.—**INSTITUTE. North Seaton.**—North Seaton branch of the Northumberland Miners' Mutual Confident Association invites tenders for erection of a welfare institute at North Seaton Colliery. Apply Mr. C. Franklin Murphy, Lloyd's Bank Chambers, Morpeth. Deposit £2.

July 6.—**HOUSES. Ossett, Yorks.**—Erection of 47 houses on the Horbury Road site (contract No. 8); pair of houses, type No. 1, and pair of houses, type No. 2, on the Leeds Road site, for the Town Council. Apply Mr. H. Holmes, M.I.C.E.I., Borough Engineer and Surveyor, Town Hall, Ossett.

July 6.—**TELEPHONE EXCHANGE. Didsbury.**—Commissioners of His Majesty's Works, &c., invite tenders for erection of a new telephone exchange at Didsbury. Apply Post Office, Didsbury. Bills of quantities and forms of tender may be obtained from the Contracts Branch, H.M. Office of Works, King Charles Street, London, S.W.1, on payment of £1 1s. (Cheques payable to the Secretary, H.M. Office of Works.)

July 6.—**COTTAGES. Putney.**—Two contracts for erection of cottages on the Roehampton estate, Putney, for the London County Council. Apply Architect to the Council, County Hall, Westminster Bridge, S.E.1. Deposit £3.

July 7.—**BUNGALOW, &c. Newquay.**—Erection of a bungalow and motor-house in Ulahia Road, Newquay. Apply Mr. C. Truscott, Architect, Downgate, Pensilva, Liskeard.

July 7.—**LANTERN LIGHT. Harrogate.**—Erecton complete of a new lantern light at the market, for the Corporation. Apply Mr. C. E. Rivers, A.M.I.C.E., Borough Engineer and Surveyor, Municipal Offices, Harrogate.

July 7.—**HOUSES. Hoghton.**—Erection of six houses at Hoghton, for the Chorley Rural District Council. Apply Mr. J. B. Jolly, 9 High Street, Chorley. Deposit £2 2s.

July 7.—**HOUSES. Methley.**—Erection and completion of 18 Class A State-assisted houses, in blocks of two, on the Mickletown housing site, for the Methley Urban District Council. Apply Mr. T. Thompson, Red House, Methley.

July 9.—**ALTERATIONS. Plymouth.**—(1) Alterations and additions to King Street Council Schools, Devonport; (2) new sanitary conveniences, &c., for the Devonport High School for Boys, for the Education Authority. Apply Mr. C. Cheverton, Architect, Chapel Street, Devonport.

July 9.—**BOILER-HOUSE. Manchester.**—Erection of a boiler-house at the Moss Side Baths, for the Baths and Washhouses Committee. Apply City Architect, Town Hall. Deposit £1 1s.

July 9.—**WIDENING BRIDGE. Kidderminster.**—Widening of Cape of Good Hope Bridge (three ring brick arch about 23 ft. span) and other incidental works in New Road, Kidderminster, for the Town Council. Apply Mr. J. Hawcroft, M.I.M. and Cy.E., Borough Engineer, Town Hall, Kidderminster. Deposit £1 1s.

July 11.—**HOUSES. Brighton.**—Erection of eight houses on the Moulecomb housing estate, Lewes Road, adjoining the north-eastern boundary of the county borough. Apply Messrs. Clayton and Black, 10 Prince Albert Street, Messrs. T. Garrett and Son, 34 Ship Street, Mr. E. Wallis Long, 56 East Street, and Mr. W. H. Overton, 22 Ship Street, on and after June 18.

July 12.—**HOUSES. Brighton.**—Erection of 28 houses in Nesbitt Road, Brighton, for the Corporation. Apply Borough Surveyor, Town Hall, Brighton.

July 14.—**HOUSES. Featherstone, Yorks.**—All trades in connection with the proposed erection of 14 houses at Brookway, Church Fields site, Purston, near Pontefract, for the Urban District Council. Apply Mr. S. Chesney, A.R.I.B.A., Council Offices, Featherstone, near Pontefract. Deposit £2 2s.

July 16.—**REPAIRS, &c. Trowbridge.**—Works in repairs and renovations, &c., at the various Council schools during the summer vacation, for the Wiltshire Education Committee. Apply Mr. T. Walker, F.R.I.B.A., County Architect, County Offices, Trowbridge.

July 18.—**HOUSES. Chester.**—Construction of 49 houses on the Heath Lane site, for the Corporation. Apply Mr. G. Greenwood, A.M.I.C.E., City Engineer and Surveyor. Deposit £3 3s.

August 21.—**RESIDENCES. Cape Town.**—Erecting residences for men and women, principal's house, and other contingent works at the site of the New University Buildings, Groote Schuur, near Cape Town. Apply Offices of the High Commissioner for South Africa, Trafalgar Square, London, W.C.

August 28.—**SCHOOL. Cape Town.**—Works to be carried out in erecting a new medical school and other contingent works at Groote Schuur, near Cape Town. Apply High Commissioner for South Africa, Trafalgar Square, London, W.C., and at the offices of the Department of Public Works, Parliament Street, Cape Town. Deposit £2.

## ELECTRICAL.

June 28.—**PUMP, &c. Horsham.**—Supply and erection at the Horsham Union House of one electrically driven centrifugal pump, capable of delivering 20 gallons of water per minute at a total head of 26 ft., direct coupled to an electric motor of suitable horse-power and mounted on combined bedplate, complete with starting panel and necessary wiring, to include the laying and connecting of a new suction pipe from the supply tank outside the engine-house (about 20 ft.) and a proper and suitable connection with the rising mains of the Union House, for the Guardians of Horsham Union. Apply Mr. F. F. Haddock, Clerk, 9 Carfax, Horsham.

June 30.—**WIRING. Gloucester.**—Wiring for the purpose of electric lighting of the Crypt Grammar School and Sir Thomas Rich's School. Apply Mr. A. Ballinger, 24 Barton Street, Gloucester.

July 2.—**CRANES. Bristol.**—Construction of two 2-ton movable electric jib cranes and erection of same on the roofs of sheds "Y" and "Z," Canons' Marsh, Bristol Docks, for the Docks Committee. Apply Mr. T. A. Peace, Engineer, Avonmouth Docks. Deposit £3 to the Bristol Docks Committee, 19 Queen Square, Bristol.

July 2.—**PLANT. Grimsby.**—Specification No. 174—boiler-house plant. The specification comprises two water-tube boilers 21,000 lbs. per hour output, together with economizers, stokers, steel chimney, brickwork setting, dust catcher, fittings, &c., Specification No. 175—converting plant. The specification comprises one 1,000-kw. converter, one 250-kw. converter and low-tension switchgear, cable work, &c. Apply Lieut.-Col. W. A. Vignoles, Borough Electrical Engineer, Corporation Electricity Works, Grimsby. Deposit 7s. 6d.

July 2.—**ELECTRIC LIGHTING. Birmingham.**—Salvage and Stables Committee invite tenders as follows: For the salvage works now being erected at Brookvale Road, Witton—Contract No. 1: Installation of electric lighting; contract No. 2: Supply and erection of one five-wire balancer set. For the Montague Street destructor works—Contract No. 3: Supply and erection of one five-wire balancer set. Apply Mr. J. Jackson, Superintendent, Salvage Department, 161 Corporation Street, Birmingham. Deposit £1 1s.

(*Continued on page* xliv.)

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July 2.—**WIRING, &c. Chorley, Lancs.**—Wiring and all the necessary fittings for the electric lighting of the Chorley Parish Church Institute, Park Road. Apply Mr. H. Barker, Secretary, Parish Church Institute.

July 2.—**TRANSFORMERS. Leeds.**—Supply of single-phase (2,200 and 6,600 volts), three-phase (6,600 volts), and Scott-connected transformers, with a total capacity of 14,600 kilo-volt-amperes, for early delivery, and for further supplies of similar transformers as required, over a period of two years, for the City Council. Apply Mr. C. N. Hefford, Manager of the Electricity Department, 1 Whitehall Road, Leeds. Deposit £1.

July 5.—**ELECTRIC LIGHT INSTALLATION. Penkridge, Staffs.**—Installation of electric light at the Farm Institute, near Penkridge, Staffs., for the Staffordshire Education Committee, in accordance with specification prepared by Messrs. Edwards and Shaw, Consulting Engineers, 105 Colmore Row, Birmingham. Apply Director, County Education Offices, Stafford. Deposit £3 3s.

July 7.—**TRAMCAR BODIES, &c. Cardiff.**—Cardiff Corporation invite tenders from contractors who are on the King's national roll for the supply of (1) 25 special low-type top-covered tramcar bodies; (2) 25 electrical equipments for above. Apply Tramways General Manager, Central Offices, The Hayes, Cardiff.

July 7.—**TRANSFORMERS. Montevideo.**—British Vice-Consul at Montevideo reports that the State Electric Light Works of that city are calling for tenders for the supply of twenty 300-k.v.a. transformers. Apply Department of Overseas Trade, 35 Old Queen Street, London, S.W.1 (Room 52).

July 16.—**SWITCHBOARD PANELS. Dunedin.**—The Electric Power and Light Department of the Dunedin City Corporation is calling for tenders for switchboard panels. Apply Department of Overseas Trade (Room 52), 35 Old Queen Street, Westminster, London, S.W.1.

July 17.—**AMMETERS. Johannesburg.**—His Majesty's Senior Trade Commissioner in South Africa reports that the Municipal Council of Johannesburg is calling for tenders, to be presented by July 17, for supply and delivery of four portable continuous chart-recording ammeters. Apply Department of Overseas Trade (Room 53), 35 Old Queen Street, London, S.W.1.

July 30.—**SWITCHBOARD CUBICLES. Dunedin, New Zealand.**—The Dunedin City Corporation is calling for tenders for the manufacture, supply, and delivery, all charges paid, at the Electric Power and Light Department Store at Dunedin of switch cubicles. (Contract No. 227.) Apply Department of Overseas Trade (Room 44), 35 Old Queen Street, London, S.W.1.

July 30.—**TURBO-ALTERNATORS, &c. Glasgow.**—The Corporation invite tenders from manufacturers of the following plant required in connection with the extension of the Dalmarnock power-station, Glasgow: (1) Two 15,000-kw. turbo-alternators and condensing plant (2) boiler-house plant, consisting of eight boilers, economizers, and accessories; (3) high-tension switchgear. Apply Mr. R. B. Mitchell, City Electrical Engineer, 75 Waterloo Street, Glasgow. Deposit £5 5s.

July 31.—**ELECTRICAL EQUIPMENT. Auckland, New Zealand.**—The Public Works Supplies and Tenders Committee, Government Buildings, Wellington, are calling for tenders for supply and delivery ex-ship's slings, Auckland, of electrical equipment for dredge No. 2, which is being used at Auckland in connection with the Waihou and Ohinemuri Rivers improvement scheme. Apply Department of Overseas Trade (Room 44), 35 Old Queen Street, London, S.W.1.

July 31.—**ELECTRIC LIGHTING. Riversdale.**—For the Riversdale Municipality, Cape Province, supply, erection and installation of generating plant, low-tension distribution material, meters, &c. (Contract No. 2.) Apply Department of Overseas Trade (Room 52), 35 Old Queen Street, London, S.W.1.

July 31.—**POWER SHOVEL. Melbourne**—The State Electricity Commission of Victoria, Australia, invite tenders for the manufacture, supply, delivery, and superintendence of erection of the following: (Specification 23/63) electrically operated power shovel. Apply Agent-General for Victoria, Melbourne Place, Strand, London, W.C. Deposit £50.

July 31.—**TURBINE. Leeds.**—Supply of a steam turbine, three-phase alternator and exciter of 10,000-kw. capacity or thereabouts, running at a speed not exceeding 3,000 revolutions per minute, and auxiliaries for surface condensing plant, for the Leeds City Council. Apply Mr. C. Nelson Hefford, Manager of the Department, 1 Whitehall Road, Leeds. Deposit £5.

August 7.—**CABLE. Montevideo, Uruguay.**—The British Vice-Consul at Montevideo reports that the State Electric Light Works at Montevideo are calling for tenders for outdoor cable with special insulation. Apply Department of Overseas Trade (Room 52), 35 Old Queen Street, London, S.W.1.

August 7.—**SWITCHBOARDS. London, W.C.**—Tenders are required by the Commonwealth of Australia for supply of switchboards, schedule V.131. Apply Supply Officer, Australia House, Strand, London, W.C.2.

August 31.—**CABLE. Melbourne.**—State Electricity Commission of Victoria invite tenders for supply, delivery, &c., of the following for the Morwell power scheme. Apply Agent-General for Victoria, Melbourne Place, Strand, London, W.C.2. Specification No. 23/77—Aluminium steel-cored cable, 0.0707 sq. in. Deposit £2.

## ENGINEERING.

June 28.—**BOILERS. Salford.**—Supply of three new steel Lancashire boilers, each 30 ft. long by 8 ft. diameter, and steel chimneys for same, for the Gas Department. Apply Gas Engineer, Gas Offices, Bloom Street, Salford.

June 29.—**PUMP. Southampton.**—Supply and erection of one 8 in. centrifugal pump, charging set and electrical equipment at the Portswood sewage farm, for the Corporation. Apply Borough Engineer's Office, 33 French Street, Southampton.

June 30.—**FORD CHASSIS. Warminster.**—Supply of new right-hand-drive Ford chassis (1923 model), with five demountable rims and tyres complete, self-starter, fitted with "fever" ambulance body, painted three coats and finished dark green. Apply Mr. W. R. Marshall, Clerk to the Warminster Joint Isolation Hospital Committee, 8 High Street, Warminster.

July 2.—**LOADING ARM. Dublin.**—Supply and erection of a new 12 in. pivoted cast-iron and steel loading arm for discharging sewage sludge from the high-level sludge tank at the Pigeon House into the sludge vessel when lying in the Pigeon House harbour, for the Corporation. Apply City Engineer, 28 Castle Street, Dublin. Deposit £1 1s.

July 2.—**BORING. Guildford.**—Constructing a second boring at their Joseph's Road pumping station, 400 ft. deep, lined with 23½ in. tubes, and for test pumping from both borings, for the Corporation. Apply Mr. P. Griffith, 20 Victoria Street, S.W., or Mr. W. G. Cross, Borough Waterworks Engineer, Tuns Gate, Guildford. Deposit £2 2s.

July 7.—**BRIDGE RECONSTRUCTION. Oxford.**—Reconstruction of Seacourt Bridge, for the Oxford Corporation. The work consists of a pile foundation and concrete superstructure. Apply Mr. J. E. Wilkes, City Engineer, Town Hall, Oxford. Deposit £5 5s.

July 9.—**DREDGING. Southampton.**—Dredging works at the town quay, for the Harbour Board. Apply Mr. E. C. Poole, A.M.I.E., Engineer, Harbour Office Town Quay, Southampton. Deposit £1.

July 9.—**FILTERS. Walton-on-Thames.**—Construction of 18 reinforced concrete primary rapid filters each about 26 ft. by 16 ft. 6 in., covered wash-water tank, compressor, and pump house and stores, six concrete secondary filters each about 220 ft. by 170 ft., clear water suction tank 58 ft. by 52 ft., four sedimentation tanks and mud bays, two chlorinating chambers and gauge-houses, also the laying of inlet and outlet mains and drains, the construction of roads and paths, together with auxiliary works in connection therewith at Walton-on-Thames, for the Metropolitan Water Board. Apply Offices of the Board, Chief Engineer's Department (Room 201).

## PAINTING.

June 29.—**PAINTING. Gateshead.**—Execution of certain painting works at the Poor Law Institution, Gateshead, for the Guardians. The work to be done has been divided into two sections, and the persons tendering may tender for either or both, but the Guardians will not give more than one contract to any tenderer. Of the men employed on the work preference is to be given to competent workmen residing within the area of the Gateshead Union. Apply Mr. G. Craighill, Clerk, Union Offices, Gateshead.

June 30.—**PAINTING. Gorleston-on-Sea.**—Following work at the East Anglian Institution for Blind and Deaf Children, Gorleston-on-Sea: (1) Painting, colouring, and whitewashing internally, and (2) repair of asphalte playgrounds. Apply Mr. D. O. Holme, Clerk of the Governors, 12 St. Giles's Street, Norwich.

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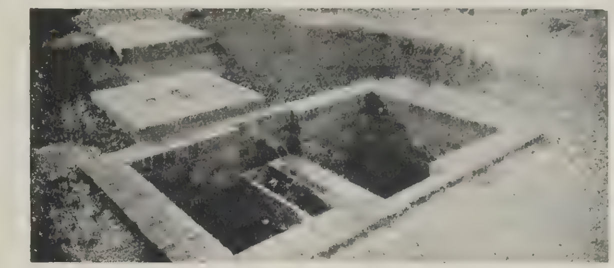

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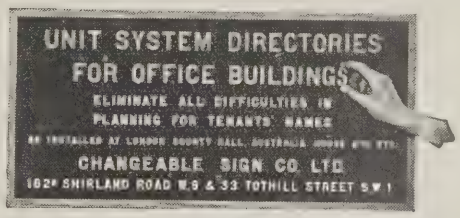
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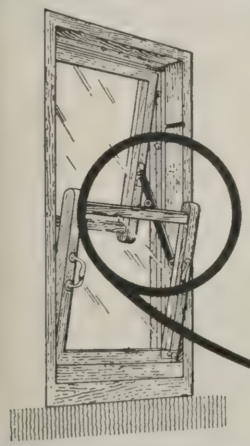

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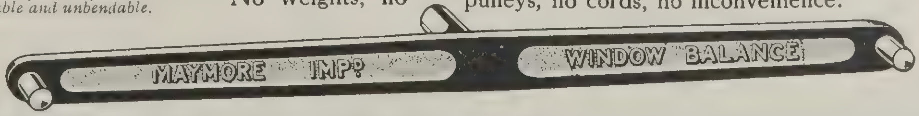

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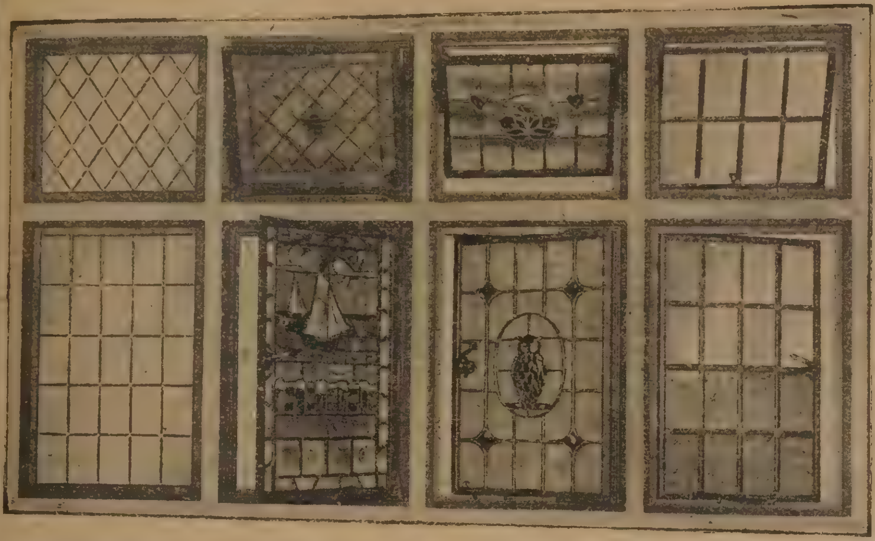

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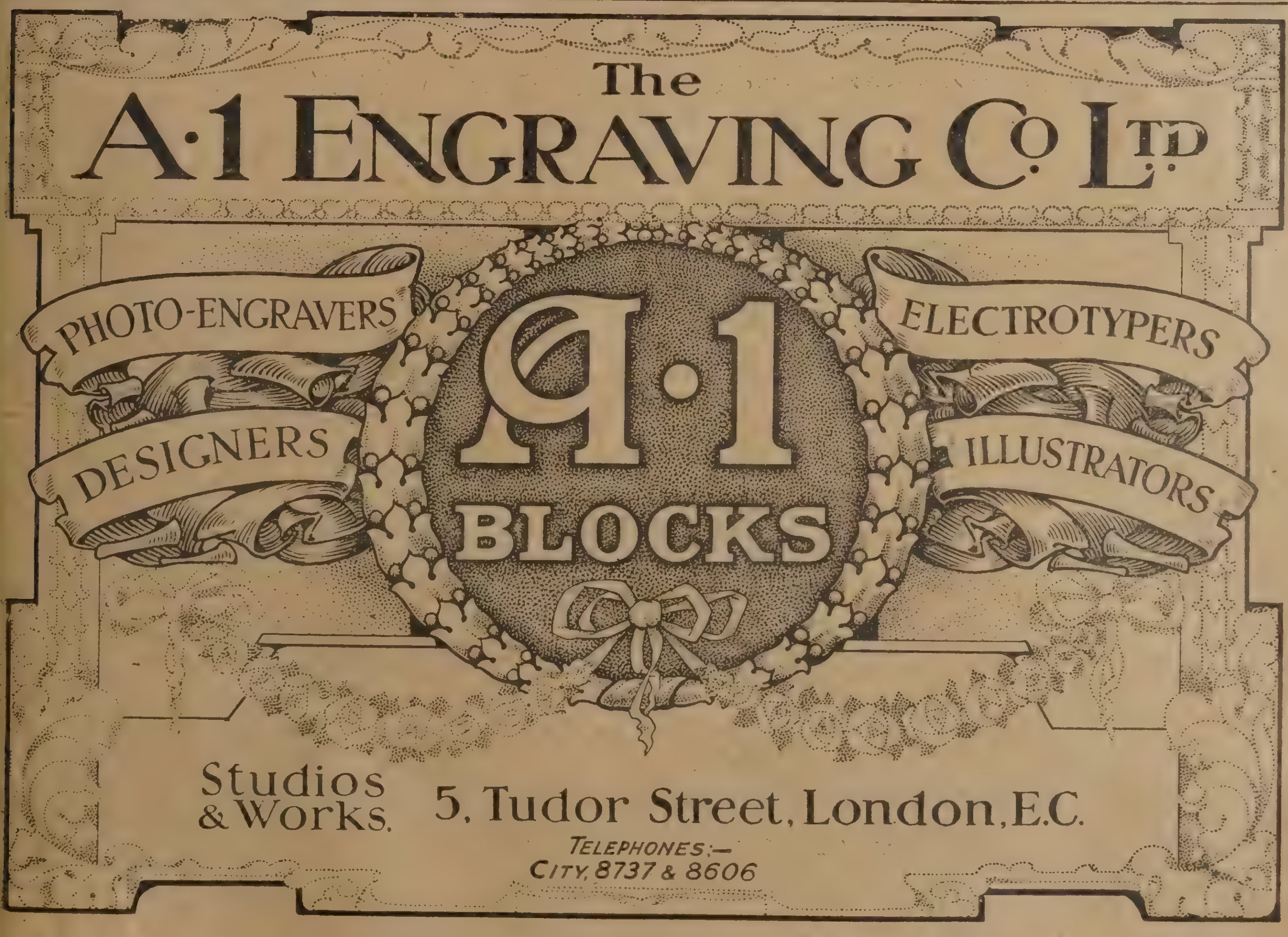

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